

## CHAPTER III

### RESEARCH METHODOLOGY

#### A. Research Design

This study used a quantitative experimental pre-post intervention design with two measurements, one before and one after the drama intervention. Experimental quantitative research is one of the research designs used to test the causal relationship between certain variables. In this study, researchers actively manipulate one or more independent variables and observe the impact on the dependent variable. Experimental research is generally conducted under controlled conditions with the aim of determining whether there is an identifiable causal relationship between the variables under study.

Creswell (2014) states that experimental designs aim to test the effect of independent variables on dependent variables under controlled and structured conditions. This research is usually conducted in a laboratory setting, but can also be conducted in the field with fewer controls. Steps in Experimental Research.

Subject	Prestest	Intervention	Posttest
R-i	O <sub>1</sub>	X	O <sub>2</sub>
R-k	O <sub>3</sub>		O <sub>4</sub>

Picture 3.1 Research Design

Description:

R-i = Respondents who were given the intervention

R-k = Control respondents

X = Intervention (Drama Media Learning)

O1 = Students' Learning Motivation before Drama Media Learning.

O2 = Students' Learning Motivation after Drama Media Learning.

O3 = Pretest of control group 54

O4 = Posttest of control group

## **B. Location and Time of Research**

This research was conducted at SMP Islam Plus Assalamah Ungaran from January to February 2025.

## **C. Population and Research Sample**

### **1. Population the population**

In this study were all English Club Member Students at Assalamah Junior High School, consisting of grades 7, 8 and, 9 totaling 44 students.

### **2. Inclusion and Exclusion Criteria**

Inclusion Criteria: Students of SMP Islam Plus Assalamah Ungaran who are members of English Club extracurricular activities, and Exclusion Criteria: unwilling to be a respondent, withdrew from the study, illness that requires rest at home

### **3. Sampling Technique**

This study was selected using Purposive Sampling technique, which is a deliberate selection of samples based on certain criteria that are considered relevant to the research. This purposive sampling technique is used because researchers are only interested in individuals who have characteristics or experiences that can provide rich and relevant information to test

predetermined hypotheses. In purposive sampling, researchers select samples based on certain considerations, such as age, experience, or involvement in the phenomenon under study.

Crossman&Nicki (2020) explains that in quantitative research, purposive sampling is used when the researcher wants to obtain information from individuals who have specific understanding or experience related to the research variables. For example, for research on the acceptance of new technology, researchers may only select participants who have already used it, as they are more capable of providing more useful information related to the topic.

Creswell (2014) in his book on research design reveals that in quantitative research, purposive sampling can be applied when researchers have very clear objectives regarding who they need to answer their research questions, such as selecting a sample based on characteristics that are important to the research (for example, certain demographic or experiential criteria). and finally, Sekaran and Bougie (2016) suggest that although purposive sampling does not provide a statistically representative sample, it can still be used in quantitative studies for more focused research or in situations where a random sample is not accessible. This allows the researcher to assess the relationship between variables with more focus on the most relevant subjects. As this study focuses on exploration, the use of these methods is the most appropriate.

#### D. Operational Definition

Tabel 3. 1 Operational Definition

No	Research Variable	Definition	Measurement Tool	Measurement Result	Scale
1	Independent Variable Drama Media Learning	Drama media learning is learning that uses drama as a medium to convey messages or stories.	Procedure Operating Standart	1=being given drama learning media 0=not given drama learning media	Nominal 1
2	Dependent Variable is Students learning motivation	Learning motivation person's drive to achieve learning goals	Questionnaire 30 questions item, score 1-5	Score total 30 – 150 Category: - High (>75%) - Moderate (50-75%) - Low (<50%)	Ratio
	a. Intrinsic Motivation	Intrinsic motivation, is a motivation drives where person perform an activity for internal reasons that are personally satisfying.	Questionnaire 10 questions item, score 1-5	Score total 10 – 50 Category: - High (>75%) - Moderate (50-75%) - Low (<50%)	Ratio
	b. Extrinsic Motivation	Extrinsic Motivation is a motivation drives where person perform an activity because of external factors, such as rewards or prizes.	Questionnaire: 10 questions item, score 1-5	Score total 10 – 50 Category: - High (>75%) - Moderate (50-75%) - Low (<50%)	Ratio
	c. Amotivation	Amotivation is a condition where a person lacks the motivation or desire to act or engage in a behavior.	Questionnaire 10 questions item, score 1-5	Score total 10 – 50 Category: - High (>75%) - Moderate (50-75%)	Ratio

No	Research Variable	Definition	Meassurement Tool	Measurement Result	Scale
				- Low (<50%)	

### E. Research Variables

This study uses two variables, namely the independent variable and the dependent variable.

#### 1. Independent Variable (free)

Independent variables are variables whose values determine other variables. This variable is measured and observed to determine its relationship or influence on other variables. The independent variable in this research is drama media learning.

#### 2. Dependent Variable

The dependent variable is the variable whose value is determined by other variables. The dependent variable in this study is student learning motivation.

### F. Research Instrument

In order to collect data on research variables, it is necessary to utilize a research instrument. A research instrument is a tool that is deemed to be an accurate means of collecting data and obtaining data on research variables from a number of predetermined research populations and samples. In order to obtain data in an objective manner, it is essential to utilize an appropriate instrument that accurately reflects the problem under study. The instrument employed in this study is a questionnaire comprising a Likert scale. The

research instruments employed in this study were questionnaires designed to assess student learning motivation and learning effectiveness.

The instrument used to measure student motivation is the Academic Motivation Scale (AMS), created by Vallerand et al. (1992). This scale has been adapted by several studies, including those by Alivernini & Lucidi (2008), Støen Utvær & Haugan (2016), and Marvianto & Widhiarso (2019). The AMS is a measurement tool for student learning motivation based on Self-Determination Theory. It contains seven components of motivation: intrinsic motivation (intrinsic motivation to know, intrinsic motivation towards accomplishment and intrinsic motivation to experience stimulation), extrinsic motivation (external regulation, introjected regulation, identified regulation) and amotivation, which is divided into 30 statements.

The AMS exhibits high reliability, as evidenced by the following values: intrinsic motivation to know (.80), intrinsic motivation toward accomplishment (0.73), intrinsic motivation to experience stimulation (0.75), external regulation (0.86), introjected regulation (0.81), identified regulation (0.84), and amotivation (0.90). Reliability values ranging from 0.70 to 0.80 or above 0.70 are deemed satisfactory for scales employed in research (Furr & Bacharach, 2013). Consequently, the AMS is deemed reliable and suitable for use as a research instrument.

In this study, seven components of motivation will be examined, namely: The three types of motivation are as follows:

1. Intrinsic motivation, which can be further divided into three subcategories:
  - intrinsic motivation to know, intrinsic motivation towards

accomplishment, and intrinsic motivation to experience stimulation.

2. Extrinsic motivation, which can be further divided into three subcategories: external regulation, introjected regulation, and identified regulation.
3. Amotivation, which is divided into 30 statements. The AMS exhibits high reliability, with values of .80 for intrinsic motivation to know, 0.73 for intrinsic motivation towards accomplishment, 0.75 for intrinsic motivation to experience stimulation, .86 for external regulation, 0.81 for introjected regulation, 0.84 for identified regulation, and 0.90 for amotivation. Reliability values of 0.70 or above are deemed acceptable for scales used in research (Furr & Bacharach, 2013). Therefore, the AMS is deemed to be of a high standard and suitable for use as a research instrument.

In the present study, seven components of motivation will be examined.

These are:

1. Intrinsic motivation, which measures three types of motivation.

These are: (1) intrinsic motivation to know, which refers to a pleasure and satisfaction derived from activities that facilitate learning, exploration and understanding of new concepts; (2) intrinsic motivation towards accomplished things, which refers to satisfaction and pleasure derived from activities that result in the creation of something new or the achievement of a certain milestone. Individuals may engage in activities related to the creation of something new or the achievement of a certain milestone, or they may seek stimulation through activities that allow them to experience sensations of pleasure and satisfaction.

## 2. Extrinsic motivation

Extrinsic motivation may be further divided into three categories: (1) external regulation, which refers to an individual who enjoys doing something due to external factors, such as rewards or punishments; (2) introjected regulation, which refers to an individual who carries out an action to avoid the consequences; and (3) identified regulation, which refers to an individual who engages in an action because it is considered important in achieving a goal. The three types of extrinsic motivation are: (1) external regulation, which refers to the student's willingness to perform an action to avoid the consequences; (2) introjected regulation, which refers to the student's internalisation of external rewards or punishments; and (3) identified regulation, which refers to the student's sense of importance in achieving a goal and their subsequent willingness to perform an action to attain that goal.

## 3. Amotivation

Amotivation is characterized by a lack of motivation, whereby an individual is either intrinsically or extrinsically motivated, yet is not concerned with the outcomes or actions required to achieve a goal.

## **G. Research Procedure**

### 1. Initial Measurement (Pre-intervention)

Objective: To measure students' learning motivation before the drama intervention.

Instrument: Validated learning motivation questionnaire.

Procedure: Students completed a learning motivation questionnaire before

participating in the drama activity.

## 2. Intervention

Universal Design for Learning (UDL) is an approach that aims to provide learning experiences that are inclusive, flexible, and accessible to all students, taking into account the diversity in how students learn, participate, and express their understanding. UDL offers three key principles, namely Multiple Means of Representation, Multiple Means of Action and Expression, and Multiple Means of Engagement. Drama as a learning medium can be integrated with these UDL principles to provide a richer and more accessible learning experience for different types of students. The following are the stages of the Drama as Learning Media Procedure with accelerate learning according to Rose and Nicholl will be divided to 4 sessions of intervention in 4 days the drama learning procedure in four interventions according to Rose and Nicholl's (1997) Accelerated Learning approach, with each intervention briefly described:

### a. Intervention 1: Orientation, Relaxation and Warm-Up (40 minutes)

This intervention aims to create a positive and conducive learning atmosphere through relaxation activities and multisensorial activities, so that students are physically and emotionally ready to receive drama material.

### b. Intervention 2: Character Exploration through Multisensorial Improvisation (40 minutes).

This intervention emphasizes holistic character exploration by integrating improvisation exercises that utilize visual, auditory and

kinesthetic stimuli to bring the role and emotions to life.

c. Intervention 3: Collaborative Script Development (40 minutes)

This intervention prioritizes student collaboration in developing scripts through brainstorming techniques and shared reading exercises, so that creative ideas can be processed into dialogues and scenarios that support a thorough understanding of drama concepts.

d. Intervention 4: Performance Repetition, Evaluation and Holistic Reflection (40 minutes).

This intervention focuses on strengthening skills through a full performance simulation followed by evaluation and reflection, so that students can identify strengths and areas of improvement to sustainably improve performance.

3. Final Measurement (Post-intervention)

Objective: To measure students' learning motivation after the drama intervention. Instrument: Validated learning motivation questionnaire.

The questionnaire was administered to the students after (post-intervention) the implementation of the drama. Results of the questionnaire

4. Intervention Implementation

Number of Learners: 22, Intervention Time: 40 minutes per session

a. Intervention 1: Orientation, Relaxation, and Warm-Up, Date: 24 January 2025

- 1) Description: Establishing a Positive Atmosphere: Starts with a relaxation activity (breathing techniques or light meditation) to

lower tension and create a safe and supportive learning environment.

- 2) Introduction to Drama Concepts: Introduction to the definition of drama and its elements (character, plot, conflict and resolution).
  - 3) Multisensorial Activities: Introductory games accompanied by music and light movement to activate students' senses.
  - 4) Initial Reflection: Students share their feelings and expectations as a basis for relating personal experiences to the drama material.
- b. Intervention 2: Character Exploration through Multisensorial Improvisation, Date: 31 January 2025

- 1) Description: Character Deepening: Students explore character by delving into traits, motivations, and emotions through improvisation exercises that relate personal experiences.
- 2) Structured Improvisation Session: Improvisation activities are conducted with the support of the use of simple props and kinesthetic stimuli (body movements) to bring the role to life.
- 3) Practice Activities
 

Emotional Expression Exercise: Students take turns expressing various emotions (such as happy, sad, angry, surprised) to practice the ability to express feelings and recognize the nuances of the character.
- 4) Props Usage Exercise: Students utilize simple props to strengthen character portrayal, while stimulating imagination and visual expression.

- 5) Feedback and Reflection: Group discussion after the exercise to provide feedback and deepen understanding of the characters.
- c. Intervention 3: Collaborative Script Development, Date: 7 February 2025
- 1) Description: Brainstorming and Idea Gathering: Students worked in groups to gather story ideas through brainstorming and concept mapping techniques.
  - 2) Simple Script Writing: Each group develops a short dialogue and scenario based on the ideas collected, exercising creative writing and critical thinking skills.
  - 3) Script Reading Exercise: A joint script reading session to practice pronunciation, intonation, and emotional expression so that storytelling becomes natural.
  - 4) Property Element Integration: Use of simple props to emphasize emotional nuances in the script.
- d. Intervention 4: Performance Repetition, Evaluation, and Holistic Reflection, Date: 14 February 2025
- 1) Description
 

Full Performance Simulation: A thorough staging exercise that integrates all learned elements (movement, dialogue, and use of space).
  - 2) Evaluation and Feedback: The teacher and students together provide evaluation and constructive feedback on acting techniques, use of space, and conveying emotions in the

performance.

- 3) Holistic Reflection: An in-depth discussion session to evaluate the whole experience, identify strengths and areas of improvement, and plan follow-up actions for the development of drama skills.

## **H. Research Ethics**

The implementation of this research takes into account ethical principles which include:

1. Informed Consent (consent sheet)

Before collecting data, respondents were given an explanation of the purpose and benefits of the study. Respondents who are willing to be studied sign the consent sheet, and if prospective respondents refuse to be studied, the researcher does not include and still respects. Prospective respondents have the right to accept or refuse to be studied. If the respondent accepts to be studied, the respondent is obliged to fill in the consent sheet and follow the research process.

2. Autonomy

There are no respondents who refuse or are not interested in research, researchers so that the needs of the subjects are met.

3. Non maleficence (no harm/harm)

This research applies literary media learning in English Club that does not contain elements of harm or harm, and does not worsen the respondent's condition.

4. Beneficence (goodness)

Research is intended for the good of the patient and provides benefits for the development of the patient's condition towards a better direction. Researchers consider the risks and benefits obtained by the subject at each stage of the intervention.

5. Justice

The researcher in the study paid attention to the sense of justice between the intervention group and the control group related to the provision of treatment. In order to suppress the sense of unfairness for the control group, after the completion of the study, the researcher in the control group learnt the drama media given to the intervention group during the study.

6. Confidentiality

The information provided by the respondents as well as all data collected were guaranteed confidentiality by the researcher and were not conveyed to parties not related to the research.

7. Veracity

The researcher conveyed the truth of information regarding literary media learning as honestly as possible to all respondents to convince respondents.

8. Fidelity (keeping promises)

The researcher kept the promise to the respondents by coming according to the time contract that had been agreed with the respondents.

## **I. Data Processing**

Data processing was carried out with the help of SPSS with the following steps:

1. Data Input

Raw data from the questionnaires were inputted into SPSS by coding the variables according to the predetermined measurement scale

a. Coding and Scoring

This section describes the process of coding and scoring the questionnaire data used to measure the dimensions of learning motivation, such as intrinsic motivation, extrinsic motivation, amotivation, and overall learning motivation. Each dimension was measured through 10 items with a 5-point Likert scale, so the total score per dimension ranged from 10 to 50 points.

b. Measurement Scale

Each questionnaire item used a Likert scale with values:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

c. Coding

Respondents' answers were coded according to the values on the scale above. For example, if the respondent chooses 'Agree', then the value given is

d. Reverse Coding

Where items were reverse coded, the values for these items were reversed (e.g., 1 became 5, 2 became 4, and so on) so that all items had a consistent interpretation, i.e., higher values indicated higher

levels of motivation.

## 2. Scoring Process

### a. Total Score Calculation

Each motivation dimension was measured through 10 items. The total score is obtained by summing the scores of all items, thus: Dimension Total =  $n_1 + n_2 + n_3 + n_4 + n_5 + \dots + n_{10}$ . Thus, the total score per dimension can range from 10 (if all answers are lowest) to 50 (if all answers are highest).

### b. Determination of Categories Based on Percentages

To interpret the level of motivation, the total score per dimension is categorized into three levels with reference to the percentage of the maximum score (50 points):

- 1) Low Category: Total score  $< 30$  points, which is equivalent to less than 50% of the maximum score.
- 2) Medium category: Total score between 30 and 39 points, which is equivalent to 50% to 75% of the maximum score.
- 3) High Category: Total score  $\geq 40$  points, which is equivalent to more than 75% of the maximal score.

### c. Use of Scores in Analysis

The calculated total scores per dimension were used for univariate analyzes (e.g., frequency distribution, mean, standard deviation) as well as bivariate analyzes (e.g., paired t-test for pre-test and post-test comparisons, and independent t-test for between-group comparisons).

### d. Validation of Coding and Scoring Processes

### 3. Data Cleaning

The data verification process was carried out to identify and correct missing data or input errors so that the data was ready for analysis.

## **J. Data Analysis Technique**

Data analysis was conducted in stages to ensure the accuracy and validity of the research findings.

### 1. Univariate Analysis

Univariate analysis aims to describe the characteristics of each variable.

The procedures performed included: Frequency and percentage calculations for each category (for example, the number of students with high or medium motivation levels). Presentation of data in tables and graphs to facilitate interpretation of the distribution of variables such as intrinsic, extrinsic, amotivation, and overall learning motivation.

### 2. Bivariate Analysis

Bivariate analysis was conducted to test differences and relationships between variables, with the following steps: Paired t-test: Used to measure the difference in scores between pre-test and post-test within each group.

This procedure tests whether the drama-based learning intervention resulted in significant changes in each dimension of motivation.

Independent t-test: Used to compare the post-test scores between the intervention and control groups in order to determine the relative effect of the application of drama media. Before conducting the t-test, it was conducted: Normality Test: Using Shapiro-Wilk to ensure that the data distribution is close to normal.

a. Normality Test

To ensure that the data obtained can be analyzed using parametric methods, normality tests were carried out using Shapiro-Wilk. The following are the results of the normality test for each variable:

Table 3.2. Normality Test Results with Shapiro Wilk test

No	Variables	Time	p value (sign.)
1	Motivation to learn	Pre	0.909
	a. Intrinsic Motivation	Pre	0.372
	b. Extrinsic Motivation	Pre	0.055
	c. Amotivation	Pre	0.303
2	Motivation to learn	Post	0.393
	a. Intrinsic Motivation	Post	0.412
	B. Extrinsic Motivation	Post	0.656
	C. Amotivation	Post	0.121

*Note: The sign indicates that the significance value is the lower limit of the true value. normality test was conducted on 20 students to see if the instrument had a normal distribution. Since all p values  $> 0.05$  (for most measurements), the data can be considered normally distributed.*

b. Homogeneity of Variance Test

Test of homogeneity of variance using Levene's The test was conducted to ensure that the variances between the intervention and control groups were comparable. The results of the homogeneity test showed that the variances between groups were not significantly different. Thus, the assumption of homogeneity is met, and the t-test analysis (both paired and unpaired) can be applied. Results of Homogeneity Test on Each Variable:

Table 3.3. Results of the Homogeneity of Variance Test

(Levene's Test) Pre-Test Variables

No	Variables	F	p value	Interpretation
1	Learning Motivation	2.331	0.134	Homogenous variance ( $p > 0.05$ ).
	a. Intrinsic Motivation Pre	11,010	0.002	Variance not homogeneous ( $p < 0.05$ )
	b. Intrinsic Motivation Pre	0.160	0.691	Homogeneous variance ( $p > 0.05$ ).
	c. Amotivation Pre	1.169	0.286	Homogeneous variance ( $p > 0.05$ ).

Conclusion of Homogeneity Test: Learning Motivation Pre, Extrinsic Motivation Pre dan Amotivation Pre meets the assumption of homogeneity ( $p > 0.05$ ), so the standard t-test with the assumption of equal variance can be applied.

Intrinsic Motivation Pre is the only variable that does not meet the homogeneity assumption, so the difference test analysis must be adjusted using a version of the t-test that does not assume equality of variance.