

## DEVELOPMENT OF CHRISTIAN FAITH CHARACTER INSTRUMENTS FOR MALINAU HIGH SCHOOL STUDENTS (CASE STUDY AT SMAN 4 MALINAU, NORTH KALIMANTAN)

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### ABSTRACT

Character education is an important aspect in the formation of an individual's personality and morals, including in the context of religious education. In Malinau, Indonesia, Christian religious education is an integral part of the curriculum in schools. However, to achieve the goal of effective Christian character education, a valid and reliable instrument is needed to measure students' Christian faith character development. This study aims to develop a Christian faith character instrument for secondary school students in Malinau. The design used in this research is positivist quantitative. The research was conducted by collecting the required literature sources (journals or books), then developing a Christian faith character instrument for Malinau high school students and measuring it using a test. Validity and reliability. The results showed that the instrument to measure the development of Christian faith character for high school students in Malinau proved to be valid and reliable to be used in further research.

Keywords: Instrument Development, Christian Faith Character, Malinau High School Students

## INTRODUCTION

The implementation of Christian Religious Education (from now on referred to as PAK) in Senior High Schools (SMA) is not only the realization of the state's mandate, which is stated not only in the Outlines of State Policy (GBHN) and the Law on the National Education System (Sisdiknas) but also has the theological basis contained in the great commission of the Lord Jesus. One of the teaching tasks, as contained in this mandate, is embodied in public educational institutions, in this case, schools as education providers. PAK implementation at school materialized in Christian Religion subjects carried out by PAK subject teachers with the aim that students can experience comprehensive life changes in terms of cognitive, affective, and psychomotor (Agung & Astika, 2011).

Implementation of PAK can achieve maximum results if it applies several influencing factors, namely the role of PAK teachers in increasing students' Christian faith and behaviour (Ermindyawati, 2019). The first factor is the role of the PAK teacher in carrying out the teaching process to convey learning material to students in class. The teaching process is essential for

achieving maximum results in teaching and learning activities (Soumokil, 2020). In the PAK context, the teaching method is a tool that can bring students to the introduction of the Lord Jesus and His word. The author uses a case study on PAK teachers at SMAN 4 Malinau, North Kalimantan, in increasing the Christian faith of tenth (X), eleven (XI), and twelve (XII) graders of Christianity. Furthermore, to measure the role of PAK teachers in improving students' Christian faith character, the authors adapted research from Agung & Astika (2011) through five (5) dimensions, namely: (1) Using the Questions Method; (2) Using the Story Method (Parable/Illustration); (3) Using the Lecture Method; (4) Using Objects or Objects, and (5) Using the Discussion Method.

The second factor is the behaviour of tenth (X), eleventh-grade students (XI), and twelve (XII) at SMAN 4 Malinau. Student behavior can be seen from the attitude that appears under certain conditions, for example, anxiety when violating school rules or regulations, angry attitudes when disturbed by friends, and even fear when receiving a reprimand from the teacher. Such attitudes cause students to be unable to focus on following the teaching and learning process. Seeing the many possibilities of bad behavior from students, for example, the attitude of not appreciating the teacher while teaching or giving advice to students, the attitude of not caring about and not paying attention to the subject matter conveyed by the teacher in class, and the appearance of disrespectful behaviour to both the teacher and friends through rude words. In the process of the role of PAK teachers in schools, the teacher does not only teach Christianity but also provides guidance and direction to students in understanding, experiencing, understanding, and being equipped with the Word of God. Therefore, students can apply God's Word and recognize Jesus Christ as Lord and Savior (Ermindyawati, 2019).

As for measuring the behavior of tenth (X), eleven (XI), and twelve (XII) grade students at SMAN 4 Malinau, the authors adapted from Kurniawati's research (2019) through four (4) dimensions, namely (1) Compassion (Indicator: Application of love in students' lives); (2) Honesty (Indicator: Honest behavior when carrying out obligations); (3) Discipline (Indicator: Obedience to existing rules); and (4) Responsibility (Indicator: Attitude and behavior responsibility when carrying out assignments from the teacher). Next, accordingHutagalung research & and Ferinia (2021), to measure character education, adopted from Lickona ((Ningsih, 2011)) based on six dimensions, namely trust (trustworthiness), respect (respect), responsibility (responsibility), justice (fairness), concern (caring), and citizenship (citizenship) and twelve (12) items, namely: (1) Can keep secrets; (2) Faithful to religion; (3) Treat others well; (4) Polite; (5) Unable to hurt friends; (6) Do not like to blame; (7) Never take advantage of others; (8)Follow school rules; (9) Never be rude; (10) Quickly respond to the needs of others; (11) Generous to those in need; (12) I obey the Law of the land.

Research by measuring the role of PAK teachers in improving the character of the Christian faith of students towards the behaviour of students in class has never been done. Therefore, the author is interested in using the title "Development of Christian Faith Character Instruments for Malinau High School Students (Case Study at SMAN 4 Malinau, North Kalimantan)" to support the

dissertation's preparation. Furthermore, in discussing this article, the authors limit it by focusing on developing research instruments measured using test validity (use Aiken's V and Pearson correlation) and test reliability.

**P**roblem Formulation This research is what is about the influence of the role of the PAK teacher in improving the character of the student's Christian faith on the behaviour of tenth (X), eleven (XI), and twelve (XII) grade students at SMAN 4 Malinau, if reviewed based on test validity and reliability?

## **METHODS**

Based on the title taken by the researcher, namely "Development of Christian Faith Character Instruments for Malinau High School Students (Case Study at SMAN 4 Malinau, North Kalimantan)", the design used in this study was the positivist quantitative. This research was conducted by collecting the required literature sources (journals or books), then developing the character instrument of the Christian faith for Malinau High School students and measuring it using a test. Validity and reliability. The overall instrument development flow will be presented in Figure 1 below;

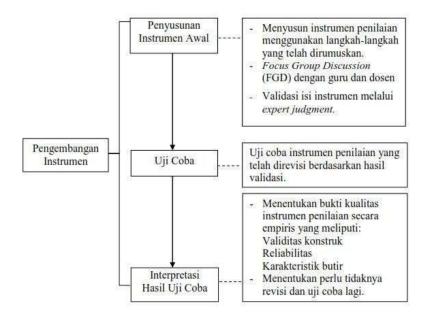


Figure 1. Instrument Development Flow

Figure 1 represents the development of research instruments to support research dissertations through three (3) stages. The three stages are (1) preparation of the initial instrument, (2) trials, and (3) interpretation of test results.

In the first stage, namely, the authors arrange research instruments using the steps formulated and adapted to the title of the dissertation, as well as some literature that the authors use, such as research journals relevant to the research variables. In the research instrument, the authors use two

(2) variables, namely the role of the teacher PAK in improving students' Christian faith character and behaviour of tenth (X), eleven (XI), and twelve (XII) graders at SMAN 4 Malinau. The variable of the role of the PAK teacher in improving the character of the student's Christian faith, in its measurement, uses five (5) dimensions (Using the questions method, Using the story method (Parable/Illustration), Using the lecture method, Using objects or objects, and Using the discussion method) which consists of nineteen questions (number 1-19). The Behavior variable of class X, XI, and XII students at SMAN 4 Malinau uses four dimensions (love, honesty, discipline, and responsibility), which consist of sixteen questions (numbers 19-35). Next, the author will focus on group discussions with lecturers (Focus Group Discussion) regarding the research instruments that have been made (Appendix I). The results of the discussion with the lecturer regarding the research instrument, the writer will directly test using three (3) experts or expert Judgment (EJ) (Appendix III). Next, the writer formulates a formula, Aiken's V, to count the content-validity coefficient, which is based on the assessment of a panel of experts (three experts) on an item in terms of the extent to which the item represents construction. Each item is rated by three (3) raters using a scale of 1-5. The following is the formula for calculating the validity coefficient Aiken's V that is

$$V = \frac{\Sigma s}{n (c-1)}$$
(1)

Information:

s = the score assigned to each rater minus the lowest score in the category.

n = total rater

c = the number of categories that can be selected rater

V = agreement index rater

After calculating and producing an index value V, Aiken also provides a guide for writers on whether an item is accepted based on several criteria. Aiken's V is less than < 0.4, then has a value validity the low. Meanwhile, at a value of 0.4 to 0.8, it has a value of the validity medium. Meanwhile, if it has a value of more than > 0.8, it has a value validity of the highest.

Before proceeding to level two, the writer determines the analysis technique first. In data collection techniques, the writer uses the following steps:

1. Interview (interview), namely conducting questions and answers with parties with the authority to provide the required data. Interviews were conducted when the writer made observations at the beginning of exploring the phenomenon that occurred in tenth (X), eleven (XI), and twelve (XII) grade students at SMAN 4 Malinau in May 2023. The author explored information from several related students and their curiosity about the influence of the role of the PAK teacher in

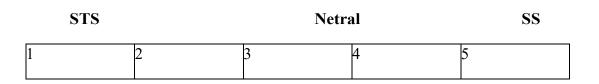
improving the character of the student's Christian faith, which is applied to SMAN 4 Malinau, North Kalimantan.

2. Questionnaires are data collection techniques by providing questions for respondents to answer (Sugiyono, 2017, p. 142). The questionnaire is a list of statements arranged based on a frame of mind, so the form of the statement in this questionnaire is a closed questionnaire. The author collects data by disseminating links to Google Forms regularly online. Based on the link, the respondent will fill an informed questionnaire online, which has been made by the author using five (5) Likert scales. In addition, the questionnaire was filled out by students-class girls ten (X), eleven (XI), and twelve (XII) at SMAN 4 Malinau in May 2023. In this study, using a scale Likert five (5) points which can be explained in Table 1 as follows:

Likert Scale Statement	score
Strongly Agree (SS)	5
Agree (S)	4
Neutral (N)	3
Disagree (TS)	2
Strongly Disagree (STS)	1
Common (Consistence of	017)

Table 1.ScaleLikert 5 Point

Source: (Sugiyono, 2017)



Likert Scale in Table 1 represents the scale used to measure a positive attitude towards an object by submitting several statements. These statements are a questionnaire that can be calculated through an answer scale with a weight value of 1 to 5. In this procedure, it is formed in the following way:

- a) Determine the variables to be studied.
- b) Compile statement questionnaire according to the indicators on each variable. In this study, two variables were used, namely the role of the PAK teacher as an independent variable (X) and the student's behavior. Student As variable depends (Y).

After compiling the statement, respondents were asked to agree, neutral, or disagree with a score of 1 to 5 for the statement submitted by the author with the respondent's perception. Assignment (scoring). For answers, Strongly Agree (SS) is given a value of 5, Neutral (3), and so on, decreases until the answer Strongly Disagree (STS) is given a value of 1. Meanwhile, data from the results

of distributing the questionnaire will be tabulated using software Microsoft Office Excel version 2019; after that, the researcher will process the data by testing statistics using tools SPSS version 27.

In the second stage, the authors tested the revised assessment instrument based on the validation results.

The third or final stage, namely the interpretation of the test results by determining empirical evidence of the quality of the assessment instrument, which includes construct validity and reliability of the characteristics of the question items in the questionnaire. Respondents in this study were tenth (X), eleven (XI), and twelve (XII) grade students at SMAN 4 Malinau, North Kalimantan. SMAN 4 Malinau was Chosen because they are students of the author, who currently works as a PAK teacher at the school. The population in this study was 250 people consisting of grades ten (X), eleven (XI), and twelve (XII). The author uses techniques sampling saturated, i.e., using the entire population as the research sample so that the sample is 250 respondents. The data from the results of distributing this questionnaire will be tested for validity and reliability using the help of software SPSS (Statistical et al.) version 27.

The following is the formula used to calculate the validity analysis using correlation Pearson (Pearson correlation) that is;

$$r = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{(n \sum (X)^2 - (\sum X)^2)(n \sum (Y)^2 - (\sum Y)^2)}}$$
(1)

Information:

r = Coefficient of validity N = Number of subjects X = Value of comparison

AND = the value of the instrument whose validity will be sought

Provision Validity Instrument in Equation (2) when r-count is more enormous with table. The basis for decision making is r count >r table, and then the variable is said valid; if Direction<r table is declared invalid. It is known that the value r-table for data totaling 250 people, with a significance level of 5%, is 0.1236, so it can be valid if the value count>0,1236.

While the reliability test is a test to ascertain whether the research questionnaire will be used to collect research variable data reliably or not (Khotimah et al., 2016). The questionnaire said that if the questionnaire is repeated measurements, it will get the same results. As for the formula to determine reliability, which will be explained in Equation (3) below:

$$ri = \frac{\kappa}{\kappa} \left( \frac{\rho(k-\rho)}{\kappa \sigma \frac{2}{\iota}} \right)$$

ri = instrument reliability

k = number of questions or number of questions

$$\rho$$
 = average score

$$\sigma \frac{2}{\iota} =$$
varians total

Test Reliability Processed using software SPSS version 27 with the overall sample data of 250 respondents. The data from 250 respondents was used as a feasibility test to be continued into research using Pearson's reliability test. On the test reliability instrument, the closer the reliability coefficient to 1.0, the better. Generally, reliability less than 0.6 is considered poor, reliability in the range of 0.6 to 0.7 is acceptable, 0.8 is considered good, and more than 0.8 is better. Cronbach's alpha was used to measure the reliability of the indicators used in the research questionnaire. Data is reliable if the Value of Cronbach's Alpha is above 0.5 (Sugiyono, 2017, p. 7).

Next, the author determines whether or not revision is necessary and re-tests if there is research instrument data that needs to be validated and reliable.

## **Results and Discussion**

Results Instrument test research measured using three (3) experts or expert's expert judgment using the formula Aiken-V. Index Formulation Aiken's V or V Aiken is the index of agreement rate on the item's suitability (or whether the item is appropriate or not), with the indicators you want to measure using that item. The results of the assessment of three expert experts will be displayed in Table2 and Table 3 below;

	The Role of PAK Teachers (X)							
No. Item	Expert 1	Expert 2	Expert 3	<b>S</b> 1	S2	<b>S</b> 3	□ <b>S</b>	Vaiken
1	4	5	5	3	4	4	11	0,92
2	5	4	5	4	3	4	11	0,92
3	5	5	5	4	4	4	12	1,00

Table 2.Result 3 Expert Judgment with Formulation Aiken-V on Variable X

#### DEVELOPMENT OF CHRISTIAN FAITH CHARACTER INSTRUMENTS FOR MALINAU HIGH SCHOOL STUDENTS (CASE STUDY AT SMAN 4 MALINAU, NORTH KALIMANTAN)

4	5	5	5	4	4	4	12	1,00
5	4	5	5	3	4	4	11	0,92
6	5	5	5	4	4	4	12	1,00
7	5	5	4	4	4	3	11	0,92
8	5	5	5	4	4	4	12	1,00
9	4	5	5	3	4	4	11	0,92
10	5	5	5	4	4	4	12	1,00
11	5	5	5	4	4	4	12	1,00
12	5	5	5	4	4	4	12	1,00

Source: Data Processed by Researchers, 2023

	<b>Behavior of Students (Y)</b>							
No. Item	Expert 1	Expert 2	Expert 3	<b>S1</b>	S2	<b>S3</b>		Vaiken
17	5	5	5	4	4	4	12	1,00
18	5	5	4	4	4	3	11	0,92
19	4	5	5	3	4	4	11	0,92
20	5	5	4	4	4	3	11	0,92
21	4	5	5	3	4	4	11	0,92
22	5	5	5	4	4	4	12	1,00
23	4	5	4	3	4	3	10	0,83
24	4	5	5	3	4	4	11	0,92
25	5	4	5	4	3	4	11	0,92
26	5	5	5	4	4	4	12	1,00
27	5	5	4	4	4	3	11	0,92

## DEVELOPMENT OF CHRISTIAN FAITH CHARACTER INSTRUMENTS FOR MALINAU HIGH SCHOOL STUDENTS (CASE STUDY AT SMAN 4 MALINAU, NORTH KALIMANTAN)

28	4	5	5	3	4	4	11	0,92
29	5	5	5	4	4	4	12	1,00
30	5	5	5	4	4	4	12	1,00
31	4	5	5	3	4	4	11	0,92
32	5	4	5	4	3	4	11	0,92
33	4	5	5	3	4	4	11	0,92
34	5	5	5	4	4	4	12	1,00
35	5	5	5	4	4	4	12	1,00

Source: Data Processed by Researchers, 2023

Table 2 and Table 3 represent if each question item in the research instrument has a value of Vaiken above 0.8, meaning validity is high and considered acceptable validity content.

It is known that the value r-table for data totaling 250 respondents, with a significance level of error of 5%, is 0.1236. It says valid If r-Count>r-table, the following is the resulting output derived from tools SPSS version 27, which will be represented in Table 4, namely;

Item	<i>r</i> -table	<i>r</i> -count	<b>Results Description</b>
X1.1	0,1236	0,803	Valid
X1.2	0,1236	0,721	Valid
X1.3	0,1236	0,803	Valid
X1.4	0,1236	0,803	Valid
X1.5	0,1236	0,579	Valid
X1.6	0,1236	0,581	Valid
X1.7	0,1236	0,721	Valid
X1.8	0,1236	0,721	Valid
X1.9	0,1236	0,579	Valid

Table 4. Output Test results validity using SPSS Version 27

# DEVELOPMENT OF CHRISTIAN FAITH CHARACTER INSTRUMENTS FOR MALINAU HIGH SCHOOL STUDENTS (CASE STUDY AT SMAN 4 MALINAU, NORTH KALIMANTAN)

0,1236	0,803	Valid
0,1236	0,721	Valid
0,1236	0,358	Valid
0,1236	0,127	Valid
0,1236	0,356	Valid
0,1236	0,263	Valid
0,1236	0,455	Valid
0,1236	0,395	Valid
0,1236	0,844	Valid
0,1236	0,847	Valid
0,1236	0,909	Valid
0,1236	0,718	Valid
0,1236	0,705	Valid
0,1236	0,434	Valid
0,1236	0,769	Valid
0,1236	0,748	Valid
0,1236	0,408	Valid
0,1236	0,336	Valid
0,1236	0,579	Valid
0,1236	0,909	Valid
0,1236	0,844	Valid
0,1236	0,702	Valid
0,1236	0,702	Valid
0,1236	0,718	Valid
	0,1236   0,1236	0,1236 0,721   0,1236 0,358   0,1236 0,127   0,1236 0,356   0,1236 0,263   0,1236 0,455   0,1236 0,455   0,1236 0,395   0,1236 0,844   0,1236 0,847   0,1236 0,705   0,1236 0,705   0,1236 0,705   0,1236 0,705   0,1236 0,705   0,1236 0,748   0,1236 0,748   0,1236 0,336   0,1236 0,579   0,1236 0,579   0,1236 0,579   0,1236 0,579   0,1236 0,909   0,1236 0,702   0,1236 0,702

Y1.19 0,1236 0,902 Valid	Y1.18	0,1236	0,847	Valid
	Y1.19	0,1236	0,902	Valid

Source: Data Processed by Researchers, 2023

Based on Table 4, which represents the correlation of each item to the total score of each statement for variables X and Y, all produce a valuer-count>r-table. Results on the validity test (validity) in Table 4 also explain that all data researchers use is valid. Thus, the entire data can be done in the following statistical test: the reliability test (reliability).

In the reliability test (Reliability) instrument, the closer the reliability coefficient to 1.0, the better. Generally, a reliability of less than 0.6 is considered poor, 0.6 to 0.7 is acceptable, and more than 0.8 is good. The following is a table of values of Cronbach's alpha from each instrument in Table 5, namely;

Item	Nilai Cronbach'sAlpha	Results Description
X1.1	0,834	Reliable
X1.2	0,839	Reliable
X1.3	0,834	Reliable
X1.4	0,834	Reliable
X1.5	0,846	Reliable
X1.6	0,847	Reliable
X1.7	0,839	Reliable
X1.8	0,839	Reliable
X1.9	0,846	Reliable
X1.10	0,834	Reliable
X1.11	0,839	Reliable
X1.12	0,859	Reliable
X1.13	0,868	Reliable
X1.14	0,863	Reliable
X1.15	0,868	Reliable
X1.16	0,855	Reliable
Y1.1	0,940	Reliable
Y1.2	0,932	Reliable
Y1.3	0,931	Reliable
Y1.4	0,930	Reliable
Y1.5	0,934	Reliable
Y1.6	0,934	Reliable

Table 5. Output Test results Reliability Using SPSS Version 27

## DEVELOPMENT OF CHRISTIAN FAITH CHARACTER INSTRUMENTS FOR MALINAU HIGH SCHOOL STUDENTS (CASE STUDY AT SMAN 4 MALINAU, NORTH KALIMANTAN)

Y1.7	0,940	Reliable
Y1.8	0,933	Reliable
Y1.9	0,933	Reliable
Y1.10	0,942	Reliable
Y1.11	0,943	Reliable
Y1.12	0,937	Reliable
Y1.13	0,930	Reliable
Y1.14	0,932	Reliable
Y1.15	0,934	Reliable
Y1.16	0,934	Reliable
Y1.17	0,934	Reliable
Y1.18	0,931	Reliable
Y1.19	0,930	Reliable

Source: Data Processed by Researchers, 2023

Based on Table 5 shows that the test result reliability in all variables has coefficient alpha which is quite large, i.e., above 0.60 (>0.60). The reliability test (Reliability) results in Table 5 also represent that the entire data used by the researcher is reliable.

## CONCLUSION

This conclusion is presented based on the test results validity Aiken's V(with the help of Microsoft Excel) and test the validity using Pearson correlation(Pearson correlation) with the help of tools SPSS. Test results correlation using Aiken's V proves that each question item in the research instrument has high validity and is considered adequate content validity. Next, the test results validity using correlation Pearson (Pearson correlation), proving that the accurate data used by the researcher is valid. Thus, these data are feasible for further statistical tests, namely the reliability test (reliability). As for the test results' reliability, prove if all variables have coefficients alpha which is large enough so that the accurate data used by the researcher is reliable. This article was created to support the author's dissertation proposal in measuring the influence of the role of the PAK teacher in improving the character of the student's Christian faith on the behavior of tenth (X), eleven (XI), and twelve (XII) grade students at SMAN 4 Malinau. Therefore, the authors' data in the test validity and reliability (including respondents and questionnaire statements) can be used as support in dissertation research.

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