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#### **CHAPTER III**

#### RESEARCH METHODOLOGY

#### III.1. The Research Design

The design of this research was experimental research. Experimental research is the type of research that can test hypotheses to establish cause-and effect relationships (Gay 2000: 367). This research was focused on the Pretest-Posttest Control Group Design involving an experimental group and a control group; both were given a pre-test and a post-test (Campbel and Stanley 1967: 47). In this research, there were two variables; the independent variable (X) was the using of video and the dependent variable (Y) was the students' motivation in writing narrative text. This research design can be seen as follows:

O<sub>2</sub> (Experimental Group)  $O_1$ X O<sub>4</sub> (Control Group) O<sub>3</sub> State Islamic University

In which:

 $O_1$  and  $O_3$ = Pre- questionnaire

O<sub>2</sub> and O<sub>4</sub> = Post- questionnaire

X = Treatment by using Video (Creswell 2008: 314)

#### III.2. The Population and the Sample of the Research

The population of this research is the first year of Senior High School



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Pekanbaru in academic year 2014/2015. Two groups were chosen as samples of this research by using Cluster Sampling; it is a sampling technique involving some groups integrated on the clusters and the sample is taken randomly (Hartono 2011: 52). The population of this research were all of the first year students in Pekanbaru and the samples were 130 students; they were class X IPA 1 and X IPA 3 of MAN 1 Pekanbaru and X IPA 3 and X IPA 4 of SMAN 5 Pekanbaru. The detail of the sample is as follows:

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Table III. 1

The Sample of the Research

NO	Classes	Number of Students	Groups
-	MAN 1 Pekanbaru		
1	X IPA 1	28	Experimental
2	X IPA 3	29	Control
	SMAN 5 Pekanbaru		
3	X IPA 3	36	Control
4	X IPA 4	37	Experimental
	Total	130	

#### III.3. Instrumentation

#### A. Pilot Study

#### 1. Writing Proposal of the Research

The title of this research is the effect of using video on th writing motivation at the first year of Senior High School Students in Pekanbaru. This is an experimental research which consists of two variables; independent variable (using video) and dependent variable (students' writing motivation).

This research were conducted in MAN 1 and SMAN 5 Pekanbaru on

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January to March 2015 where the subject of this research was the second semester of the first year students in academic year 2014/2015. In conducting the research, there were four classes; two experimental classes, which were taught by using video, and two control classes which were taught without using video.

The purpose of this research was to find out the effect of using video toward students writing motivation.

#### 2. Preparation of the Study

Some preparations were necessary to carry out before conducting the research. Some preparations were necessary regarding the needs in implementation of teaching process as follows:

#### a.Making Instrument

In this part, a questionnaire consisting of 33 statements was prepared to be responded by the students in try-out.

#### b.Conducting a try out

The questionnaire sheets were distributed to try the students out to find out which statements are valid and reliable, which then were used as questionnaire in pre-questionnaire and post-questionnaire. The try-out was conducted twice.

#### c. Analysing validity and reliability of the instrument

After obtaining the result of the try out, each statement response was analyzed to find out whether the statement is valid and reliable or not. The valid and reliable items then were used in pre-questionnaire and post-

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questionnaire and the invalid and inreliable one were unused.

d. Conducting Pre-questionnaire

In pre-questionnaire, the valid and reliable questionnaire sheet were distributed before the treatment to find out the students' basic writing motivation.

#### 3. Implementation of the Study

In implementing the research, there are three parts of focus:

a.Influencing Factors

In this case, the same factors are used in order to get the dependable data that the experimental group and control group had the same characteristics, except the teaching and learning technique. The influence factors in implementing the teaching process are learning purpose, students, teacher, facilities and teaching technique.

#### 1.) Learning Purpose

The purpose of learning that should have been achieved by both groups is to improve the students' writing motivation.

#### 2.) Students

The students who became the subject of this research were the first year students of MAN 1 and SMAN 5 Pekanbaru.

#### 3.) Teacher

In implementing the research, the classroom teacher gave treatment by using active viewing technique incorporating with the use of video in experimental group and the researcher became the observer in the classroom.

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4.) Facilities

The facilities which are necessary to use in teaching process are books, laptop, in-focus, screen, sound system and some short movie.

5.) Teaching Strategy

In experimental group, the teacher used video which incorporate with Active Viewing Technique and in control group, the teacher did not use the same technique (conventional technique).

b. Lesson Plan

Lesson plan is undeniably important in teaching and learning process. The teacher is necessary to consider and prepare the procedures of teaching process in the form of lesson plan. The lesson plan that was used in this research is as follow:

**School** : MAN 1 PEKANBARU / SMA NEGERI 5 PEKANBARU

**Subject** : ENGLISH

Class/semester : X (Experimental Class)/2

**Standard of Competence:** 

Expressing the idea in short functional monologue text or written essay in the form of narrative, descriptive, and news item, accurately, fluently, and acceptably in daily life context and accessing knowledge.

**Basic Competence:** 

Expressing the idea in monologue text or essay by using various written language accurately, fluently, and acceptably in the form of narrative.

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#### **Indicators**

Students can write monologue text or essay in the form of narrative

- Students can make coherence in text and context
- Students can write the text structurally

#### **Teaching Objectives**

At the end of the lesson, the students are motivated and able to write narrative text well based on the material given

#### **II.** Teaching Material:

Narrative text

#### **III. Teaching Method:**

Active Viewing Technique

#### **IV. Teaching Learning Activities**

**Previewing Activilties** 

- Greeting
- Appreciation: The teacher prepares the students to watch the video by tapping their background knowledge.
- Motivation: The teacher stimulates students' interest in the topic, and lessens their fear of unfamiliar vocabulary by using drama sequence. The teacher announces and asks the students to predict the content of the video.

#### Viewing Activities

•The teacher requires students to focus on important aspects such as factual information, plot development, or the language used in a particular situation of the video

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- •The teacher gives students question related to the important aspect of the video that the students can look for the answer while they watch the video; for example, what was the story about? how many characters are there? How was the story ending? and so forth.
  - The teacher plays entire sequence of video.
  - The teacher replays the sequence of video and relevant parts of video.
  - After students get the answer from video, the teacher then asks the students to determine some specific detail, such as sequence of events or particular utterances used.

#### Post-viewing activities

- The teacher lets the students give question.
- The teacher requires students to react to the video by writing narrative text based on the content of video.
- Closing.

#### V. Resources and Media

A video of an animation story entitled "Bawang Merah and Bawang Putih".

#### VI. Evaluation

Form of test : Written

Technique of the Test: Writing narrative text

Instrument :

#### Task 1. While you watch the video, find the following information individually!

1. Title of Story : 2. Characters :

3. Time and Place

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Task 2. After watching the video, answer the following questions!

- 1. What was the story about?
- 2. How many characters are there? Who are they?
- 3. What did actually happen to Bawang Putih's Mother?
- 4. Why was Bawang Putih happy when she visited the pond?
- 5. How did Bawang Putih recognize her mother's appearance?
- 6. How did the Step Mother and Bawang Merah make Bawang Putih back to sorrow?
- 7. What did Bawang Putih do to the golden fish bones?
- 8. How was the story ending? Explain!
- 9. What is the moral values of the story?

#### Task 3. Write a narrative text based on the video played at least in 3 paragraphs including orientation, complication & re-orientation!

#### B. Validity

Validity is the most important characteristic a test or measuring instrument can possess. It is concerned with the appropriateness of the interpretations made from test scores (Gay and Airasian, 2000:161). It generally means that the instrument measures what it purposes to measure. Similarly, Richardson and Morgan (1997:35) also stated that validity is the "truthfulness" of the test—a check of whether the standardized test actually measures what it claims to measure.

According to Tuckman (1978:163-165), validity consists of four types. They are predictive validity, concurrent validity, construct validity, and content validity (test appropriateness). *Predictive validity* is used if a test can be used to predict an outcome in terms of some performance or behavior criterion. Predictive validity of the test can be obtained by relating test performance to subsequent performance on the related criterion. *Concurrent validity* is a validity that is to compare qualities or performance as assessed by that test to the qualities or

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performance as assessed by another procedure. In this case, the result of test is paired to the result of experience. Construct validity is a validity in which the items of questions that construct the test measure every thinking aspect in special instructional aim. Content validity measures special destination which equal to the material or the content of the lesson given. This research used content validity, in which the questions which used is appropriate to the material.

To find out the validity of the items of questionnaire, Split-Half formula in using SPSS 20 version was employed by looking at corrected item-total correlation (correlation between score item and score total item =  $r_{counted}$ ) in table Item-Total Statistics.

To determine whether the test is valid or not, the value of r<sub>counted</sub> must be compared with  $r_{table}$ . The number of students is 29. Degree of freedom is 29-2=27.  $r_{\text{table}}$  on df=27 is 0,367 (5%).

If the value of  $r_{counted} > r_{table} = valid$ ;

If the value of  $r_{counted} < r_{table} = invalid$ .

The result of calculation of validity can be seen in the table below:

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#### Table III. 2 Validity of the Questionnaire in Try-out 1

E Item	r counted	r <sub>table</sub> (df=27; 5%)	Result	Item	r counted	r <sub>table</sub> (df=27; 5%)	Result
_ Item_1	0.529	0.367	Valid	Item_18	0.301	0.367	Invalid
Item_2	0.175	0.367	Invalid	Item_19	0.297	0.367	Invalid
□ Item_3	0.369	0.367	Valid	Item_20	0.174	0.367	Invalid
☐ Item_4	0.143	0.367	Invalid	Item_21	0.265	0.367	Invalid
Ltem_5	0.136	0.367	Invalid	Item_22	0.555	0.367	Valid
Item_6	0.455	0.367	Valid	Item_23	0.761	0.367	Valid
Item_7	0.562	0.367	Valid	Item_24	0.545	0.367	Valid
Item_8	0.465	0.367	Valid	Item_25	0.175	0.367	Invalid
Item_9	0.785	0.367	Valid	Item_26	0.656	0.367	Valid
Item_10	0.635	0.367	Valid	Item_27	0.608	0.367	Valid
Item_11	0.658	0.367	Valid	Item_28	0.629	0.367	Valid
Item_12	0.194	0.367	Invalid	Item_29	0.596	0.367	Valid
Item_13	0.679	0.367	Valid	Item_30	0.501	0.367	Valid
Item_14	0.510	0.367	Valid	Item_31	0.813	0.367	Valid
Item_15	0.547	0.367	Valid	Item_32	0.587	0.367	Valid
Item_16	0.288	0.367	Invalid	Item_33	0.563	0.367	Valid
Item_17	0.204	0.367	Invalid				

The table above shows that there are 33 items of questionnaire are distributed to students in try-out 1. The result is that there are 22 items that are valid and the rest are invalid. The invalid items are revised and redistributed in try-out 2. The result is as follows:

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Table III. 3

Validity of the Questionnaire in Try-out 2

Item	r counted	r table (df=27; 5%)	Result	Item	r counted	r table (df=27; 5%)	Result
Item_1	0.582	0.367	Valid	Item_18	0.819	0.367	Invalid
Item_2	0.183	0.367	Invalid	Item_19	0.279	0.367	Valid
Item_3	0.380	0.367	Valid	Item_20	0.790	0.367	Invalid
Item_4	0.095	0.367	Invalid	Item_21	0.250	0.367	Valid
Item_5	0.105	0.367	Invalid	Item_22	0.535	0.367	Valid
Item_6	0.503	0.367	Valid	Item_23	0.752	0.367	Valid
Item_7	0.550	0.367	Valid	Item_24	0.537	0.367	Valid
Item_8	0.524	0.367	Valid	Item_25	0.134	0.367	Invalid
Item_9	0.841	0.367	Valid	Item_26	0.635	0.367	Valid
Item_10	0.637	0.367	Valid	Item_27	0.603	0.367	Valid
Item_11	0.736	0.367	Valid	Item_28	0.614	0.367	Valid
Item_12	0.214	0.367	Invalid	Item_29	0.612	0.367	Valid
Item_13	0.725	0.367	Valid	Item_30	0.531	0.367	Valid
Item_14	0.494	0.367	Valid	Item_31	0.797	0.367	Valid
Item_15	0.557	0.367	Valid	Item_32	0.598	0.367	Valid
Item_16	0.234	0.367	Invalid	Item_33	0.545	0.367	Valid
Item_17	0.470	0.367	Valid				

The table above shows that there are 33 items of questionnaire that are distributed to students in try-out 1. The result is that there 25 items that are valid and the rest are invalid. The invalid items are unused and the valid ones are used as the questionnaire in pre- questionnaire and post- questionnaire.

The conclusion of the questionnaire items distribution is as follows:

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Table III. 4 Resume of Questionnaire item distribution

	0 4: :	Number of Items			
No	Questionnaire Distribution	Before	After Distribution		
	Distribution	Distribution	Used	Unused	
1	Try-out 1	33 items	22 items (1,3,6,7,8,9,	11 items (2,4,5,	
	•		10,11,13,14,15,22,23,	12,16,1718,19,20,	
			24,26,27,28,29,30,31,	21,25)	
			32,33)		
2	Try-out 2	33 items	25 items (1,3,6,7,8,9,	8 items (2,4,5,	
			10,11,12,13,14,15,17,	12,16,18,20,25)	
			19,21,22,23,24,26,27,		
			28,29,30,31,32,33)		
3.	Pre- and post-	25 items	25 items (1-25)		
	questionnaire				

The table above shows that before the try-out 1, there are 33 items of questionnaire. After its distribution, there are 22 valid items that can be used and the rest are invalid and revised. In try-out2, there are 25 items valid that can be used as the questionnaire items in pre-questionnaire and post-questionnaire and the rest of items are invalid and unused.

#### В. **Reliability**

Reliability is a necessary characteristic of good test. Shohamy (1985:70) says that reliability refers to extent to which the test is consistent in its score and it gives us an indication of how accurate the test score are. Along with the same lines, Singh et al (2006:149) stated that reliability refers to the consistency of measurement, that is, how consistent test scores or other assessment results are from one measurement to another. In addition, reliability is the "consistency" of the test—

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whether it will produce roughly the same results if administered more than once to the same group in the same period. Reliability checks how dependable the test is (Richardson and Morgan, 1997:35). It is clear that reliability is used to measure the quality of the test scores and the consistency of the test.

In finding reliability of instrument, there are several formulas can be used, such as Split-Half formula, Spearman-Brown formula, Flanagan formula, Rulon formula, Hoyt formula, Kuder-Richardson 20 (K-R 20) formula and Kuder-Richardson 21 (K-R 21) formula (Suharsimi, 2006:180). Among these formulas, Split-Half formula in SPSS 20 version was employed.

To find out whether the test is reliable or not, the value of  $r_{counted}$  must be compared with  $r_{table}$ . The number of students is 29. Degree of fredoom is 29-2=27.  $r_{table}$  on df=18 is 0.367 (5%).

If the value of  $r_{counted} > r_{table} = reliable$ ;

If the value of  $r_{counted} < r_{table} = not reliable$ 

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To be clearer, the result of calculation of reliability can be seen in the table as follows:

Table III. 5

The Reliability of Questionnaire in Try-out 1

		N	%
	Valid	29	100
Cases	Excluded <sup>a</sup>	0	0
	Total	29	100
	Reliability	Statistic	
Cronba	ch's Alpha	.906	
	f Items	33	

It can be viewed the result of reliability test of the questionnaire in try-out 1. The values of cronchbach alpha ( $r_{counted}$ ) from 33 items of questionnaire is 0.906 which is higher than  $r_{table}$  (0.906>0.367). Meaning that the questionnaire is reliable.

Table III. 6

The Reliability of Questionnaire in Try-out 2

		N	%
	Valid	29	100
Cases	Excluded <sup>a</sup>	0	0
	Total	29	100
	Reliability S	Statistic	
Cronba	ich's Alpha	.925	
No	of Items	33	

The table above shows the result of reliability test of the questionnaire in try-out 2. The values of cronchbach alpha ( $r_{counted}$ ) from 33 items of questionnaire is

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0.925 which is higher than  $r_{table}$  (0.925>0.367). Meaning that the questionnaire is reliable.

#### III.4. Data Collection Technique

The questionnaire was used in colloecting the data. The purpose of this instrument is to collect the data containing series of question for respondents dealing with students' writing motivation. The questionnaire was presented as prequestionnaire and post-questionnaire to find out the difference of the students' writing motivation when they were taught by using video and when they were taught without using video as well as before they were taught by using video and after they were taught by using video. The questionnaire was designed into some statements those were measured into 5 points of Likert scales; they are Never or almost never true of me (1), Usually not true of me (2), Somewhat true of me (3), Usually true of me (4), and Always or almost always true of me (5) (Setiyadi, 2006: p.60).

The questionnaire of the research was distributed in three different form, those are try-out 1, try-out 2, and pre-questionnaire, and post- questionnaire. The blue-print of the questionnaire items that represents four indicators of the writing motivation is as the tables below:





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#### 1. Try-out 1

Table III. 7

The Blueprint of the Questionnaire Items in Try-out 1

Dimentions	Indicators	Item Numbers	Total
Intrinsic Motivation			
Autonomy	The students have strong desire to write English	1,2,3,4,5,6	6
Competence	The students tend to seek out challenge, exercise their capacity, and explore their skill in English writing	7,8,9,10,11, 12	6
Relatedness	The students are likely to establish their English writing due to supportive relationship to other people	13,14	2
Extrinsic Motivation			
External Regulation	The students affords to gain their writing skill in order to obtain the external rewards	15,16,17, 18,19,20,21	7
Introjected Regulation	The students show persistence in practicing their writing in because of feeling pressure, avoiding guilt and obtaining self-esteem	22,23,24,25, 26	5
Identified Regulation	The students practice English writing because it is important for them	27,28,29,30	4
Integrated Regulation	The students seriously practice the English writing because they feel it is necessary for their success in the future	31,32,33	3
ta	Total Items		33

The table above indicates the number of the questionnaire items in try-out 1 that represents all the indicators. The first indicator is represented into 6 items of questionnaire those are the item 1 to 6. The second indicator is represented into 6 items of questionnaire those are the item 7 to 12. The third indicator is represented into 2 items of questionnaire those are the item 13 and 14. The fourth indicator is represented into 7 items of questionnaire those are the item 15 to 21. The fifth



indicator is represented into 5 items of questionnaire those are the item 22 to 26. The sixth indicator is represented into 4 items of questionnaire those are the item 27 to 30.

The last indicator is represented into 3 items of questionnaire those are the item 31 to

2. Try-out 2

33. Thus, the total number of the questionnaire items is 33.

#### Table III. 8 The Blueprint of the Questionnaire Items in Try-out 2

Dimentions	Indicators	Item Numbers	Total
Intrinsic Motivation			
Autonomy	The students have strong desire to write English	1,2,3,4,5,6	6
Competence	The students tend to seek out challenge, exercise their capacity, and explore their skill in English writing	7,8,9,10,11, 12	6
Relatedness	The students are likely to establish their English writing due to supportive relationship to other people	13,14	2
Extrinsic Motivation			
External Regulation	The students affords to gain their writing skill in order to obtain the external rewards	15,16,17, 18,19,20,21	7
Introjected Regulation	The students show persistence in practicing their writing in because of feeling pressure, avoiding guilt and obtaining self-esteem	22,23,24,25, 26	5
Identified Regulation	The students practice English writing because it is important for them	27,28,29,30	4
Integrated Regulation	The students seriously practice the English writing because they feel it is necessary for their success in the future	31,32,33	3
ity	Total Items	IAU	33

After the item validation, there are 11 invalid items of questionnaire. Consequently, those items are revised and redistributed as try-out 2 with same

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number as the try-out 1. The table above indicates the number of the questionnaire items in try-out 2 that represents all the indicators. The first indicator is represented into 6 items of questionnaire those are the item 1 to 6. The second indicator is represented into 6 items of questionnaire those are the item 7 to 12. The third indicator is represented into 2 items of questionnaire those are the item 13 and 14. The fourth indicator is represented into 7 items of questionnaire those are the item 15 to 21. The fifth indicator is represented into 5 items of questionnaire those are the item 22 to 26. The sixth indicator is represented into 4 items of questionnaire those are the item 27 to 30. The last indicator is represented into 3 items of questionnaire those are the item 27 to 30. The last indicator is represented into 3 items of questionnaire those are the item 31 to 33. Thus, the total number of the questionnaire items is 33.

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#### 3. Pre-questionnaire and Post-questionnaire

Table III. 9 The Blueprint of the Questionnaire Items in Pre-questionnaire and Post-questionnaire

3. Pre-qu	estionnaire and Post-questionnaire		
3. Pre-qu  The Blueprint  Dimentions	Table III. 9  of the Questionnaire Items in Pre-questionnaire and Po	st-questionnaire	
Dimentions	Indicators	Item Numbers	Total
Intrinsic Motivation			
Autonomy	The students have strong desire to write English	1,2,3,	3
Competence	The students tend to seek out challenge, exercise their capacity, and explore their skill in English writing	4,5,6,7,8	2
Relatedness	The students are likely to establish their English writing due to supportive relationship to other people	9,10	2
Extrinsic Motivation			
External Regulation	The students affords to gain their writing skill in order to obtain the external rewards	11,12,13,14	4
Introjected Regulation	The students show persistence in practicing their writing in because of feeling pressure, avoiding guilt and obtaining self-esteem	15,16,17,18	4
Identified Regulation	The students practice English writing because it is important for them	19,20,21,22	4
Integrated Regulation	The students seriously practice the English writing because they feel it is necessary for their success in the future	23,24,25	3
	Total Items		25

After the item validation, there are 8 invalid items of questionnaire. Therefore, those items are unused and only the valid ones are used. These valid items of questionnaire are distributed in pre-questionnaire and post-questionnaire for both groups. The first indicator is represented into 3 items of questionnaire those are the item 1 to 3. The second indicator is represented into 5 items of questionnaire those are the item 4 to 8. The third indicator is represented into 2 items of questionnaire

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those are the item 9 and 10. The fourth indicator is represented into 4 items of questionnaire those are the item 11 to 14. The fifth indicator is represented into 4 items of questionnaire those are the item 15 to 18. The sixth indicator is represented into 4 items of questionnaire those are the item 19 to 22. The last indicator is represented into 3 items of questionnaire those are the item 23 to 25. Thus, the total number of the questionnaire items is 25.

#### **Data Analysis Technique** III.5.

#### Homogeneity

In this research, it is necessary to find out the homogeneity of variance. Assumption of homogeneous (equal) variance is often plausible because different treatment may be expected to affect the mean level of response but not the variability. To measure the homogeneity of variance, the formula of Levene Statistic in IBM SPSS Statistic 20 was utilized.

Statistical Hypothesis of Homogeneity:

If P < 0.05, Ho is accepted (Variance A not equal with Variance B)

If P > 0.05, Ha is accepted (Variance A equal with Variance B)

#### **B.** Normality

When talking parametric approach to inferential statistics, the values that are assumed to be normally distributed are the means across samples. In brief, the assumption that underlies parametric statistics does not emphasize that the observations within a given sample are normally distributed, nor does it emphasize

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1. Dilarang mengutip sebagian atau seluruh karya tulis

that the value within the population (from which sample was taken) are normal. This core element of assumption of normality emphasizes that the distribution of sample means (across independent samples) is normal. In technical term, this assumption of normality emphasizes that the sampling distribution of the mean is normal.

In this research, the data from pre-questionnaire score of students were analyzed by using the formula of Kolmogorov-Smirnov (Liliefors) in SPSS Version 20 to find out the normality of the test.

Statistical Hypothesis of Normality:

Ho : Samples are **not** from the **normal** distributed population

Ha: Samples are from the **normal** distributed population

If P < 0.05, Ho is accepted

If P > 0.05, Ha is accepted

In this research, there are three formulations of the problem that whose results should have been found out. Some techniques were used to analyze the data to find out the information about difference of the students' writing motivation when they were taught by using video and when they were taught without using video, the difference of students' writing motivation before and after they were taught by using video, and the effect of using video towards students' writing motivation. The following computations were applied:

1. To find the significant difference of writing motivation between students' who are taught by using video and who are taught without using video in pre-questionnaire, independent sample t-test in IBM SPSS Statistic 20 was

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applied with the following statistical hypotheses:

Ho<sub>1</sub> is accepted: Significant probabilities > 0.05 or  $\mu_{A} = \mu_{B}$ 

Ha<sub>1</sub> is accepted: Significant probabilities  $< 0.05 \ or \ \mu_A \ \mu_B$ 

Ho<sub>1</sub> is accepted and Ha<sub>1</sub> is rejected or there is no significant difference of writing motivation between students' who are taught by using video and who are taught without using video in pre-questionnaire at the first year of Senior High School Pekanbaru.

Ho<sub>1</sub> is rejected and Ha<sub>1</sub> is accepted or there is significant difference of writing motivation between students' who are taught by using video and who are taught without using video in pre-questionnaire at the first year of Senior High School Pekanbaru.

2. To find the significant difference of writing motivation between students' who are taught by using video and who are taught without using video in post-questionnaire, the independent sample t-test in IBM SPSS Statistic 20 was applied with the following statistical hypotheses:

 $Ho_2$  is accepted : Significant probabilities >0.05 or  $\;\mu_A=\mu_B\;$ 

 $Ha_2\,is$  accepted : Significant probabilities  $<0.05~\text{or}~\mu_A~\mu_B$ 

Ho<sub>2</sub> is accepted and Ha<sub>2</sub> is rejected or there is no significant difference of writing motivation between students' who are taught by using video and who are taught without using video in post-questionnaire at the first year of Senior High School Pekanbaru.

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I Ho<sub>2</sub> is rejected and Ha<sub>2</sub> is accepted or there is significant difference of writing motivation between students' who are taught by using video and who are taught without using video in post-questionnaire at the first year of Senior High School Pekanbaru.

To find the significant difference of the students' writing motivation before being taught by using video and after being taught by using video, paired sample t-test in IBM SPSS Statistic 20 was applied with the following statistical hypotheses:

Ho<sub>3</sub> is accepted: Significant probabilities > 0.05 or  $\mu_A = \mu_B$ 

Ha<sub>3</sub> is accepted: Significant probabilities  $< 0.05 \ or \ \mu_A \ \mu_B$ 

Ho<sub>3</sub> is accepted and Ha<sub>3</sub> is rejected or there is no significant difference of the students' writing motivation before being taught by using video and after being taught by using video

Ho<sub>3</sub> is rejected and Ha<sub>3</sub> is accepted or there is significant difference of the students' writing motivation before being taught by using video and after being taught by using video.

ic University of Sultan Syarif Kasim To find the significant effect of using video towards students' writing motivation, t-value of paired sample t-test by using effect size was manually computed. The formula of effect size is as follows:

Eta Square = 
$$\frac{t^2}{t^2 + (N1 - 1)}$$

Where:



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mengutip sebagian atau seluruh karya tulis

Eta Square = the value of effect size

= The t-value t

N = The number of sample in experimental class

Here is the category of effect size:

0 - 0.1= weak effect

0.1 - 0.3= modest effect

0.3 - 0.5= moderate effect

> 0.5 = strong effect (Cohen, 2007:523)

Statistical hypothesis:

Ho<sub>4</sub> is accepted: the value of effect size

 $Ha_4$  is accepted: the value of effect size > 0.3

Ho<sub>4</sub> is accepted and Ha<sub>4</sub> is rejected or there is no significant effect of using video towards students writing motivation at the first year of Senior High School Pekanbaru.

Ho<sub>4</sub> is rejected and Ha<sub>4</sub> is accepted or there is no significant effect of using video towards students writing motivation at the first year of Senior High School Pekanbaru.

To find out whether the students' writing motivation significantly implicates their writing achievement, linear regression in IBM SPSS Statistic 20 was applied with the following statistical hypotheses:

Ho<sub>5</sub> is accepted: Significant probabilities > 0.05 or  $\mu_A = \mu_B$ 

Ha<sub>5</sub> is accepted: Significant probabilities  $< 0.05 \ or \ \mu_A \ \mu_B$ 

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Ha

Ho<sub>5</sub> is accepted and Ha<sub>5</sub> is rejected or the students' writing motivation does

not significantly implicate their writing achievement.

Ho<sub>5</sub> is rejected and Ha<sub>5</sub> is accepted or the students' writing motivation

significantly implicates their writing achievement.

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Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber

Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah

2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau