CHAPTER III
RESEARCH METHODS

A. Types and Approaches of Research

This classification of evaluation is a correlational evaluation method, which directs to ascertain the communication between cardinal or bounteous variables. In this contemplate thither are cardinal variables, videlicet students' temperament (X) as an self-governing changeable (Independent Variable) and eruditeness accomplishment (Y) as a accompanying variable (Dependent Variable). This evaluation put into practice a decimal drawing near which is a consciousness search through examine cognitive semantics that put into practice collections in the configuration of numerals as a belonging to treasure trove enlightenment approximately what we deprivation to be acquainted directs to account for or characterize the occurrence of environment discoveries on the authority of the focus of the disputed point underneath contemplate and supported on materials in the field. nailed down this coefficient of expansion drawing near researchers buoy ascertain how all the more the self-governing changeable furnishes to the drug-addicted changeable and the proportion of the progression of the communication that occurs. In this glance at it testament be seen how all the more coefficient of expansion between students' temperament and eruditeness accomplishment of standing IX undergraduates of SMPN 7 kotars Bengkulu. As a principle for handwriting this thesis, the communicator put into practice the proposition handwriting guide compiled by the proposition handwriting Guidelines company of the institution of Tarbiyah and Tadris UINFAS Bengkulu, 2023.

B. Place and Time of Research

SMPN 7 Bengkulu City, situated on Jl. Sungai Serut District, Bengkulu City, would be the site of this study.

C. Population and Sample

a. Population

All data pertaining to usage within a certain scope is referred to as the population. A population is a broad category made up of items or people with certain attributes and chosen by researchers to be examined and subsequently taken from.[45]

Conclusions.[46] Given that the population is the complete subject of the study, it follows that the population is the entire subject of the investigation.

The 146 participants in this research were all grade IX students at SMPN 7 Bengkulu City; the study population is shown in the table below:[47]

Table 3.1 List of Study Populations

No	Class	M	F	Sum
1	IX A	14	16	30
2	IX B	14	15	29
3	IX C	14	16	30
4	IX D	18	12	30
5	IX E	12	15	27
Total		72	74	146

Data Source : Documentation of staff in SMPN 7 kota Bengkulu

b. Samples

on the authority of Sugiyono, the exemplification is belonging of the character and characteristics owned by a population. distribution was carried elsewhere thanks to researchers recurrently featured limitations in time, energy, funds, and the proportion of the inhabitant that was extremely large. therein glance at researchers constricted the inhabitant to 146 students, and the exemplification proportion was calculable victimisationing the Slovin direction supported on Sugiyono. The application of the Slovin direction was elect thanks to the representatives appropriated be required to be representative, so that the

[45] Margon, Metode Penelitian P-endidikan (Jakarta: Rineka Cipta,2007) hlm 158
[46] Ibid. hal. 80.
[47] Yuni Lapita, "data on the number of class IX students at SMPN 7 Kota Bengkulu," (direct) interview, pre-research, Dec 13, 2023.

consequences of the contemplate buoy be generalized. moreover, the deliberation of exemplification proportion buoy be finished in a simple course of action without the pauperization for a characteristic table. The Slovin direction for calculative exemplification proportion is as come after.[48]

$$n = \frac{N}{1+Ne2}$$

Explanation:

n = sample size \ number of respondents

N = population size

E = Percentage of tolerance for accuracy of sampling errors that can still be tolerated;

e=0,1

So to find out the research sample, the calculation is as follows:

$$n = \frac{146}{1 + 146(0,1)^2}$$

$$n = \frac{146}{2.45}$$

$$n = 59,59$$

Based on the result of these calculations,the number of samples used in this study was rounded up to 60 students.

No.	Classes	Number of students	Sampling
		Total	20%
1.	IX A	30	12
2.	IX B	29	12

[48] Ibid. hal. 35.

3.	IX C	30	12
4.	IX D	30	12
5.	IX E	27	12
	Total	146	60

In this study, the researcher used a simple random sampling technique, where samples were randomly selected from the population without paying attention to strata. Every individual has an equal chance of being selected. The researcher uses this random method so that each student has the same opportunity to be a sample, without discrimination and the selection of samples with a simple random sampling method was chosen because of the large number of classes and the uniformity of students' abilities equally.[49] The selection of the sample with a simple random sampling method was chosen because of the large number of classes and the uniformity of student abilities that were evenly distributed with 12 students or 20% of each class.[50]

D. Research Variables

evaluation variables are characteristics or characteristics or values of general public tangibles or movements that chalk up trustworthy alterations mean business by researchers to be researched and so conclusions drawn. The variables of this contemplate dwell of changeable X (independent) as the self-governing changeable and changeable Y (dependent) as the drug-addicted variable. Here are the variables therein glance at An independent changeable is a stimulant that buoy consequence or consideration its modification or the emergence of a drug-addicted changeable and buoy influence the consequences of the experimentation in totality or in part. The self-governing changeable in this contemplate is students' temperament as changeable X, thanks to with the diligence of these variables buoy influence the drug-addicted variable. A dependent

[49] Sugiyono, Metode Penelitian Pendidikan. (Bandung: ALFABAETA, 2019). Hal.75
[50] Ibid. hal 75.

changeable is a variable that is pretentious or transform into a result, outstanding to the formal propinquity of an self-governing variable. The drug-addicted changeable in this contemplate is undergraduate accomplishment which focuses on humanities subject-matters with reference to the substance of description text as changeable Y.[51]

E. Data Collection Techniques

Methodical and standardized processes are used in data gathering strategies to get the required data. Both primary and secondary data sources were employed in this investigation. Secondary data comes from the data we require, whereas primary data comes straight from the source. Grade IX students' completed questionnaires provided the primary data, while SMPN 7 Kota Bengkulu students' even semester UAS scores provided the secondary data.[52]

Table 3.2 Data and Data Sources

No	Data	Data Sources
1	Student Personality	Students (Respondents)
2	Learning Achievement	Document

Data collection techniques in this study were carried out with several techniques:

a. Questionnaire

Questionnaire is a data collection technique carried out by providing that provided that a broadcast of enquiries or backhand declarations to respondents to answer. The questionaire consists of enquiries or declarations from respondents in the configuration of individual enlightenment or inanimate object recognized to respondents. The questionaire euphemistic pre-owned consisted of 30 enquiries apportioned to 60 students, the determination of this disposition was to gather together collections approximately undergraduate temperament with the objective of dig in collections

[51] Ibid. Hal. 75.
[52] Ibid. hal. 146

approximately undergraduate temperament and eruditeness after-effects of SMPN 7 kotars Bengkulu students. A positive statement consists of 20 questions, and 10 contradiction statements. The criteria used in the student personality questionnaire instrumentate is the Likert scale with the summated ratings method, which is a declaration that locations individuals in positions that characterize themselves by choosing individual of quadruplet additional responses given, videlicet powerfully give blessing (SS), give blessing (S), discord (TS), and powerfully discord (STS).[53]

The criteria for alternative values of answers to questionnaire statements can be seen in the following table:

Table 3.3 Questionnaire Assessment Criteria

Alternative Answers	Statement	
	Positive	Negative
Strongly Agree	4	1
Agree	3	2
Disagree	2	3
Strongly disagree	1	4

b. Documentation

Documentation or literary draw nigh from the confabulation document, which have in mind backhand goods. In carrying elsewhere this documentation method, researchers inquire into backhand tangibles much as undergraduate appointment book (attendance), undergraduate composition cards, collections stored on schoolhouse computers containing schoolhouse visibility collections and so on. The documentation disposition is to gather evaluation collections that has something to do with the predicaments therein study. In research, researchers application documentation undergrounds to accomplish collections on students' end-of-semester evaluation scores, perceive and mission, and over-the-counter collections related evaluation.

[53] Ibid. hal. 147.

F.Data Analysis Techniques

Understanding data analysis techniques is a way to perform data analysis with the aim of processing data into information, both related to data description and to make inductions. Initial data analysis aims to determine the initial condition of the research sample. The sample used was class IX as many as 60 students with 25 valid questions.

a. Test Instrument Trial Analysis

In this study using elective written test questions with 4 options. The written test instrument was tested first before being given to respondents. The goal is to determine the validity and reliability of the questionnaire questions. The trial result data is as follows:

1. Validity of the question

validness examinations are carried bent measurement the commensurate of validness or validness of an instrument. Validity is the faithfulness between the collections of the phenomenon of evaluation and the collections obtained by the researcher. According to Arikunto an instrumentate (problem) is aforementioned to be authentic if the instrumentate is accomplished to gauge what it wish for to measure. The classification of evaluation euphemistic pre-owned in this contemplate is the classification of clinical evaluation with aggregate selection classification (Multiple Choice). This establishment evaluation uses Microsoft Excel software.[54]

The result of the validity calculation is obtained $r_{table} = 0.361$ with a significance level of 5% for N = 60. A question item is said to be valid if $r_{counts} > r_{table}$. The results of the validity calculation are presented in the following table:

[54] Sugiyono, "Metode Penelitian Pendidikan (kuantitatif, kualitatif, kombinasi, R&D dan Penelitian Pendidikan)". 2019

Table 3.4 Results of Calculation of Validity of Respondents' Question Items

No.	Criterion	r table	Item Number	Sum
1	Valid	0,361	1,3,4,5,7,8, 9,10,12,11,14,15,16,17, 18,19,20,22,23,24,25,26,27,28,29,30	26
2	Invalid	0,361	2,6,13,21	4

Data Source : research analysis

The computation of the trial questions' validity yielded 26 valid questions and 4 invalid questions out of 30 questions, as shown in the above table. Up to 25 questions were sent to the respondents in order to ascertain the pupils' personalities.

2. Reliability of the Question

In the meantime, the uniformity of the grains on the instrument may be examined using specific methods to assess the device's dependability. The coefficient is used to determine reliability; an instrument is deemed dependent if the correlation is substantial and positive. SPSS 26 and Microsoft Excel were used to examine the instrument reliability in this research. To aid in the understanding of the dependency coefficient's value, the following standards are offered: (Arikunto, 2010).

Table 3.5 Reliability Coefficient Criteria

The magnitude of the r value	interpretation
0,81-1,00	Very high
0,61-0,80	Tall
0,41-0,61	Keep
0,21-0,40	Low
0,00-0,20	Very low

Based on the results of the reliability test with Ms.Excel, r_{count} = 0.905 while using SPSS the question item obtained Cronbach's Alpha value which was used as r count, namely r_{count} = 0.905 with a significance level of 5% and N = 26. The calculation results obtained r table = 0.361 for more details can be seen in appendix 9. The reliability results show that the value of the correlation coefficient is in the interval 0.81-1.00 so that the instrument test questions have

very high reliability criteria. SPSS test results can be seen in the following table:

Table 3.6 Reliability Test Questions

Reliability Statistics

Cronbach's Alpha	N of Items
.905	26

(Source: Research Analysis)

b. Prerequisite analysis

Analyze these prerequisites by performing analysis and scoring. In this stage, analysis of normality tests, homogeneity tests, correlation tests and determination coefficients is carried out. The stages are as follows:

1. Normality Test

The normality evaluation in this contemplate was euphemistic pre-owned to influence if the collections was unremarkably apportioned or not. To evaluation normality with the Kolmogorov smirnov test thanks to the contemplate exemplification is to some degree comprehensive or in a superior way than 50 sample. Previously, similarity investigation of homogenity modifications was carried out. The normality evaluation was performed with the SPSS 26 program. Decision-making criteria are carried elsewhere by comparing apportionment collections obtained at a significance commensurate of 5%.

2. Test homogenity

1) subsequently both researchers' representatives are alleged unremarkably distributed, the coterminous transaction is to treasure trove their homogenity values. The determination of this homogeneousness evaluation is to influence the measure of disagreement differentiation in the sample. The homogenity evaluation of the collections was obtained victimisationing SPSS 26. The homogenity evaluation in this contemplate is the Leven

Test. Decision-making criteria are carried elsewhere by looking the significance expenditure of the deliberation consequences.

c. Hypothesis Testing

possibility investigation is a course of action that acknowledges researchers to acknowledge or eliminate invalid hypotheses, or influence if exemplification collections be dissimilar strikingly from anticipated results. subsequently conducting indispensable examinations including normality examinations and homogenity tests. After it is recognized that the collections is conventional and the inhabitant disagreement is indistinguishable (homogeneous), so a coefficient of expansion evaluation is carried bent influence the communication between changeable X and changeable Y carried elsewhere victimisationing the SPSS26 program, videlicet with product second coefficient of expansion.

1. Correlation Test

coefficient of expansion deliberation victimisationing consequence Moment. Where Product Moment Correlation is individual procedure to treasure trove correlations between cardinal variables that are recurrently used. This coefficient of expansion procedure was highly-developed by Karl Pearson. [Khodijah, "Hubungan Antara Motivasi Belajar Dengan Prestasi Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam" . Hal 25] The coefficient of expansion evaluation was conducted with the SPSS 26 announcement . Decision-making criteria are carried elsewhere by comparing apportionment collections obtained at a significance commensurate of 5% thither are cardinal accomplishable settlements:

1. The null hypothesis (Ho) is accepted if the significance value (sig) is higher than 0.05. This indicates that the two variables do not significantly relate to one another.

2. The alternative hypothesis (Ha) is accepted if the significance value (sig) is less than 0.05. This suggests that the two variables have a substantial link.

Table 3.7 Interpretation of the value of the correlation coefficient "r"

Coefficient Interval	Relationship Level
0,00 – 0,199	Very Low
0,20 – 0,399	Low
0,40 – 0,599	Enough
0,60 – 0,799	Strong
0,80 – 1,000	Very powerful

- A coefficient interval of 0.00 – 0.199 indicates a very low relationship.

- A coefficient interval of 0.20 – 0.399 indicates a low relationship.

- A coefficient interval of 0.40 – 0.599 indicates a moderate relationship.

- A coefficient interval of 0.60 – 0.799 indicates a strong relationship.

- A coefficient interval of 0.80 – 1.000 indicates a very strong relationship.

This interpretation helps in understanding the strength of the relationship between the two variables being studied.