CHAPTER III

RESEARCH METHOD

This chapter presents about the research method that used in the study which covers: (a) research design, (b) population, sampling and sample, (c) variable, (d) method to collect data, (e) instrument of research, (f) validity reliability testing, (g) data analysis.

3.1. Research Design

In this study, the researcher use Quantitative approach with Quasi Experimental research design. According to Ary (2006), "Quantitative research is inquiry employing operational definition to generate numeric data to answer predetermined hypotheses or questions".

A quantitative approach is one in which the investigatory primarily uses postpositive claim for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and question, use of measurement and observation, and the test of theories) employs strategies of inquiry such as experiment and survey and collect data on predetermined instrument that yield statistics data.

The experimental research design is classified into: pre-experimental design, true experimental design and quasi

experimental design. Pre experimental designs do not have random assignment of subjects to groups or other strategies to control extraneous variables. True experimental designs used randomization and provide maximum control of extraneous variables

In this study, the researcher uses quasi experimental design with nonrandomized control group, pre-test and post-test because the researcher take a data in a school that has a system and the students has already setting into some classes. So the researcher can not take a random sample because later it will change the existing order. According Sugiyono (2015) Quasi experimental design is a design that had a control group, but may not work fully to control the outer variables that affect the execution of experimental".

This research involved two groups of subject; they were experimental class and control class. Before conducted a pre-test, first the researcher did a try out in another class. The purpose is to know the reliability and the validity of the test. After the test was reliable and valid, next the researcher does a Pre-test in control group and experimental group to know the students' achievement in writing descriptive text before a treatment in control group.

After that, the treatments were given to the students in experimental group by using Youtube Video in writing descriptive text. The pretest was used to find out the students' achivement in writing before using Youtube Video and the treatment and the

posttest was used to see the effect of the students' writing achievement after giving a treatment.

In this research design, the researcher compare the post test score in writing descriptive text between experimental group who got a treatment by using Youtube Video and control group that was not get a treatment by using Youtube Video.

The design of the study was taken from Ary (2006) and presented in the table 3.1 below:

Table 3.1 The design of nonrandomized control group, pre-test and post-

test design

Group	Pre-test	Treatment	Post-test
A	Y1	X	Y2
B	Y1	-	Y2

(Taken from Ary, 2006)

Notes:

A   : Experimental group B : Control group

Y1 : Pre-test in experimental group before treatment Y1 : Pre-test in control group

Y2 : Post-test in experimental group after treatment Y2 : Post-test in control group

X   : Treatment using Youtube Video for the experimental group

-    : The group without treatment or using conventional strategy

In this research, the researcher can't apply the treatment, post-test

and pre- test directly in the classroom because there is Corona Virus pandemic so teaching learning activities are carried out at home by using online system. All of teacher in SMAN Tulungagung uses Whatsapp Group to do the online class because this application is easy to use and it is commonly used by students and teacher. So, hopefully using Whatsapp group the online class successfully. The teacher can deliver the material easily and the students can understand the material that has been delivered by the teacher.

In this case the researcher uses Whatsapp group because it is easy to use beside the English teacher suggest to the researcher to use this application. All of students have this application in their phone because it is popular mobile application that can be used for send a massage, send a file, a photo, voice note, video call, telephone and so on. Beside it, by using this application the online class will be successfully because there is no difficulty to operate this application. So, the students who have a little memory in their phone do not worry to join this online class because Whatsaap Application automatically installed in their mobile phone and it does not require a lot of memory.

In the first meeting the researcher does a pre-test. In the second, third and fourth meetings the researcher does a treatment. In each meeting of treatment the researcher asks the students to make a descriptive text based on the video in Youtube. They have different activities in each meeting such as in the first meeting of treatment, they make a descriptive

text with their group that consists of 4-5 students.. In the second meeting of treatment, they make a descriptive text with their group that consists of 2-3 students. In the third meeting of treatment the researcher asks the students to make a descriptive text by themselves.

In the first and the second of treatment, they can discuss how to make their paragraph coherent and well organized, what grammar that they used, how to make a clear main idea in their written text by using Whatsapp group. One student does one paragraph in their group so they have to make a coherent paragraph each other and it will makes a written text well organized if all of the paragraphs are merged. In the fifth meeting the researcher does a Post-Test

1. **Pre-Test**

    The first meeting conducted Pre-Test. The researcher gave a pretest in order to know the students' writing achievement before being taught by using Youtube Video. The researcher asks the students to make a descriptive text based on the topic that have been given. The topic is Gemah Beach. (See table 3.4)

Table 3.2. Pre-Test

TEST

Level   : Senior High School
Course   : English
Theme   : Descriptive Text
Time Allocation : 45 Minutes
Type of Question : Essay

Instruction !

1. Please write a descriptive text about **"Gemah Beach"**!
2. You are given 45 minutes to write descriptive text!
3. Your writing contain at least or minimal 3 Paragraph!
4. Please make an identification of the generic structure of Descriptive text (Identification and Description).

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5. You have used the following language features of descriptive text!
   a. Simple present tense
   b. Using Action Verb
   c. Using Adjective
6. Your score will be measured based on five aspects   (Content, Organization, Grammar, Vocabulary and Mechanic)
7. You may open your dictionary book.
8. You have to write your writing in piece of paper. Please write your name, class and the time when you start and finish in making this project. (For example : 10.00 – 10.45)
9. Please do it by yourself and not copy from the google or your friend's writing.
10. You may open your dictionary book.
11. If you have finished, please take a picture of your writing and send it Via whatssapp to this number **(087758650808)**
12. You have to send your writing not more than 16.00 in this day.
13. The last please keep the authenticity of your writing and do not let it to lose. So, when you get the class later, the score of your writing will lose your score 20 points.

2. Treatment

The second meeting, the researcher conducted what is Youtube, how is Youtube can be used in teaching learning writing descriptive text, and what is Youtube implemented in teaching learning writing descriptive text.

Next, the researcher divided the students into 6 groups. One group consisted of 4-5 students. Every group has one chairman. Then, the researcher gives a link of Youtube to the students and asks them to play the video. It is about Descriptive Text material and the example.

After that the researcher asked the students to make the resume based on the explanation in that video about descriptive text. Every student in group has a different assignment:

1. What is the definition descriptive text?

2. What is the purpose of descriptive text?

3. What is the generic structure of descriptive text?

4. What is the definition in every generic structure of descriptive text?

5. Please, identify the generic structure of the example in that video!

The students have 20 minutes to do the assignment. After that, they will send their assignment to the chairman. Next, the chairman sends the group's assignment in the researcher. Every chairman sends 4-5 photos to the researcher.

Next, the researcher shares the second youtube's link to the students. The teacher asks the students to make 4-5 paragraphs. One student writes 1 paragraph in every group. After that, they will send their assignment to the chairman. Next, the chairman sends the group's assignment in the researcher. Every chairman sends 4-5 photos to the researcher.

The third meeting, the researcher divided the students into 17 groups. One group consisted of 2-3 students. Every group has one chairman. Then, the researcher gives a link of Youtube to the students and asks them to play the video and make a descriptive text based on the video. Every student writes 2 paragraph and they collect their assignment to the chairman of the group. Next, the chairman sends the group's assignment in the researcher. Every chairman sends 2-3 photos to the researcher. The students have 30 minutes to do the assignment.

Next, the researcher asks them to make a record of their writing text. They make a record based on their part in writing text before. The students have 45 minutes to do all of the assignment.

In the last time, the researcher sends a video from Youtube to the group. And ask the students to describe the object in that video. The five students who can answer the question correctly and faster they will get 5 scores. They send their answer to the researcher's phone

The forth meeting, the researcher give 2 links of Youtube to the students. After that, the researcher asks the students to make a descriptive text minimum 3 paragraph. The students who have odd number they should make a descriptive text based on the first link, and the students who has even number should make a descriptive text based on the second link. The researcher gives them 45 minutes to make a descriptive text.

After that, the teacher gives a game to the students. The teacher sends a video from youtube and ask them to describe the object in video. They send their answer to the researcher's phone.

3. **Post-Test**

The last meeting the researcher gave the post-test. The researcher gave the test to know the students' achievement in writing descriptive text after the researcher did the treatment. The pre-test and post-test is similar, both of them are asked to make a descriptive text in the same time and the same rules. But the topic of descriptive text in pre-test and post-test are different. The topic in pre-test in Gemah beach and in Post Test is my school mate. (See table 3.3)

Table 3.3. Post-Test

TEST

Level : Senior High School
Course : English
Theme : Descriptive Text
Time Allocation : 45 Minutes
Type of Question : Essay

Instruction !

1. Please write a descriptive text about **"My Classmate"**!
2. You are given 45 minutes to write descriptive text!
3. Your writing contain at least or minimal 3 Paragraph!
4. Please make an identification of the generic structure of Descriptive text (Identification and Description).
5. You have used the following language features of descriptive text!
   d. Simple present tense
   e. Using Action Verb
   f. Using Adjective
6. Your score will be measured based on five aspects (Content, Organization, Grammar, Vocabulary and Mechanic)
7. You may open your dictionary book.
8. You have to write your writing in piece of paper. Please write your name, class and the time when you start and finish in making this project. (For example : 10.00 – 10.45)
9. Please do it by yourself and not copy from the google or your friend's writing.

Different attribute to the application of the experimental treatment was determined by comparing the pre-test and post-test scores. The effectiveness would be known after knowing the significant differences scores on writing descriptive text between the students' taught by using Youtube video and those taught without using Youtube Video.

3.4. Schedule of Researcher's Activities

NO	Date	Activities
1.	4th March 2020	Pre-Test (Experimental Class)
2.	11th March 2020	The first Treatment based on lesson plan 1. (Experimental Class)
3.	18th March 2020	The second treatment based on lesson plan 2. (Experimental Class)
4.	1st April 2020	The third Treatment based on lesson plan 3 (Experimental Class)
5.	8th April 2020	Post-Test (Experimental Class)

3.2. Population, Sampling and Sample

3.2.1. Population

According to Arikunto (2002), population is the whole of research subject, if someone wants to research all of the elements in research area his research is called population research on census study. We can define that population is a group or subject (person or things) to whom or which the findings of the study are to be applied.

The population of this study was the tenth grade students of SMAN

1 Tulungagung. The number of population was 193.

They were divided into seven classes. X IPA 1, X

IPA 2, X IPA 3, X IPA 4, X IPS 1, X IPS 2, and X

IPS 3.

Table 3.5. Population

XI IPA 1	32
XI IPA 2	33
XI IPA 3	34
XI IPS 1	32
XI IPS 2	32
XI IPS 3	32
Total	**193**

3.2.2. Sampling

According Sugiono (2018), The sampling technique used is

total population sampling technique. This sampling technique

was chosen when the research was conducted in a small

population area.

In this research, the researcher uses nonrandomized sampling

with purrposive sampling to take sample from population and it

represents the entire population. The researcher uses it because

the researcher can not choose a person who is suitable with his

criterion. But in this case, the researcher can choose the class

that has students who is suitable with the criterion. The

researcher consults with the English teacher in SMAN 1

Tulungagung to choose the suitable class.

According to Ary (2006) , Purposive sampling also referred

to as judgment sampling-sample elements judges to be typical, or representative, are chosen from the population.

3.2.3. Sample

Sample is a part of population. According to Ary (2002), " Sample is a group selected from population for observation in a study. In this study, the writer took X IPA 2 as the experimental group and X IPA 3 as the control group from seven classes. The writer took those classes because it was the researchers' needed.

The reason why the researcher chose those classes because the students in those classes were active, communicative and has many ideas in learning about writing.

The students in X IPA 2 were 33 students as an experimental group and the students in X IPA 3 were 34 students as a control group. So, the total of sample in this study is 67 students.

3.3. Variables

Every research involves to be measured. Variable is key term of research. When the variables are not clear, it is difficult for the researcher to conduct research. Variable is the focus in any research. According to Ary (2006: 40), the most important classification is on the basis of their use within the researcher under consideration when they are classified as independent (X) and dependent (Y) variables. In this study the variables are :

1. Independent (X) = Youtube Video.

2. Dependent (Y)= Students' writing skill in descriptive text.

Independent variable is the values that can be changed or controlled in a given model or equation. Dependent variable is the values that result from the independent variable.

3.4. Methods to Collect Data

Before the researcher does a Test, the researcher has tried out the instrument of to know the validity and reliability of the test. In this case the researcher sends a file of the test to the students and asks them to do it. The researcher asks them to make a descriptive text based on the topic in the instrument of the test. It is "Gemah Beach". The students get 45 minutes to do the test. After that, the researcher asked the students to send and collect their answer as a data in try out to the researcher's phone.

The researcher used SPSS 16.0 to calculate the validity and reliability of the test. After SPSS 16.0 stated that the test is valid and reliable, next the researcher did a Test in Experimental Group and Control group. The reason why the researcher do a try out because to make sure if the test proper to be tested. The test is not too difficult or too easy.

The researcher does a Test twice. They are before treatment and after treatment. A test before treatment (Pre-Test) is to know the students' writing achievement in descriptive text before a treatment. A

test after treatment (Post-Test) is to know the students' writing achievement in descriptive text after treatment. If the mean of Post-test in experimental group is better than control group, so Youtube Video is effective to use in teaching descriptive text.

3.5. Instrument of Research

According to Ary et al (2010: 201) test was a set of numerical score can be assigned. In this study the researcher gave a written or essay test to the students. There were two kinds of test they were Pre-test and Post-test. Both of the tests were descriptive text as the level of students in their grade of level and by considering with core competence and also basic competence.

In the test, the topic chosen in every test was different to avoid as they can remember on the previous topic given. The teacher asks them to describe about Gemah Beach in 45 minutes. In this test, the researcher wants to know how the students can develop their idea about a sentence of "Gemah Beach" into a writing text. Not only it, but also the researcher wants to know how is the students' grammar, vocabulary, spelling and punctuation, content and the last how they can organize a writing text into a perfectly coherent .

Table 3.6. Instrument of The test

TEST	
Level	: Senior High School
Course	: English
Theme	: Descriptive Text
Time Allocation	: 45 Minutes
Type of Question	: Essay

Instruction !

1. Please write a descriptive text about **"Gemah Beach"**!
2. You are given 45 minutes to write descriptive text!
3. Your writing contain at least or minimal 3 Paragraph!
4. Please make an identification of the generic structure of Descriptive
   text (Identification and Description).

5. You have used the following language features of descriptive text!
   b. Simple present tense
   c. Using Action Verb
   d. Using Adjective
6. Your score will be measured based on five aspects (Content, Organization, Grammar, Vocabulary and Mechanic)
7. You may open your dictionary book.
8. You have to write your writing in piece of paper. Please write your name, class and the time when you start and finish in making this project. (For example : 10.00 – 10.45)
9. Please do it by yourself and not copy from the google or your friend's writing.
10. You may open your dictionary book.
11. If you have finished, please take a picture of

    your writing and send it Via whatssapp to this

    number **(087758650808)**

12. You have to send your writing not more than 16.00 in this day.

13. The last please keep the authenticity of your

    writing and do not let it to lose. So, when you get

    the class later, the score of your writing will lose

    your score 20 points.

    To know the result of the tests, the researcher used scoring rubric.

Table 3.7. Scoring Rubric

Aspects	Score	Indicator

CONTENT	5 (Excellent)	Main ideas stated clearly and accurately, change of opinion very clear.
	4 (Good)	Main ideas stated fairly clearly and accurately, change of opinion relatively clearly.
	3 (Average)	Main ideas somewhat unclear and inaccurate, change of opinion somewhat weak.
	2 (Poor)	Main ideas not all clear or accurate, change of opinion weak.
	1 (Very Poor)	Main ideas not all clear or accurate, change of opinion very weak.
ORGANIZATION	5 (Excelent)	Well organized and perfectly coherent
	4 (Good)	Fairly well organized and generally coherent.
	3 (Average)	Loosely organized but main ideas clear, logical but incomplete sequencing.
	2 (Poor)	Ideas disconnected, lacks logical sequencing.
	1 (Very Poor)	No. organization, incoherent.
	5 (Excellent)	Very effective choice of words and use of idioms and word forms.
VOCABULARY	4 (Good)	Effective choice of words and use idioms and word forms.

	3 (Average)	Adequate choice of words but some misuse of vocabulary, idioms and word forms
	2 (Poor)	Limited range, confused use of words, idioms, and word forms
	1 (Very Poor)	Very limited range, very poor of words, idioms, and word forms
GRAMMAR	5 (Excellent)	No. errors, full control of complex structure
	4 (Good)	Almost No. errors, good control of structure
	3 (Average)	Some errors, fair control of structure
	2 (Poor)	Many errors, poor control of structure
	1 (Very Poor)	Dominated by errors, No. control of structure
MECHANICS	5 (Excellent)	Mastery of spelling and punctuation
	4 (Good)	Few errors in spelling and punctuation
	3 (Average)	Fair number of spelling and punctuation errors
	2 (Poor)	Frequent errors in spelling and punctuation
	1 (Very Poor)	No. control over spelling and punctuation

3.6. Validity Testing

3.6.1. Validity

According to Creswell (2012), validity is the degree to which all of the evidence points to the intended interpretation of the test scores for the proposed purposes. Gay (1992) stated that "validity is the degree to which a test measures what it is supposed to measure". The purpose of the validity test is to determine the performance of the instrument in measuring what is measured.

3.6.2. Content Validity

Hughes (2003: 26) stated that test is considered to have content validity if their content constitutes a representative sample of language skills, structures, etc. it meant to be concerned. This validity is a tool that can be measured the extent of instrument represents all aspects considered as a conceptual framework.

Table 3.8. Content Validity of Instrument

Core Competence	Basic Competence

3. Memahami, menerapkan, menganalisis pengetahuan faktual, konseptual, prosedural berdasarkan rasa ingin tahunya tentang ilmu pengetahuan, teknologi, seni, budaya, dan humaniora dengan wawasan kemanusiaan, kebangsaan, kenegaraan, dan peradaban terkait penyebab fenomena dan kejadian, serta menerapkan pengetahuan prosedural pada bidang kajian yang spesifik sesuai dengan bakat dan minatnya untuk memecahkan masalah.	3.7.Memahami tujuan, struktur teks, dan unsur kebahasaan dari jenis teks deskriptif lisan dan tulis, sederhana, tentang orang, tempat wisata, dan bangunan bersejarah terkenal.

4. Mengolah, menalar, dan menyaji dalam ranah konkret dan ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah secara mandiri, dan mampu menggunakan metoda sesuai kaidah keilmuan	**4.2.**Menyusun teks deskriptif lisan dan tulis sederhana tentang orang, tempat wisata, dan bangunan bersejarah terkenal, dengan memperhatikan tujuan, struktur teks, dan unsur kebahasaan, secara benar dan sesuai dengan konteks.

3.6.3. Construct Validity

Construct validity can be fulfill if a test can measure what we are supposed to measure. Construct is any theory, hypothesis or model that attempts to explain observed phenomena in our universe perception (Brown, 2004:25).

In this test, the researcher asked the students to make a writing descriptive text. The aspect of writing descriptive text guides to create a suitable instrument before being tested.

This is valid in term of construct validity, they are:

1) Generic structure : Identification and description

2) Language features : Using Simple Present tense

3) Social function : To describe and reveal a particular person, place or thing.

3.6.4. Face Validity

Face validity refers to the degree to which a test looks right, and appears to measure the knowledge or abilities it claims to measure, based on subjective judgment or the examines who take it, the administrative personnel who decide on its use, and other psychometrically unsophisticated observers (Brown, 2004).

In this research, the researcher consulted with the advisor by using face validity. In the Pre-test and Post-test form, the researcher gave the instruction in order to make a writing descriptive text.

Table 3.9. Face Validity of Instrument

Instruction !

1. Please write a descriptive text about **"Gemah Beach"**!
2. You are given 45 minutes to write descriptive text!
3. Your writing contain at least or minimal 3 Paragraph!

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5. Please make identification the generic structure of Descriptive text (Identification and Description).
6. You have used the following language features of descriptive text!
   a. Simple present tense.
   b. Using Action Verb
   c. Using Adjective
7. Your score will be measured based on five aspects (Content, Organization, Grammar, Vocabulary and Mechanic)
8. Answer it in the answer sheet.
9. You may open your dictionary book.

3.7. Reliability

Johnson and Christensen (2008,p.144), " Reliability refers to the consistency or stability of a set of test scores". The purpose of the reliability test is to make sure that the instrument that we compile will be really good to measuring a symptoms and producing a valid data. It used to assess the consistency of the instrument. To know the reliability of the test, the researcher used the inter-rater reliability. It means that the researcher involved two raters for scoring the students' writing achievement. Then, that two score was compared to know the reliability of coefficient.

The writer used SPSS 16.0 (Statistics Package for Social Sciences) to search Cronbachs Alpha to know the reliability of the test. It seems fairly common to describe Cronbarch's alpha values as follows:

- 0.9 and greater   = Excellent reliability
- Between 0.9 and 0.8 = Good Reliability
- Between 0.8 and 0.7 = Acceptable Reliability
- Between 0.7 and 0.6 = Acceptable Reliability
- Between 0.6 and 0.5 = Poor Reliability
- Less than 0.5   = Unacceptable Reliability

To know the reliability of the test, the researcher did a try out on 28th February 2020 in X IPA 1 at SMAN 1 Tulungagung that consists of 32 students. There were 5 assessments in order to get to get the score of the students' result they are content, organization, vocabulary, grammar and mechanics. The highest score in each part was 5 and the lowest score was 1. So, the highest final score in their writing was 25.

Table 3.10. Students' Score in Try out of The Test

Nama	Rater 1	Rater 2
A.A.F.	18	17
A.L.P.F.	16	14
A.Y.R.	20	22
A.A.N.	22	19
A.N.A.M.	22	23
B.A.N.	19	21
D.N.S.	16	17
D.A.A.	20	20
E.O.M.P.	23	22
G.N.L.	20	18
I.J.M	21	22
K.S.K.P	21	21

L.S.A.	19	17
M.F.E	22	20
M.H.	21	19
M.S.A.S	17	19
M.I.F.	17	15
M.K.F.S.	20	18
M.R.W.S	18	19
N.L.A.	21	22
N.H.	21	20
N.L.	18	16
R.A.S.R.	20	22
R.A.C.	21	21
R.R.D.J.	19	22
R.G.F.	16	18
S.P.S.	22	22
S.A.N	21	20
S.Y.	20	22
S.T.Y.	22	23
T.R.S.	21	20
W.A.F.	21	19

Table 3.11. Correlations

		Rater_1	Rater_2
Rater_1	Pearson Correlation	1	.707[**]

			.000
	N	32	32
Rater_2	Pearson Correlation	.707**	1
	Sig. (2-tailed)	.000	
	N	32	32

**. Correlation is significant
at the 0.01 level (2- tailed).

After Try Out, the researcher calculates the students score by using SPSS 16.0. The researcher uses Pearson Correlation to know the correlation of rater 1 and rater 2 that is far from biased. If the result of the test is more than 0.05 or close with 1,so the instrument of the test is reliable to be tested.

In this research, the result of the test was showed in table 3.8. It can be seen that the result of the correlation coefficient in try-out of Pre- test is 0.707 or close with 1. It means that there is good relationship between two variables. So, the instrument of the test is reliable to be tested.

3.8. **Data Analysis**

Quantitative analysis was done using statistic which is called statistical analysis or inferential statistic. The quantitative data of this research in analyzed using

statistical computation. In order to know the students'
significant difference achievement of writing
descriptive text after and before taught by using
Youtube Video, the researcher conducted normality
testing. The data of post-test of both experimental group
and control group were analyzed statistically by using
T-test by using SPSS

16.0. The use of T test in order to know is there any
significance difference on students' writing
achievement different after and before the students
taught by Youtube Video.

3.8.1. Normality Testing

The function of normality testing is used to
know the distribution of the test is normal or not.
If the data of test is normal distribution, the data
could be considered to represent the population.
In this case, the researcher used SPSS 16.0 to
measure the normality of the test. The researcher
uses One Sample Kolmogrov method. If the
significance value > 0.05 the data had normality
distribution but if the significance value < 0.05
the data did not have normal distribution

3.8.2. Homogeneity

Homogeneity testing was intended to know whether the variance of data was homogeneous or not. It was used to know the similarity of the two conditions of population. In this case to measure the homogeneity testing, the researcher analyzed the sample by using SPSS 16.0 (ANNOVA). Basic decisions making in homogeneity testing were as follows:

a. If the significance value > 0,05, the data distribution was homogeneous.

b. If the significance value < 0,05, the data distribution was not homogeneous be seen as in the tables.