

# EVALUATION MODEL OF THE AFFECTIVE ASPECT FOR RELIGION EDUCATION IN MADRASAH ALIYAH AND PONDOK PESANTREN

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**Abstract:** The objective of this present research is to develop an evaluation model of the affective aspect of Islamic Religious Education (IRE) in madrasah aliyah and pondok pesantren. It is developmental research with a mixed approach (quantitative and qualitative design) covering three phases of development: pre-development, development, and dissemination. This model consists of (1) a guide for the evaluation model, and (2) the instrument for the evaluation model in the forms of questionnaires, observation sheets, and questionnaires for self-evaluation. The instrument validity of the evaluation model consisting of questionnaires, observation sheets, and questionnaires for self-evaluation was determined by expert judgment while its reliability was decided using the Alpha Cronbach. Instrument validity consisting of questionnaires, observation sheets, and questionnaires of self-evaluation is a construct validity determined using Exploratory Factor Analysis (EFA) and Confirmatory Factor analysis (CFA), while its reliability was decided using Alpha Cronbach. The results showed that the components of the evaluation model of the Affective Aspect for IRE (AEIRE) consist of Input, Process, and Output. All instruments of the model show a good fit. The model is effective enough for madrasahs aliyah and pondok pesantrens. According to the teachers of IRE, the guide for the use of the model is very good.

**Keywords:** Affective Aspect, Evaluation Model, Islamic Religious Education.

## Introduction

This information age and globalization have effects on rapid social changes. There is a transitional situation that results in the changes in the formulation of social values and norms, and also in the formation of the social structure. Primordial ties become to be brittle. The community faces changing situations, even some of them experience vacuum feelings that may cause them to be trapped in an anomie.<sup>1</sup> The value references they believe in become unclear.<sup>2</sup> The description shows that the optimization of Islamic Religious Education (henceforth, IRE) as the source for the value reference has its prominent importance due to the degradation of the values of Islamic Religious Education (IRE) among school-age children.

According to Abdurrahman, children's maturity in their religious faith is more dependent on their achievement in cognitive mastery of their religion.<sup>3</sup> Evaluation is made in a rigid fashion, where the result of the evaluation would be realized in the form of a numerical symbol. This shows that there is some tendency that the religious education that has been implemented up to now is more oriented toward the school system than toward the formation of a learning community in the family and society environments.

This condition needs a more comprehensive IRE that should give an emphasis not only on the cognitive aspect of mastery of religion but also on affective and religious practices aspects. A religious education full of the implanting of values, in practice, should be not only implemented by presenting materials of Islamic Religious Education to children but also by involving the habituation process made by the school through a series of activities that may form children's religious attitudes. According to Zamroni, to realize the goal, cooperation among various parties in the form of a hidden curriculum designed by the school is needed.<sup>4</sup>

Based on the phenomenon, this present research is expected to be the starting point for studying the implementation of IRE in madrasahs (schools where people go to learn about the religion of Islam) and Pondok pesantren (Islamic Boarding Schools in Indonesia) where the results of the implementation are less satisfactory viewed from the figure of the present young generation. The question to arise is as follows: what is wrong with

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<sup>1</sup> E. Durkheim, *The Division of Labor in Society* (New York: The Free Press, 1893).

<sup>2</sup> Mohamad Ali and Ma'arif Jamuin, "GAGASAN MOESLIM ABDURRAHMAN TENTANG PENDIDIKAN ISLAM TRANSFORMATIF Moeslim Abdurrahman's Ideas About Transformative Islamic Education," *Jurnal SMART (Studi Masyarakat, Religi, dan Tradisi)* 3, no. 2 (December 29, 2017): 169–80, <https://doi.org/10.18784/smart.v3i2.487>.

<sup>3</sup> Moeslim Abdurrahman, *Islam Transformatif* (Jakarta: Pustaka Firdaus, 1995).

<sup>4</sup> Zamroni Zamroni, *Dinamika Peningkatan Mutu* (Yogyakarta: Gavin Kalam Utama, 2011).

the implementation of IRE in the institutions related to the problems the young generation faces?

The implementation of character education in Indonesia is badly needed<sup>5</sup> since recent fights among students and some other forms of juvenile delinquency especially in big cities, bullying, the tendency of domination of seniors over juniors, brutal football supporters, narcotics and drug misuse, and the like have been common in the community. Even, what raises apprehension is that failures have happened to most efforts made in creating “sincerity” character among children through sincerity canteens at schools. Moreover, according to the National Narcotics Board, there are about 3.6 million people in Indonesia who are narcotics-addicted.<sup>6</sup>

This present research may serve as initial information on the evaluation of the IRE implementation in Madrasa and Pondok pesantren. IRE has a very strong load to implant character education in children. This present research is conducted in the institutions since they represent existing formal education institutions.

Dealing with the above theme, Aman conducted a study with the title of “Developing an Evaluation Model of History Learning in Senior High School.” This study is intended to establish an evaluation model of history learning intended to be able to result in information that is proper and accurate for headmasters and teachers and also beneficial for implementing the history learning program in Senior High School.<sup>7</sup>

Widoyoko studied an evaluation model of Social Science Learning in Junior High School. The objective of the study is to develop an evaluation model of a comprehensive social science learning program that may give information that is proper for social science teachers and headmasters, either in terms of content, coverage, or presentation which may result in optimal benefits for the social science learning program in Junior High School.<sup>8</sup>

Kartowagiran and Maddini developed an evaluation model of Islamic Religious Learning intended to know the evaluation model of Islamic

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<sup>5</sup> Dandy Sobron Muhyiddin et al., “The Relevance of The Character Education Development Model in Islamic Boarding Schools,” *Nazhruna: Jurnal Pendidikan Islam* 5, no. 3 (October 3, 2022): 1129–45, <https://doi.org/10.31538/nzh.v5i3.2479>.

<sup>6</sup> Syamsu A. Kamaruddin, “Character Education and Students Social Behavior,” *Journal of Education and Learning (EduLearn)* 6, no. 4 (September 17, 2012): 223–30, <https://doi.org/10.11591/edulearn.v6i4.166>.

<sup>7</sup> Aman Aman, “PENGEMBANGAN MODEL EVALUASI PROGRAM PEMBELAJARAN SEJARAH DI SMA,” *Jurnal Penelitian Dan Evaluasi Pendidikan* 16, no. 2 (2012): 437–56, <https://doi.org/10.21831/pep.v16i2.1126>.

<sup>8</sup> Sugeng Eko Putro Widoyoko, “PENGEMBANGAN MODEL EVALUASI KUALITAS DAN OUTPUT PEMBELAJARAN IPS DI SMP,” *Jurnal Penelitian Dan Evaluasi Pendidikan* 11, no. 1 (2008), <https://doi.org/10.21831/pep.v11i1.1417>.

Religious Learning in Junior High Schools and its effects on students' attitudes and to test the feasibility of the model in terms of its fit and significance to various research variables.<sup>9</sup>

This present research is different from the previous ones since this research is focused on the establishment of an evaluation model of the affective aspect of the IRE in madrasahs and Pondok pesantren covering the implementation of IRE in *madrasahs* and *Pondok pesantren* in Kediri regency and city, as well as the development of an evaluation model of the affective aspects in IRE learning in madrasahs and Pondok pesantren that may give proper and comprehensive information either in the content coverage or presentation and also optimal benefits for IRE program, and the effectiveness of the evaluation model of the affective aspects in the developed IRE learning.

Kediri area is taken as the research site area since this area is known as the location of *santries* (students at Muslim Schools or Pondok pesantren) and many *santries* are living in this area. Moreover, in this area, the schools and madrasahs serve as the center for studies for students around the Kediri area covering Kediri, Nganjuk, Blitar, Tulungagung, and Trenggalek. Kediri city is also developing into a metropolitan city which of course will result in changes in attitude among its young generation.

This research and development is used as an approach to developing an evaluation model of the affective aspects of the IRE in madrasah aliyah and pondok pesantren. Based on the approach, it is expected to be able to produce a product in the form of an evaluation model of the affective aspects of IRE in Madrasahs aliyah dan Pondok Pesantrens.

The development model of this present research refers to the spiral model recommended by Cennamo & and Kalk. Development according to Cennamo and Kalk includes the determination of the product developed, the product design, demonstration, development, and delivery.<sup>10</sup>

Based on the model above, after being adapted to Provus's gap model evaluation focusing on input, process, and output, the stages of this research and development covered preliminary investigation, determination of the direction and making of the development design, then followed by a

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<sup>9</sup> Badrun Kartowagiran and Harsul Maddini, "Evaluation Model for Islamic Education Learning in Junior High School and Its Significance to Students' Behaviours," *American Journal of Educational Research* 3, no. 8 (July 16, 2015): 990–95, <https://doi.org/10.12691/education-3-8-7>.

<sup>10</sup> K. Cennamo and D. Kalk, *Real World Instructional Design* (Canada: Thompson Learning, Inc., 2005).

demonstration, implementation of the design tryout, evaluation, and revision, development, and delivery.<sup>11</sup>

The stages of the development principally may be mapped into pre-development, development, and application of the model. The stage of pre-development of the evaluation model of the affective aspect in IRE covered the preliminary investigation including activities of studying theories, literature, and relevant research results and of making field observations. The stage of the model development included activities of determining and making the design of the evaluation model of the affective aspect and presenting the model. The stage of the application of the model of the evaluation model of the affective aspect in IRE covered activities of tryout, evaluation and revision, validation, and presentation of the product.

The tryout subject or respondents involved in this present research consisted of students of MAN 3 Kediri City, MAN 2 Kediri City, *santries* in Pondok Modern Gontor 3 Sumber Cangkring Gurah Kediri, *santries* in Pondok Modern Gontor Putri 5 Kandangan Kediri, teachers of IRE in Man 3, Man 2, in Pondok Gontor 3, and Pondok Gontor Putri 5 in Kediri regency, East Java province. The subject sample for the tryout was chosen based on the characteristics and the number of the subjects, meaning that the subjects in the first stage to the next, the varieties of characteristics, and the number were chosen in stages, from the lowest to the highest. MAN 2 and MAN 3 were chosen as the representation of madrasah aliyah, while Pondok Gontor 3 and Gontor Putri 5 as the representation of pondok pesantren.

Referring to the objective of the development, to obtain data some techniques of data collection were employed namely: focus group discussion, questionnaires, observations, and documentation. In this present research, three types of instrument were employed, namely the instrument for obtaining data on : (1) the fit of the model (accuracy of the procedure, coverage of the content of the instrument, the readability and the practicality of the instrument, and the effectiveness of the model), (2) the accuracy of the guide, and (3) input, process and output variables.

- a. To obtain data on the model fit, questionnaires were distributed to the students and teachers of IRE.
- b. To obtain data on the accuracy of the evaluation guide of the affective aspect in IRE learning, questionnaires were distributed to the teachers of IRE.
- c. To obtain data from the input, process, and output variables, the following instruments were used:

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<sup>11</sup> Malcolm M. Provus, "The Discrepancy Evaluation Model: An Approach to Local Program Improvement and Development" (Pittsburgh: Pittsburgh Public Schools, 1969), <https://eric.ed.gov/?id=ED030957>.

- 1) Evaluation of input covering (a) learning facilities, (b) teachers' qualifications, and (c) teachers' competence was made using questionnaires
- 2) Evaluation of the process covering (a) learning plans, and (b) the learning process in the classrooms was made using documents and observation sheets, respectively.
- 3) Evaluation of outputs covering four affective aspects namely discipline, responsibility, respect, and obedience in praying to God was made attitude inventories filled in by the students and teachers of IRE.

The techniques of data analysis in this present research employed were descriptive qualitative and quantitative ones. Descriptive quantitative analysis was used to analyze the validity and measurement model, while descriptive qualitative analysis was used to analyze the procedures of evaluation and the evaluation guide developed.

Quantitative data analysis was intended to analyze the validity of the instruments for collecting the data. To know the validity, *Exploratory Factor Analysis* (EFA) and *Confirmatory Factor Analysis* (CFA) with the aid of the SPSS program and *Lisrel 8.51* were employed. CFA is used to show that the measurement model is valid to use. The validity of the instrument was determined based on  $\lambda$ . If the values of  $\lambda \geq 0,3$ , the instrument item is considered to be valid to measure the construct.<sup>12</sup> If the result has not fitted, the instrument should be revised and re-tried out.

Lisrel is also used to test the fit model, either measurement or evaluation model/procedure. A model is called to be good (fit) if the hypothetic model conceptually and theoretically is supported by empirical data. Testing the fit of the hypothetical model of the evaluation of the affective aspect in IRE using empirical data was based on the indicators of  $P\text{-value} > 0,05$ ;  $RMSEA < 0,08$ ;  $GFI > 0,9$ ;  $AGFI > 0,9$ .<sup>13</sup>

Descriptive-qualitative data analysis was used to analyze the data from the validation results made by experts, users (teachers of IRE), and practitioners giving inputs to improve the evaluation procedures and the instruments. The analysis was made to the construct of the evaluation model, completeness of the model tool, instrument readability and its tools, and the analysis of the effectiveness of the use of the evaluation model.

### Model Pre-Development of AEIRE

At this stage, information on the implementation of the evaluation of the affective aspect in IRE in Madrasah aliyah and pondok pesantren was

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<sup>12</sup> MS Solimun, *Structural Equation Modelling (SEM) Lisrel Dan Amos* (Malang: Universitas Brawijaya, 2002).

<sup>13</sup> Imam Ghazali, *Teori, Konsep Dan Aplikasi Dengan Program Lisrel* (Semarang: Badan Penerbit Universitas Diponegoro, 2014).

collected. The data were collected through direct observations in two madrasahs aliyah and two pondok pesantren, identification for relevant previous research results, and study of various concepts and theories related to the evaluation of affective aspects in IRE. Moreover, the scope of the product, the comprehensiveness of the use, and the supporting condition will be studied. The strengths and weaknesses of the product will also be identified. The activities above serve as the need analysis functioning as the foundation for developing an evaluation model of the affective aspect which is effective for IRE.

### **Developing Conceptual Model of AEIRE**

At this stage, the direction in developing the evaluation model of the affective aspect in IRE on the base of the need in the field and the scope was formulated. The steps in this stage covered the following: the product/evaluation model of the affective aspect in IRE was determined, the development model design was made and the model was presented. Before the steps were made, the goal of the evaluation of the affective model, the construct, and the limitations of the aspects evaluated were determined.

The goal of the evaluation in this present research is the affective aspect of the students in Madrasah aliyah and pondok pesantren as the result of the education process of the IRE, covering subjects of *aqidah akhlaq* (character), *al-Qur'an Hadith*, *Fiqih* and history of Islamic culture. The affective aspect consists of discipline, responsibility, respect for others, and worship. The discipline aspect includes discipline in learning in the classroom and in obeying all school regulations out of the class in the school environment. The responsibility aspect includes responsibility for oneself, others, and the school environment. The respect aspect consists of respect for teachers, parents, and other students in the school environment. While worship includes obedience to obligatory worship, sunnah worship, and other worship. The formulation of the indicators of the aspects refers to the competence of the IRE group containing contents of the four aspects.

The next step is to determine the development of the evaluation model of the affective aspect in IRE. To obtain information comprehensively on the students' affective aspects, in this present research an evaluation model of the affective aspect would be developed by involving students. In other words, students were involved in their self-evaluation besides the evaluation made by the teachers. Then, a design or prototype of an evaluation model of the affective aspects of IRE was made and the design was presented to the practitioners (teachers of IRE) and the academicians (lecturers of IRE) with relevant expertise in this field. The practitioners and

academicians were involved in evaluating the design model being developed. Their involvement was done through Focus Group Discussion (FGD).

Based on the results of the tryout, the evaluation model of the affective evaluation in IRE is the one consisting of input, process, and output evaluations. The general procedures or steps in implementing the evaluation are as follows

### **1. Input Evaluation**

Input evaluation of the affective aspect of IRE in this present model covered teachers' competence, educational environment, facilities/infrastructures, and curriculum. The following presents the descriptions of each evaluation.

#### **a. Evaluation of Teachers' Competence**

The observations of the teachers' competencies were made by the students based on the teachers' daily attitudes and performance in terms of their pedagogical, professional, personal, and social competencies. The evaluation was made by filling in the instrument in the form of questionnaires that are complemented with a guide. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

#### **b. Evaluation of Educational Environment**

The educational environment is anything influencing students' attitudes, behavior, and achievement as educational outputs in an educational institution or school. The educational environment includes school regulation; etiquette among students, between teachers and students, teachers and teachers, and all civitas academic existing at school. In evaluating the educational environment, the headmasters, teachers, or students were asked to complete the evaluation instrument in the form of questionnaires. The steps of the implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect of IRE in the product developed.

#### **c. Evaluation of Facility/Infrastructures of IRE**

Facility/infrastructures of IRE are anything supporting the process of IRE namely: classrooms, learning tools, IRE lab, mosque, and all educative tools. In evaluating the facility/infrastructures, the headmasters, teachers, and students were asked to fill in the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.



## **2. Process Evaluation**

In the second step, an evaluation was made of the process of IRE covering the evaluation of the plan made by the teachers, the implementation of the education, and the implementation of the evaluation made by the teachers.

### **a. Evaluation of the IRE Plan**

The plan evaluated covered: the syllabus and Lesson Plan of IRE made by the teachers. In the evaluation, the headmasters/teachers and students were asked to complete the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

### **b. Evaluation of the Implementation of Education**

The implementation of education evaluated included classroom management, the method of materials presentation, understanding towards the students, and appropriateness of the materials with the learning objective. In evaluating the implementation of education, the headmasters/teachers and students were asked to fill in the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

### **c. Evaluation of Educational Measurement**

In the educational measurement, the aspects evaluated included: types of measurement made, and the way to make an effective measurement. In evaluating the educational measurement, the headmasters/teachers and students were asked to fill in the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

## **3. Evaluation of Output**

The third step in the evaluation of the affective aspect of IRE is the evaluation of the output of IRE consisting of students' discipline, respect for others, responsibility, and worship.

### **a. Evaluation of Students' Discipline**

The student's discipline evaluated included the discipline in following the lessons, obeying regulations, being ordered in the classroom, doing homework well, and obeying teachers. In evaluating the students' discipline, students were asked to fill in the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

b. Evaluation of Students' Respect

The students' respect was evaluated in terms of willingness to greet, willingness to listen to others, say thanks if they get something, respecting elders, being polite, hospital, and willingness to praise other students. In the evaluation of the students' respect for others, students were asked to fill in the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

c. Evaluation of Students' Responsibility

The evaluation of students' responsibility included the willingness to complete tasks well, consistency between what is said and what is done, obedience to the prevailing regulations, considering results from any acts, and being used to be ordered and organized. In evaluating the students' respect for others, students were asked to fill in the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

d. Evaluation of the Students' Worship

The students' worship was evaluated in terms of the implementation of five-time worship, praying before and after certain acts, reading al Qur'an, doing Ramadhan fasting, wearing clothes/dresses in line with the *syari'at* of Islam, eating and drinking following the *syari'at* teachings, making friendship according to the *syari'at* of Islam, willingness to sacrifice for Islam, following activities in Islam, and willingness to give charity to others. In evaluating the students' worship, the students were asked to fill in the evaluation instrument in the form of questionnaires provided. The steps of the technical implementation are described in the Guide Book for the Use of the Evaluation Model of the Affective Aspect in IRE provided.

## AEIRE Model Significance Discussion

FGD was conducted in December 2022 by inviting 8 experts in the fields of IRE, language, evaluation, and measurement. The inputs from the experts were used as the materials for improving the instrument related to construction, fit with the indicators, the formulation of statements/questions, formulation of the answer choices, and also the number of the answer choices. The results of the validation using the Content Validity Index (I-CVI) are presented in Table 1.

Table.1 Results of Analysis on Polit's Content Validity Index

Validator	Type of Instrument	$\Sigma$ point	I-CVI	Content Validity
Expert Judgement	A Instrument of Teachers' Competence	26	0,882	Good
	B Educational Environment	12	0,869	Good
	C Facilities/Infrastructures	18	0,862	Good
	D Educational Process	37	0,902	Good
	E Educational Outputs	52	0,92	Good

According to Polit and Beck, the Content Validity Index recommended if the number of raters is between 3 to 5 is 1.00, and the number is at least 6 to 10, the recommended value of the I-CVI is 0.78.<sup>14</sup> The data in Table 1 show that the recommended value of the I-CVI is good enough since the minimal value of the I-CVI is from 0.826 to 0.92 made by 8 raters.

The components of the evaluation model validated by the experts (experts, users, and practitioners) consist of (1) components and procedures of evaluation, (2) instruments and their grids, and (3) the guide for Use. The clarity of procedures, instruments, and guide was validated by the experts, and the readability test by the practitioners in the FGD. Based on the validation process made by the experts and the readability test by the practitioners, the results are presented as follows.

The clarity of procedures means a) completeness of components/coverage of the model (items 1 – 4), b) expediency (items 5-8), practicality (items 9-10), and d) effectiveness (item 11) as presented in Table 4. A four-scale evaluation was employed. Based on the scores obtained for

<sup>14</sup> Denise F. Polit and Cheryl Tatano Beck, "The Content Validity Index: Are You Sure You Know What's Being Reported? Critique and Recommendations," *Research in Nursing & Health* 29, no. 5 (2006): 489–97, <https://doi.org/10.1002/nur.20147>.

each item from each expert, the average score for each item was calculated. The results of the evaluation are presented below.

The results of the evaluation from the experts are presented in the third left column of Table 2.

Table. 2 Assessment Result of AEIRE by Experts and Practitioners

No	Aspect of Assessment	Assessor		Category
		5 Experts	5 Practitioners	
1	Evaluation Procedures	3,83	3.58	Very Good
2	Evaluation Manual	3,9	3.3	Very Good
3	Clarity of AEMIRE instruments	3,475	3.425	Very Good

From Table 2, according to the evaluation made by the experts and practitioners, it is shown that the developed AEIRE model is under a very good category on a scale of 1 to 4.

The readability test was conducted in January 2023. The test was administered to 3 students of MadrasahAliyahNegeri 3 Kediri, where the three students are from Natural Science, Social Science, and Religion Streams. The readability test was conducted to understand the fit of the content and the student’s understanding. Moreover, the test is also intended to know the time needed to do/complete the instrument.

The result of the readability test of teachers’ competence aspect from the average input component is 3.5; educational environment, 3.87 and the educational facility/infrastructure, 3.59from the 4 Likert scale. . In the Process component, the average result of the readability test is 3.59. From the Output component, the average result of the respect aspect is 3.64. The Output component of the responsibility aspect shows an average score of 3.625, while the worship aspect, is 3.75. The scale used is the 4 Likert scale. The average time needed to answer the instrument questions in the evaluation model of the affective aspect in IRE in MadrasahsAliyah and Pondok Pesantren is 20 minutes with the detailed description as follows, for the input component, 8.5 minutes; the process component, 3.5 minutes; output components, 8 minutes. The result of the readability test is under a good category. Therefore, a field test could be conducted.

A limited field test was conducted in Madrasah Aliyah Al-Huda Kediri city in March 2023. The sample was taken from students in Class XI from Natural Science and Social Science streams. The number of samples in this limited field test was 49 students.

The results of the instrument tryout of the evaluation model of the affective aspect in IRE in Madrasah aliyah and pondok pesantren were analyzed using *Exploratory Factor Analysis (EFA)* and the reliability was

counted using the *Alpha Cronbach coefficient* with the aid of SPSS 15.000 for Windows program.

Table. 3 Instrument Reliability

No	Aspect	Reliability Coefficient	Category
1	Teachers' Competence	0.841	Good
2	Educational Environment	0.708	Moderate
3	Facilities/ Infrastructures	0.932	Very Good
4	Educational Process	0.857	Good
5	Students Discipline	0.670	Moderate
6	Respect to Others	0.772	Moderate
7	Responsibility	0.842	Good
8	Devotion to Worship	0.849	Good

Hair et.al.(1998) state that a construct possesses good reliability if the value of its Construct Reliability (CR)  $\geq 0.7$ . Based on the variable reliability presented in Table 3, it is shown that in general the variables tested possess good reliability coefficient values.

The EFA analysis is conducted to identify whether there is a relationship among variables and to reduce the number of items so that a new variable with simpler items would be obtained.

Table 4. Results of the EFA Analysis

No	Component	KMO	COMMUNALITIES	Dimension
1	Teachers' Competence	0,552	74,062%	9
2	Educational Environment	0,614	65,7082%.	4
3	Educational Facility/Infrastructures	0,634	79,838%.	4
4	Educational Process	0,707	65,983%.	6
5	Students' Discipline	0,672	70,263%.	3
6	Respect	0,672	74,183%.	4
7	Responsibility	0,722	59,712%.	2
8	Worship	0,602	68,074%.	6

From the results of the EFA analysis presented in Table 4, it is known that the KMO value from all components has been above 0.5. Therefore, all of the components have been valid enough to measure various existing components from teachers' competence, educational environment, facility/infrastructures, educational process, discipline, respect, responsibility, and worship.

A wide-scale tryout was conducted in four educational institutions namely Madrasahs Aliyah Negeri 3 Kediri City, Madrasahs Aliyah Negeri 2 Kediri, Pondok Gontor 3 Darul Ma'rifat Gurah Kediri, Pondok Gontor Putri 5 Kandangan, Kediri. The number of respondents was 670 students.

The objective of the operational tryout of the questionnaire instrument is to obtain a wide picture of the evaluation model of the affective aspect in IRE.

Based on the results of analysis using the SPSS program, it can be concluded that the questionnaire instrument is reliable with the Alpha coefficient of (0.827) > 0.7, while as a whole the instrument validity is good. The complete results of the reliability and validity may be seen in the Attachment.

Figure 1 shows that the results of the results of the empirical test of the Evaluation Model of the Affective Aspect in IRE (AEIRE) using LISREL 8.7 for windows program.

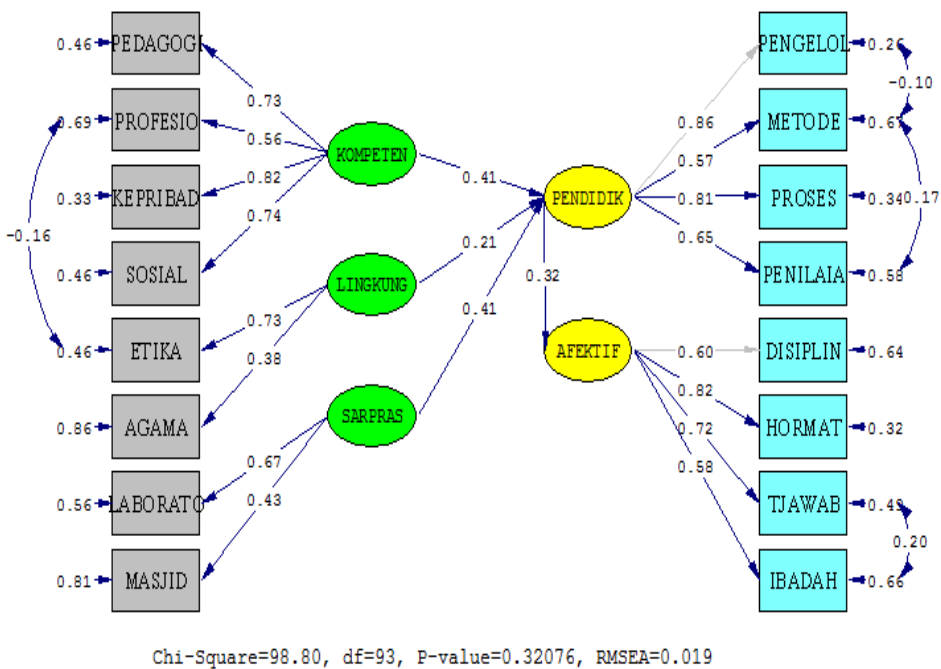


Figure1. Empirical Model: The Evaluation Model of the Affective Aspect for IRE (AEIRE)

Table 5. *Goodness of Fit Indices*

<i>Goodness of Fit Indices</i>	<i>Value</i>	<i>Decision</i>
p value	0,3207	Fit
RMSEA	0,019	Fit
GFI	0,94	Fit
AGFI	0,91	Fit
NFI	0,96	Fit
CFI	1,00	Fit

According to Brown and Cudeck the RMSEA value  $\leq 0.05$  signs a close fit.<sup>15</sup> While the GFI and AGFI values  $\geq 0.90$  according to Joreskog and Sorbon are under a good fit category.<sup>16</sup> According to Bentler and Bonnet,<sup>17</sup> NFI and CFI values  $\geq 0.90$  are under the category of good fit. From Table 5, it is known that all criteria to get a fit model have been met from the p-value to *RMSEA*, *GFI*, *AGFI*, *NFI*, and *CFI* values.

Table6. Test Results of the Instrument Measurement of the AEIRE Model

No	Aspect	p-value	RMSEA	t-value	LoadingFactor
1	Pedagogy	0,092	0,036	> 1.96	> 0.3
2	Teacher Professionalism	0,58029	0,00	> 1.96	> 0.3
3	Teacher Personality	0,24269	0,025	> 1.96	> 0.3
4	Social Competence	0,05489	0,053	> 1.96	> 0.3
5	EthicsandRegulations	0,57104	0,00	> 1.96	> 0.3
6	Religious Environment	0,09516	0,033	> 1.96	> 0.3
7	Laboratory Facility/Infrastructure	0,17711	0,033	> 1.96	> 0.3
8	Mosque Facility/Infrastructure	0,5990	0,052	> 1.96	> 0.3
9	Management	0,20836	0,026	> 1.96	> 0.3
10	Method	1,00	0,00	> 1.96	> 0.3
11	Process	0,25935	0,022	> 1.96	> 0.3
12	Evaluation	1	0,00	> 1.96	> 0.3
13	Discipline	0,14704	0,028	> 1.96	> 0.3
14	Respect	0,32315	0,016	> 1.96	> 0.3
15	responsibility	0.64568	0.00	> 1.96	> 0.3
16	Worship	0,29959	0,015	> 1.96	> 0.3

From Table 6, it is known that all aspects have a loading factor of above 0.3, therefore it can be stated that measurement instruments of AEIRE Model are valid.

Evaluation Model of the Affective Aspect in Islamic Religious Education (AEIRE) in Madrasah aliyah and Pondok Pesantren and its Tools has been tested in terms of its implementation. The results of the test show

<sup>15</sup> Michael W. Browne and Robert Cudeck, "Alternative Ways of Assessing Model Fit," *Sociological Methods & Research* 21, no. 2 (November 1, 1992): 230–58, <https://doi.org/10.1177/0049124192021002005>.

<sup>16</sup> K. G. Jöreskog and Dag Sörbom, *LISREL 8: User's Reference Guide* (Scientific Software International, 1996).

<sup>17</sup> P. M. Bentler and Douglas G. Bonett, "Significance Tests and Goodness of Fit in the Analysis of Covariance Structures," *Psychological Bulletin* 88, no. 3 (1980): 588–606, <https://doi.org/10.1037/0033-2909.88.3.588>.

that the implementation of this model is practical and objective enough. The results of the quantitative test in a limited scale using the SPSS and a wide scale using the LISREL program show that the instruments of the model evaluation of the AEIRE have fulfilled reliability coefficients, the items of the instrument has been valid and the model has also met the fit model requirement.

Based on the analysis of the quantitative data, this model may be implemented in a simple, practical, objective way, and it is also provided with a short, clear, and complete guide for the educational evaluation therefore it may facilitate the implementation of the evaluation of the affective aspect in IRE. The complete characteristics of the evaluation model are as follows:

1. This model is used to evaluate the affective aspect of IRE in Madrasah aliyah and pondok pesantren.
2. The AEIRE model is comprehensive in nature, consisting of three main components possessing a logical and integrated relation, covering *input*, *process*, and *output*.
3. The use of this model would not be dependent upon certain teaching approaches or strategies adopted by the teacher.
4. This model may be used for either formative or summative evaluation.
5. The implementation of the evaluation of the IRE program may be made by the teacher, the headmaster, the vice headmaster or educational staff or anyone given the authority to evaluate the IRE program.

Based on the results of the qualitative and qualitative analyses as described before, it can be concluded that the evaluation of the affective aspect in IRE in Madrasah Aliyah and Pondok Pesantren may be categorized as a good model since it is (a) valid, (b) reliable, (c) objective, (d) practical, (e) efficient, (f) useful, meaning that it may give accurate information to the headmaster, teachers, superintendent of IRE in terms of content, coverage, format, time of presentation, and benefit for the implementation of the evaluation of the affective aspect in IRE in Madrasah Aliyah and Pondok Pesantren.

The affective education model and affective domain have implications for the theory and model of instructional design as a whole. This is as a result of Martin's research with his team,<sup>18</sup> that the affective aspect is a crucial element in education, especially if the content is related to Islamic religious education. Of course, the affective outcome cannot be separated from the success of the cognitive aspect, which is also supported by the

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<sup>18</sup> Barbara L. Martin Reigeluth Charles M., "Affective Education and the Affective Domain: Implications for Instructional-Design Theories and Models," in *Instructional-Design Theories and Models* (Routledge, 1999).



effectiveness of the educational model designed by the school. Creemers and Kyriakides, for example, the effectiveness of the education model in question can include aspects of teaching and learning environment in schools.<sup>19</sup>

Vermunt's research confirms that affective aspects are synergistically implicated with metacognitive and cognitive aspects in learning styles and strategies.<sup>20</sup> The results of this research are in line with the recommendations of Santos and his team on the need to realize models that support affective aspects in education.<sup>21</sup> Hernandez and his colleagues also recommended an affective model for smart educational environments. This model has been evaluated and the results show high accuracy in the affective model of students and student learning. They present this model to provide an educational environment with affective behaviors where student affect is reflected on the user-system interaction.<sup>22</sup>

Furthermore, in the context of digital learning, the affective model is also very relevant. Foutsitzi and his team's research shows that cognitive and emotional aspects can enrich the learning process, thus achieving more optimal results.<sup>23</sup> On the other hand, Sandanayake and his colleagues also confirmed that affective e-learning models can be optimized to recognize learners' emotions in an online learning environment.<sup>24</sup> Therefore, the author increasingly believes that this AEIRE model can be applied optimally, especially in learning Islamic religious education.

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<sup>19</sup> Bert Creemers and Leonidas Kyriakides, "School Factors Explaining Achievement on Cognitive and Affective Outcomes: Establishing a Dynamic Model of Educational Effectiveness," *Scandinavian Journal of Educational Research* 54, no. 3 (June 1, 2010): 263–94, <https://doi.org/10.1080/00313831003764529>.

<sup>20</sup> J. D. Vermunt, "Metacognitive, Cognitive and Affective Aspects of Learning Styles and Strategies: A Phenomenographic Analysis," *Higher Education* 31, no. 1 (January 1, 1996): 25–50, <https://doi.org/10.1007/BF00129106>.

<sup>21</sup> Olga C. Santos, Jesus G. Boticario, and Ángeles Manjarrés-Riesco, "An Approach for an Affective Educational Recommendation Model," in *Recommender Systems for Technology Enhanced Learning: Research Trends and Applications*, ed. Nikos Manouselis et al. (New York, NY: Springer, 2014), 123–43, [https://doi.org/10.1007/978-1-4939-0530-0\\_6](https://doi.org/10.1007/978-1-4939-0530-0_6).

<sup>22</sup> Yasmín Hernández, L. Enrique Sucar, and Gustavo Arroyo-Figueroa, "Affective Modeling for an Intelligent Educational Environment," in *Intelligent and Adaptive Educational-Learning Systems: Achievements and Trends*, ed. Alejandro Peña-Ayala, Smart Innovation, Systems and Technologies (Berlin, Heidelberg: Springer, 2013), 3–24, [https://doi.org/10.1007/978-3-642-30171-1\\_1](https://doi.org/10.1007/978-3-642-30171-1_1).

<sup>23</sup> Sotiria Foutsitzi, Stylianos Asteriadis, and George Caridakis, "An Overview of Affective Models and ICT in Education," in *2019 10th International Conference on Information, Intelligence, Systems and Applications (IISA)*, 2019, 1–8, <https://doi.org/10.1109/IISA.2019.8900783>.

<sup>24</sup> T. C. Sandanayake and A. P. Madurapperuma, "Affective E-Learning Model for Recognising Learner Emotions in Online Learning Environment," in *2013 International Conference on Advances in ICT for Emerging Regions (ICTer)*, 2013, 266–71, <https://doi.org/10.1109/ICTer.2013.6761189>.

## Conclusion

The implementation of the affective education in IRE and the evaluation of the affective aspects covering discipline, responsibility, respect for others, and worship in Madrasah Aliyah and Pondok Pesantren have not been good, it is proven from the fact that there are still many schools that have not paid attention to the affective aspect of the IRE. The Evaluation Model of the Affective Aspects in AEIRE is new. Therefore, before being disseminated to users, it should be tried out first in the field at either a limited or wide scale to know the instrument validity, model effectiveness, and the practicality of the use of the model.

The components of the AEIRE consist of *Input*, *Process*, and *Output*. Based on the components in it, the implementation of the program evaluation of the AEIRE model follows the steps stated in the guide for using the evaluation model. The AEIRA model consisting of components of *input*, *process*, and *output* has a good fit based on the results of the *Confirmatory Factor Analysis* (CFA), with a *p-value* of 0,3207; *GFI* value of 0,94; *RMSEA* value of 0,019; *AGFI* value of 0,91; *NFI* value of 0,96; and *CFI* value of 1.00. Therefore, the requirement of the five elements above has been met so that the model can be categorized as a fit model. Based on the results of analysis using the Alpha Cronbach technique, the questionnaire instrument is reliable with the Alpha coefficient of (0.827) > 0.7. The Guide for the use of the AEIRE model according to the teachers of IRE in madrasah aliyah and the experts is very good with an average score of 3.6 from a minimal score of 1 and a maximal one of 4. The Evaluation Model of the Affective Aspects in Madrasah Aliyah and pondok pesantren is effective enough with the average score of 3.6 from the minimal score of 1 and the maximal one of 4.

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