CHAPTER III
RESEARCH METHOD

This chapter describes the research methodology. It consists of research design, research variables, population and sample, research procedure, research instrument, data collection and data analysis of the research.

A. Research Design

This research is conducted at SMA Plus Bahrul Ulum Sungailiat, Bangka regency. The reason for choosing this school is due to the terms of accessibility in collecting the data. Also, the researcher is going to know the eleventh-grade students' writing motivation in recount text. In addition, research relating to topic was never conducted yet at this school.

This study involves use of experimental research methods. Experimental research manipulates and manages the cause variable before evaluating how the impact variable changes.[83] There are three types of experimental research: true experimental, quasi-experimental, and pre-experimental. This is quasi-experimental research. It is because researchers cannot establish artificial groups for tests.[84] As a result, the researcher divides the participants into two groups: experimental and control.

The researcher doing quasi-experimental study just assigns different treatments to two different classes. First, the researcher determines who will be eligible to participate in the study. Second, the researcher selects two classes of equal level from among the current classes. Third, the researcher allocates one class to the experimental group and another to the control group. Fourth, the experimental group receives the experimental treatment, while the control group receives the control treatment. Fifth, the researcher assesses the results of both the

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[83] Latif, Muhammad Adnan, *Research Method on Language Learning an Introduction.* (Malang: Universitas Negeri Malang, 2019: 93).

[84] John W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, 4ᵗⁿ Ed (Boston: Pearson Education, 2012).

groups' therapies. Finally, the researcher calculates the difference between the experimental and control groups' average scores.

B. Research Variable

A variable refers to an attribute of the study object. This research includes three variables:

1. Independent Variable: The instructional methods used are Self-Regulated Strategy Development for the experimental group and the Four Square Writing Method for the control group.

2. Dependent Variable: Students' Writing Skill on Recount Text.

3. Moderator Variable: Students' Writing Motivation.

C. Population and Sample

The population is the entire group of people or items that share certain characteristics and are the focus of a research study.[85] The population of this research is the students in the eleventh-grade in SMA Plus Bahrul Ulum Sungailiat Bangka Regency. The overall population in this study is 77 students, divided into four classes. Below is a detailed Table of student numbers:

Table 3.1
The situation of the Eleventh Grade Students at SMA Plus Bahrul Ulum Sungailiat Bangka in academic year 2024/2025

No.	Class	Gender	No. of the students
1.	XI-A	Male	20
2.	XI-B	Female	14
3.	XI-C	Female	21
4.	XI-D	Female	22
TOTAL			77

In research methodology, a sample refers to a smaller group drawn from the population that shares the characteristics of the entire population and is used for

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[85] Michael Mncedisi Willie, "Population and Target Population in Research Methodology," *Golden Ratio of Social Science and Education* 4, no. 1 (2024): 75–79, https://doi.org/10.52970/grsse.v4i1. 405.

data collection and analysis.[86] In this study, the researcher uses *non random sampling* to determine the sample. The researcher chose two classes that would be research objects. One of these is the experimental class, and other is the control class. Furthermore, the English teacher suggests choosing XI-A as the Control group and XI-D as the Experimental group. Before determining the sample, the researcher interviewed the teacher. The teacher may claim that both courses have the same degree of competency. This is also corroborated by the findings of the mid-term exam administered prior to the researcher doing the investigation. The table below depicts the distribution of treatment in this research:

Table 3.2

Distribution of the Treatment

Group	Class	Treatment	No. of students
Control	XI-A	Four Square Writing Method	20
Experimental	XI-D	Self-Regulated Strategy Development	22
		TOTAL	42

D. Research Procedure

The treatments in the experimental and control classes are carried out over sixth meetings, which include a motivation questionnaire, a pre-test, class treatment, and a posttest. The schedule and treatment activities are as follows:

Table 3.3

Schedule of the Treatment

Meeting	Schedule	Date	
		Experimental Group	**Control Group**
1	Writing Motivation Questionnaire	Saturday, July 19th, 2025	Tuesday, July 15th, 2025
2	Pretest		
3	Treatment 1 using the SRSD method.	Tuesday, July 22nd, 2025	Monday, July 21st, 2025

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[86] Pooja Bhardwaj, "Types of Sampling in Research," *Journal of the Practice of Cardiovascular Sciences* 5, no. 3 (2019): 157–163, https://doi.org/10.4103/jpcs.jpcs.

	- The topic is "My Weekend Activities".		
4	Treatment 2 using the SRSD method. - The topic is "My Birthday".	Saturday, July 26th, 2025	Tuesday, July 22nd, 2025
5	Treatment 3 using the SRSD method. - The topic is "My Holiday".	Tuesday, July 29th, 2025	Monday, July 28th, 2025
6	Post-Test.	Saturday, August 2nd, 2025	Tuesday, July 29th, 2025

Table 3.4

Treatment of the Activities

Experimental Group	Control Group
Pre-Teaching Activities a. The researcher greets, lead praying and check attendance list. b. Asking Students About Their Previous Knowledge of Writing Recount Texts.	Pre-Teaching Activities a. The researcher greets, lead praying and check attendance list. b. Asking Students About Their Previous Knowledge of Writing Recount Texts.
While Teaching Process a. Explaining the Learning Objectives for Today's Lesson. b. The researcher explains the six steps of Self-Regulated Strategy Development: *Step 1*: Develop Background Knowledge. - Explain what recount text is. - Explain its purpose, structure (Orientation- Events-Re-orientation), and language features (past tense and time connectors). - Show a simple example of a recount text and identify each part. *Step 2*: Discuss the Strategy - Introduce the writing strategy POW + WWW, What=2, How=2. *Step 3*: Model the Strategy	While Teaching Process a. Explaining the Learning Objectives for Today's Lesson. The researcher explains about the Four Square Writing Method as an approach for teaching and learning. There are four steps of FSWM, these are: *Step 1*: Brainstorming and Planning. - Ask students to think of one experience they want to write about (for example: their birthday, a school trip, or a fun holiday). - Let students list important details: Who was involved?, What happened?, When and where it happened, How they felt. *Step 2*: Organizing Ideas into Four Squares.

- Show how to use the strategy by writing your own recount text.
- Write it step-by-step and say your thinking aloud: "First, I think about WHO was there, mother and my friend Lisa." "Then, I write WHAT happened first—it was a normal morning."

Step 4: Memorize the Strategy
- Help students memorize POW and WWW, What=2, How=2.
- Say it together as a class. Use posters or flashcards to help them remember.

Step 5: Support the Strategy (Guided Practice)
- Ask students to write a recount text with your guidance.

Step 6: Independent Performance
- Ask students to write their own recount text independently.

c. Students start writing and reflect on a preset topic.

- Draw a large square divided into four smaller squares, and one box in the middle.
- Guide students to fill in each box: Top left: Main idea or topic sentence (e.g., "My 17th Birthday"), Top right: First event (e.g., "In the morning, everything felt normal"), Bottom left: Next event (e.g., "I went to a café with my friend Lisa"), Bottom right: Final event or reflection (e.g., "Surprise party and gift from parents"), Center box: Summary or personal feeling (e.g., "It was the happiest day of my life!")

Step 3: Writing the Draft.
- Guide students to turn the information from each square into full sentences and paragraphs.
- Show an example of how one square turns into a paragraph. *"In the morning, I felt like it was a normal day. My mom just said happy birthday without anything special…"*

Step 4: Revising and Editing.
- Ask students to reread their drafts.
- Encourage them to check: Use of past tense, Sequence words (first, next, after that, finally), Spelling and punctuation.
- Allow peer editing or feedback in pairs.

Post-teaching Activities	Post-teaching Activities
a. The researcher asks the students about the lesson's difficulties.	a. The researcher asks the students about the lesson's difficulties.
b. The researcher and students reach a decision together.	b. The researcher and students reach a decision together.
c. Motivate students to keep practicing recount writing to strengthen their skills.	c. Motivate students to keep practicing recount writing to strengthen their skills.
d. End the session with a positive message and say "Sallam" to ensure a respectful and friendly closing.	d. End the session with a positive message and say "Sallam" to ensure a respectful and friendly closing.

E. Research Instrument

In this research, the researcher collects data using two different instruments. They are creating tests and questionnaires.

1. Writing Test

According to Creswell in the writing test consists of two parts: pre-test and post-test.[87] This procedure is widely used in pre-experimental research designs to measure students' achievement before and after treatment and is supported by the findings of Zulvanya et al., who confirmed that pre-test and post-test effectively capture students' writing improvement following instructional intervention.[88] Both classes received the same test. The post-test materials were identical to those used for the pre-test. The topic of the pre-test is an unforgettable experience, whereas the topic of the post-test is exciting experiences. The length of the writing are three paragraphs for around 200-300 words, and the time is 90 minutes.

The study used a writing assessment criteria to evaluate students' writing abilities, concentrating on topic, organization, language, vocabulary, and mechanics.[89] In measuring the students' writing skills, the researcher used the

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[87] J. W Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th Ed (USA: Sage Publications, 2014).

[88] D. C Zulvanya, M. A Gaffar, and R Ruswandi, "The Development of Teaching Materials for Recount Text Writing Skill Using Past Tense Based on Creative, Active, Systematic, And Effective (CASE)," *Journal on Language Teaching and Learning, Linguistics and Literature* 13, no. 2 (2025): 6936–6952, https://doi.org/10.24256/ideas.v13i2.8244.

[89] G Setiadi, "Authentic Assessment in the 21st Century Classroom: A Guide for Teachers," *Journal of English Language Education* 4, no. 2 (2019), https://jele.or.id/index.php/jele.

question blueprint set out in Appendices 2 and 3, and the writing was assessed using a scoring rubric provided in Appendix 6.

2. Questionnaire

A questionnaire is a set of researcher questions used to gather information from respondents about their knowledge, beliefs, or behaviors. In this research, the questionnaire was used to assess students' involvement in the English learning process, specially focusing on their motivation in writing.[90]

This research adopt Writing Motivation Questioner by Payne, consisting 30 items questions designed to investigate how students feel about writing. The questionnaire includes statements related to the students' attitudes, confidence, goals, and interest in writing activities. Respondents are asked to indicate their level of agreement using a four-point Likert scale: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4.

The items in the questionnaire are divided into two major components of writing motivation, based on motivation theory:

a. Intrinsic Motivation (numbers 1-15)

Intrinsic Motivation refers to students' internal desire to write for personal satisfaction, interest, and enjoyment. Students with high intrinsic motivation write because they find writing meaningful and enjoyable. For example, they may write stories because they like expressing their ideas or because they feel proud when they complete a piece of writing.[91]

b. Extrinsic Motivation (numbers 16-30)

Extrinsic motivation refers to students' drive to write due to external rewards or pressures, such as grades, teacher approval, or future goals. Students with high

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[100] H. D Brown, *Language Assessment: Principles and Classroom Practices* (NY: Pearson Education, 2004).

[90] Ranganathan P and Caduff C, "Designing and Validating a Research Questionnaire - Part 1," *Perspect Clin Res* 14, no. 3 (2023): 152–155, https://doi.org/10.4103/picr.picr_140_23.

[91] Ali Alzubi and Mohd Nazim, "Students' Intrinsic Motivation in EFL Academic Writing: Topic-Based Interest in Focus," *HELIYON* 10, no. 1 (2024), https://doi.org/10.1016/j.heliyon.2024.e24169.

extrinsic motivation may write because they want to get good marks, impress to others, or fulfill academic requirements.[92]

F. Data Collection Technique

The aim of this study is to measure the effect of Self-Regulated Strategy Development on Students Writing Recount Text with having different Writing Motivation. To collect the data. The researcher separated the subjects into two groups; the two groups are experiment group and control group. Both of the group are given a pre-test, then the experiment group is taught Self-Regulated Strategy Development, and the control group is taught Four Square Writing Method, and followed by a post-test for the experiment and control group. The steps in data collection technique are as follows:[93]

1) The researcher requested authorization from the head of SMA Plus Bahrul Ulum, Sungailiat Bangka, on September 13th, 2024, to conduct the research.

2) The participants were divided into two groups: an experimental group and a control group.

3) The data collection began with the administration of the writing motivation questionnaire, followed by the writing pre-test on the same day. The pre-test was conducted on July 15th, 2025, in the control group, and on July 19th, 2025, in the experimental group.

4) The experimental group received treatments through the Self-Regulated Strategy Development (SRSD) model, while the control group was taught using the Four Square Writing Method. The treatments were conducted from July 21st to July 28th, 2025, in both groups.

5) After the treatment phase, a writing post-test was administered to both groups. The post-test was conducted on July 29th, 2025, in the control group, and on August 2nd, 2025, in the experimental group.

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[92] Qingyang Li, Yuan Yao, and Xinhua Zhu, "The Association between Writing Motivation and Performance among Primary School Students: Considering the Role of Self-Efficacy," *Humanities and Social Sciences Communications* 11, no.1 (2024), https://doi.org/10.1057/s41599-024-04298-2.

[93] J.W Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed (Thousand Oaks, CA: SAGE Publications, 2014).

6) Following the administration of the pre-test, treatment, and post-test, the researcher collected the students' work, checked, and scored the results. The data were then compiled and rechecked for accuracy.

7) The collected data were analyzed statistically using SPSS software. Descriptive and inferential analyses, including ANCOVA, were employed to determine the effect of the treatments on students' writing skill and motivation.

8) Finally, the researcher discussed the findings, drew conclusions based on the results, and related them to the research objectives and hypotheses.

G. Data Analysis Technique

The data of this study includes students' writing recount text and students' motivation. Therefore, the data is quantitative. This statistical analysis is suitable to answer the research problem. [94] In this case, the researcher applies one-way ANOVA to examine students' writing recount text and writing motivation when taught writing recount text using self-regulated strategy development in writing ability and learning motivation at eleventh grade.

The researcher analyzes the data quantitatively. Quantitative data is processed to obtain a numerical representation, characterize a series of numbers, and present them as averages, frequencies, and percentages. [95] The data includes scores from the students' writing tests and motivation questionnaires, collected through pre-tests and post-tests in both the experimental and control groups. Before conducting the ANCOVA test, several prerequisite tests must be fulfilled to ensure the data meets the assumptions for parametric analysis.

1. Analysis of Students' Score in Writing Test

To evaluate students' writing skills in recount texts, the researcher used an analytic the scoring rubric from Christopher Tribble, which assesses five major aspects of writing: Content (C), Organization (O), Vocabulary (V), Language Use

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[94] D Ary et al., *Introduction to Research in Education*, 8th Ed (Belmont, CA: Wadsworth Cengage Learning, 2010).

[95] Mohajan, Haradhan Kumar, "Quantitative Research: A Successful Investigation in Natural and Social Sciences," *Journal of Economic Development, Environment and People* 9, no. 4 (2020): 52–79.

(G), and Mechanics (M). Each aspect is assigned a specific weight to reflect its importance in evaluating the overall quality of student writing. His scoring formula is as follows:

Score = 30% (C) + 20% (O) + 20% (V) + 25% (L) + 5% (M) = 100

This formula emphasizes the importance of grammatical accuracy and language use, while also giving balanced consideration to the other elements of effective writing. Each student's test was scored based on this rubric, and the total score for each individual was recorded.

The detailed writing assessment rubric used for this scoring process is provided in Appendix 6. It outlines the specific criteria and descriptors for each level of performance across the five aspects, ensuring consistency and objectivity in scoring.

The writing scores obtained from both the experimental group (who were taught using the Self-Regulated Strategy Development strategy) and the control group (taught using Four Square Writing Method) were then used for further analysis. These scores were examined through descriptive and inferential statistical techniques to determine the effectiveness of SRSD in improving students' recount text writing performance.

2. Analysis of Students' Score in Writing Questionnaire

To examine students' motivation in writing recount text, the researcher distributed a writing motivation questionnaire. This instrument was used to identify the students' internal and external reasons for engaging in writing activities. Understanding students' motivation helps reveal whether the use of Self-Regulated Strategy Development (SRSD) influences their writing motivation.

The questionnaire consisted of 30 items adapted from Payne, with 15 items measuring intrinsic motivation (items 1–15) and 15 items measuring extrinsic motivation (items 16–30). Each item used a four-point Likert scale: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4.

The students' responses were scored and grouped according to each motivation type. Descriptive statistics were applied to calculate the mean score of

both intrinsic and extrinsic motivation. These average scores provided an overview of students' general motivation tendencies.

To determine whether students were more intrinsically or extrinsically motivated after receiving SRSD treatment, the researcher used a paired sample t-test in SPSS 26.0. This statistical test compared the two sets of motivation scores to see if there was a significant difference between them.

3. Inferential Analysis

After collecting data from pre-test and post-test in the experimental and control groups, then before analyzing the data using ANOVA Test, the researcher needs to fulfill the requirements of ANOVA Test. They are descriptive analysis, normality test, homogeneity test, and independent sample t-test, as explained below.

a. Descriptive Analysis

Descriptive analysis provides a summary of the data collected from the writing tests. This analysis includes calculating measures of central tendency (mean, median, and mode) as well as measures of dispersion.[96]

b. Prerequisite Test

The Analysis of Covariate is a popular statistical tool for measuring and understanding higher-dimensional data structures. Several assumptions need to be made while doing an ANCOVA calculation, including multivariate normality, the matrix of covariance homogeneity, and variance homogeneity.[97]

1) The Normality Test

Normality Test is used to determine the normality of the data that is being analyzed, specifically whether or not both groups have a normal distribution. To test for normality the researcher applies the SPSS 26 program using the one-sample Kolmogorov-Smirnov test with a level of significant of 5%. If the significance value (ρ) is higher than α (0.05), the data distribution

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[96] F Azevedo, "Descriptive Statistics and Data Presentation," in *Introduction to Statistics*, 1st Ed (Switzerland: Springer, 2016), 24–45.

[97] Tabachnick and Linda S, *Using Multivariate Statistics*, 7th Ed (Boston, MA: Pearson Education, 2019).

is considered normal. If the significant value (p) is lower than α (0.05), it indicates a not normal data distribution.

2) The Homogeneity Test

To satisfy the prerequisites for ANCOVA analysis, there should be no interaction between the covariate and the independent variable. It is used to determine whether the experimental group and the control group, which are established, come from a population with relatively the same variance or not. To calculate homogeneity testing, the researcher applies SPSS 26.

This is confirmed when the *ρ value* is higher than 0.05 (p > α). Additionally, the covariance matrices are considered homogeneous if the significance level is above 0.05.

3) The Homogeneity Variances

A homogeneity test determines if two or more groups of sample data come from populations with equal variation (homogeneity). Levene's test is commonly used to determine whether variances are consistent between control and experimental groups.[98] If the homogeneity test result is higher than α (0.05), it means that the pre-test and post-test data have the same variance, proving homogeneity.

4) Linier Relationship Between Covariate and Dependent Variable

The test of covariate linearity evaluates the connection between the covariate and the dependent variable. The significance level (ρ) < α (0.05).

4. Hypothesis Testing

ANCOVA (Analysis of Covariance) is a statistical approach for examining the effect of categorical independent factors on numerous dependent variables with quantitative data. This is usually known as covariate analysis. In this study, ANCOVA was used to test the hypothesis using SPSS version 26.0. The following are the criteria used for hypothesis testing.

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[98] H Levene, *Contributions to Probability and Statistics: Essays in Honor of Harold Hotelling*, First edition (Stanford University Press, 1960).

1) If the 2-tailed significance value is less than 0.05, it indicates a significant difference in writing skills between students taught using Self-Regulated Strategy Development (SRSD) and the Four Square Writing Method. This means that the alternative hypothesis (Ha) is supported while the null hypothesis (Ho) is rejected, implying that SRSD and the Four Square Writing Method have different effects on students' writing abilities.

2) If the obtained significance value (2-tailed) is higher than 0.05, it is possible to conclude that there is no significant difference in writing skill on recount text between students taught using Self-Regulated Strategy Development and taught using the Four Square Writing Method across various aspects of writing. This signifies that the alternative hypothesis (Ha) is not supported while the null hypothesis (Ho) is not rejected.

After testing the first hypothesis to determine whether the use of self-regulated strategy development is effective in teaching students' writing, the second hypothesis is tested to determine the effectiveness of self-regulated strategy development in teaching writing to students with having different writing motivation. The data is then analyzed using a correlated t-test to see whether writing motivation affects students' writing skill on recount text in the context of self-regulated strategy development.