CHAPTER III

RESEARCH METHOD

This chapter discusses the research designand the design strategies underpinning this research study. In addition, the chapter discusses the research design and approach which used in the study including place and time of the research, population and sample, instruments, endorsment of the data, data collecting procedure, data analysis while explaining the stages and processes involved in the study, and method for verification the research findings.

A. Research Type

The research type of this study was descriptive quantitative his research purely quantitative with questionnaire as the main instrument to obtain the data which in the form of numerical in the statistic analysis. Wido states the descriptive research is a research that involving the collection of the data for the purpose of describing exiting conditions.[1]Descriptive study is a type of research that happened naturally, has no control over the condition and the situation, and could only measure what already exist.[2]

---

[1]Wido H. Toendan, 2013. *"Research Methods", University of Palangka Raya.*
[2]Norjenah, 2012. *"The Students' Perception Toward EFL Teachers' Feedback on Oral Performance ofthe Seventh Grade Students of Mtsn 1 Model Palangkara Raya"*, Unpublished Thesis, Palangka Raya: State Islamic College of Palangka Raya, p.37

B. Research Design

The research design of this study was a survey research. A survey is any activity that collects information in an organized and methodical manner about characteristics of interest from some or all units of apopulation using well-defined concepts, methods and procedures, and compiles such information into a useful summary form.[3]In one line, survey is a procedure used by the researcher to describe the attitudes, opinions, behaviors, or characteristics of the population.[4]

While in this study was descriptive with survey research, there a few common characteristics in it:

1. A pre-established instrument has most likely been developed by the researcher.

2. Most responses to the questions on the survey are quantitative (e.g., ratings) or will be summarized in a quantitative way.

3. The sample is selected from a larger population or group to allow the study's findings to be generalized back to the larger group.[5]

20

C. Population and sample

1. Population

---

[3]Statistics Canada. 2003. *Survey Methods and Practice.*p.1
[4]John W. Creswell, 2012. *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research,* Boston: Pearson Education Inc, p. 376
[5]Marguerite G. Lodico, Dean T. Spaulding, Katherine H. Voegtle, 2006. *Method in Educational Research,* San Francisco: Jossey-Bass a Wiley Imprint, p. 156-157

Population is defined as all members of any well-defined class of people, events, or objects.[6] While in this study, the population was the students of all Senior High Schools in Palangka Raya. In total there are 40 Senior High Schools in Palangka Raya.

The population data of senior high schools in Palangka Raya can be seen in the following table:

Table 3. 1

POPULATION

o.	Nama Sekolah	Alamat	Status	Jumlah Siswa
	MA MIFTAHUL JANNAH	Jl.Wisata Pahandut Seberang	Negeri	12
	MA MUSLIMAT NU	Jl. Pilau No. 41	Negeri	36
	MAN MODEL PALANGKARAYA	Jl. Cilik Riwut Km.4.5	Negeri	611
	MA-S ANNUR PALANGKA RAYA	Jl. Mahakam No.31 Palangkaraya	Negeri	12
	MAS DARUL ULUM	Jl. Dr. Murjani	Negeri	143
	MA-S HIDAYATUL INSAN	Jl. Sulawesi No 76	Negeri	80
	SMA-S GARUDA	Jl. Rajawali Vii Gang Kusuma	Swasta	21

---

[6] Donald Ary, Lucy Cheser Jacobs, Chris Sorensen, and Asghar Razavieh, 2010. *Introduction to Research in Education*, Canada: Wadsworth, p.148

	PALANGKA RAYA	Jaya		
	SMA-S ISEN MULANG	Jl. Dr. Wahidin Sudiro Husodo	S wasta	307
	SMA-S KARYA PALANGAKA RAYA	Jl. Cilik Riwut Km. 15 Sakan V	S wasta	132
0	SMA-S KATOLIK ST PT. KANISIUS	Jl. Cilik Riwut	S wasta	265
1	SMA-S KRISTEN	Jl. Diponegoro Nomor 1	S wasta	624
2	SMA-S MUHAMMADIYAH 1 PALANGKA RAYA	Jl. Rta Milono Km. A.5	S wasta	671
3	SMA-S MUHAMMADIYAH 2 PALANGKA RAYA	Jl. Demak	S wasta	26
4	SMA-S NAHDIATUL ULAMA	Jl. Rta. Milono Km. 3	S wasta	169
5	SMA-S NUSANTARA	Jl. Dr. Wahidin Sudirohusodo	S wasta	386
6	SMA-S PGRI – 1	Jl. Putri Junjung Buih	S wasta	80
7	SMA-S PGRI – 2	Jl. Hiu Putih	S wasta	65
8	SMA-S PURNAMA PALANGKA RAYA	Jl. Patih Rumbih No. 03	S wasta	57
9	SMAN 1 PALANGKA RAYA	Jl. Ade Irma Suryani Nasution	N egeri	1.2 08
0	SMAN 2 PALANGKA RAYA	Jl. Ks Tubun No. 02	N egeri	293

1	SMAN 3 PALANGKA RAYA	Jl. G. Obos No. 12	Negeri	1.13
2	SMAN 4 PALANGKA RAYA	Jl. Sisinga Maharaja III	Negeri	212
3	SMAN 5 PALANGKA RAYA	Jl. Tingang	Negeri	281
4	SMAN 6 PALANGKA RAYA	Jl. Cilik Riwut Km. 29	Negeri	333
5	SMAN 7 PALANGKARAYA	Jl. Bukit Manuah	Negeri	19
6	SMK (SMEA) ISEI PALANGKA RAYA	Jl. Yos Sudarso No. 15	Swasta	10
7	SMK (SMEA) ISEN MULANG	Jl. Dr. Wahidin Sudirohusodo	Swasta	48
8	SMK (STM) AL ISHLAH	Jl. Mahakam	Swasta	25
9	SMK(STM) BETHEL PALANGKA RAYA	Jl. Aries No. 4 Lantai Ii Amaco	Swasta	15
0	SMK KARSA MULYA	Jl. G. Obos Km. 4.5	Swasta	191
1	SMK KECIL NEGERI 1 PALANGKA RAYA	Jl. Mawar	Negeri	35
2	SMK KECIL NEGERI 2 PALANGKA RAYA	Jl. Tjilik Riwut Km. 33	Negeri	41
3	SMK KRISTEN	Jl. Diponegoro	Swasta	-
4	SMK NASIONAL	Jl. Tambun Bungai	Swasta	-
5	SMK NEGERI 5 PALANGKA RAYA	Jl. Matal	Negeri	-

6	SMKN - 6 PALANGKA RAYA	Panjehang	Negeri	-
7	SMKN 1 PALANGKA RAYA	Jl. Tambun Bungai	Negeri	550
8	SMKN 2 PALANGKA RAYA	Jl. Ra. Kartini	Negeri	211
9	SMKN 3 PALANGKA RAYA	Jl. Ra Kartini No. 25	Negeri	214
0	SMKN 4 PALANGKA RAYA	Jl. Seth Adjie	Negeri	18

2. Sample

A sample is a portion of a population.[7] In this study the writer used the cluster random sampling criteria or called as clustering sampling technique. Because, in this case the population of Palangka Raya Senior High Schools students too large that the writer cannot list all members of students for the purpose of drawing a simple random sample.Cluster random sampling is the type of sampling technique that the unit chosen is not an individual but, rather, a group of individuals who are naturally together.[8]Cluster random sampling is used when it is more feasible or convenient to select groups of individual that it is to select individuals from a defined population.[9]

Another statement that refer to this research by Borg and Gall that "for survey research, it is desirable to have at least 100 subjects in each major

---

[7]*Ibid.*Donald Ary, Lucy Cheser Jacobs, Chris Sorensen, and Asghar Razavieh, *Introduction to Research in Education*, ...

[8]*Ibid,*Donald Ary, Lucy Cheser Jacobs, Chris Sorensen, and Asghar Razavieh, *Introduction to Research in Education*, ...

[9] H Wido H. Toendan, 2013. *"Research Methods",* University of Palangka Raya, p.78

subgroup and 20 to 50 in each minor subgroup whose responses are to be analyzed".[10]

While in this research the writer used some step to establish based on the clustering random sampling technique. Firstly, the writer chosen the major subgroup (school)randomly for 10% from the total of population: 40:10%= 4 major subgroup / senior high schools, namely;MAN Model Palangka Raya (Islamic senior high school), MA Muslimat – N.U Palangka Raya (Islamic senior high school), SMA Negeri 4 Palangka Raya and SMK Negeri 2 Palangka Raya. Secondly, the writer selecta random sampleof one minor subgroup (class)on the second grade from within each these schools in total there are 4 classes, namely; XI-Bahasa of MAN Model, XI-IPA of MA Muslimat N.U, XI-Bahasa / 10 of SMA Negeri 4, and XI-APK / 01 of SMK Negeri 2. The last step, the writer includes all students from each of these classes in totally 134 students as the samples.

The samples data were selected based on the cluster random sampling technique in the following table:

---

[10]Borg, W. R., & Gall,M.D. 1989. *Educational research: An introduction (5th ed.).* New York: Longman.

Table 3. 2

Sample Result Based on the Simple Clustering Technique

No.	Name	Class	School	Code
1	Abdul Halim	XI IPA	MA Muslimat NU	A001
2	Alviani Maulidyah	XI IPA	MA Muslimat NU	A002
3	Ani	XI IPA	MA Muslimat NU	A003
4	Arbain	XI IPA	MA Muslimat NU	A004
5	Aula Mukarramah	XI IPA	MA Muslimat NU	A005
6	Dadung Maulana	XI IPA	MA Muslimat NU	A006
7	Dewie Aisah	XI IPA	MA Muslimat NU	A007
8	Dian Nita	XI IPA	MA Muslimat NU	A008
9	Emiliardi	XI IPA	MA Muslimat NU	A009
10	Gina Fauzia	XI IPA	MA Muslimat NU	A010
11	Herlina	XI IPA	MA Muslimat NU	A011
12	Hidayatullah	XI IPA	MA Muslimat NU	A012
13	Ihsan Syaufari	XI IPA	MA Muslimat NU	A013
14	Khairunnisa	XI IPA	MA Muslimat NU	A014
15	M. Anwar Hilmi	XI IPA	MA Muslimat NU	A015
16	M. Fahriannor	XI IPA	MA Muslimat NU	A016
17	M. Fauzi	XI IPA	MA Muslimat NU	A017
18	M. Hasir	XI IPA	MA Muslimat NU	A018
19	M. Riduan	XI IPA	MA Muslimat NU	A019
20	M. Rifky Aulia	XI IPA	MA Muslimat NU	A020
21	M. Rizal Mahbub	XI IPA	MA Muslimat NU	A021
22	M. Yasin	XI IPA	MA Muslimat NU	A022
23	Maulida Oktavia	XI IPA	MA Muslimat NU	A023
24	Muhammad Setiawan	XI IPA	MA Muslimat NU	A024

25	Nordiyanti	XI IPA	MA Muslimat NU	A025
26	Putri Tunggal Dewi	XI IPA	MA Muslimat NU	A026
27	Rahmad Padillah	XI IPA	MA Muslimat NU	A027
28	Rahmad Shomadi	XI IPA	MA Muslimat NU	A028
29	Reza Mahdi	XI IPA	MA Muslimat NU	A029
30	Reza Ramadhan	XI IPA	MA Muslimat NU	A030
31	Risna Wati	XI IPA	MA Muslimat NU	A031
32	Rizky Aulia Nanda A	XI IPA	MA Muslimat NU	A032
33	Roesmegawati	XI IPA	MA Muslimat NU	A033
34	Salasiah A	XI IPA	MA Muslimat NU	A034
35	Salman Al-Farizi	XI IPA	MA Muslimat NU	A035
36	Vira Cantika Khalbina	XI IPA	MA Muslimat NU	A036
37	Afifah Ayura Firdaus	XI BAHASA	MA Negeri Model	B037
38	Amaliya Mulyanor	XI BAHASA	MA Negeri Model	B038
39	Asri Mulandari	XI BAHASA	MA Negeri Model	B039
40	Aula Mliani	XI BAHASA	MA Negeri Model	B040
41	Dea Aulia	XI BAHASA	MA Negeri Model	B041
42	Dessy Wulandari Saputri	XI BAHASA	MA Negeri Model	B042
43	Dwi Cahyo Ramadhan	XI BAHASA	MA Negeri Model	B043
44	Edo Suryo Bintoro	XI BAHASA	MA Negeri Model	B044
45	Farah Yumnaa M Ar	XI BAHASA	MA Negeri Model	B045
46	Fathiya Rosyada	XI BAHASA	MA Negeri Model	B046
47	Fatmawati	XI BAHASA	MA Negeri Model	B047
48	Fuziah	XI BAHASA	MA Negeri Model	B048
49	Helda Raysa	XI BAHASA	MA Negeri Model	B049
50	Hilmansyah	XI BAHASA	MA Negeri Model	B050
51	Lia Anjelina	XI BAHASA	MA Negeri Model	B051

52	Mauladi A Asyawali	XI BAHASA	MA Negeri Model	B052
53	Maulidia Astuti	XI BAHASA	MA Negeri Model	B053
54	M. Ridwan Farid	XI BAHASA	MA Negeri Model	B054
55	Muhammad Rizqan	XI BAHASA	MA Negeri Model	B055
56	Mutiani	XI BAHASA	MA Negeri Model	B056
57	Nina	XI BAHASA	MA Negeri Model	B057
58	Novia Khairina	XI BAHASA	MA Negeri Model	B058
59	Rahmawati	XI BAHASA	MA Negeri Model	B059
60	Rena Apriana	XI BAHASA	MA Negeri Model	B060
61	Rona Sekar Ayu	XI BAHASA	MA Negeri Model	B061
62	Siti Munawarah	XI BAHASA	MA Negeri Model	B062
63	Syifauddin M Al Zuhri	XI BAHASA	MA Negeri Model	B063
64	Tiara	XI BAHASA	MA Negeri Model	B064
65	Tirra Nugrahani Dewi	XI BAHASA	MA Negeri Model	B065
66	Zahratun Nisa	XI BAHASA	MA Negeri Model	B066
67	Zakiah	XI BAHASA	MA Negeri Model	B067
68	Zella Nur Qayyimah	XI BAHASA	MA Negeri Model	B068
69	Zhapyrend Putri Sangadji	XI BAHASA	MA Negeri Model	B069
70	Angeni Kristalesalonika	XI-10 BAHASA	SMA Negeri 4	C070
71	Arfiana	XI-10 BAHASA	SMA Negeri 4	C071
72	Ragus Wahyudi	XI-10 BAHASA	SMA Negeri 4	C072
73	Brianson Topan Prayogi	XI-10 BAHASA	SMA Negeri 4	C073
74	Cristoperus Andrian	XI-10 BAHASA	SMA Negeri 4	C074
75	Cris Dogi Prioky	XI-10 BAHASA	SMA Negeri 4	C075
76	Dwi Prasetyo	XI-10 BAHASA	SMA Negeri 4	C076
77	Epifania Alexia	XI-10 BAHASA	SMA Negeri 4	C077
78	Ferdinand Aquinaldo B	XI-10 BAHASA	SMA Negeri 4	C078

79	Fitriani	XI-10 BAHASA	SMA Negeri 4	C079
80	Giyan	XI-10 BAHASA	SMA Negeri 4	C080
81	Henny Hidayatul Adha	XI-10 BAHASA	SMA Negeri 4	C081
82	I Gde Awan	XI-10 BAHASA	SMA Negeri 4	C082
83	Indrianan Lame C.K	XI-10 BAHASA	SMA Negeri 4	C083
84	Jessica Maria Fernanda	XI-10 BAHASA	SMA Negeri 4	C084
85	Joshua Arbiyanto	XI-10 BAHASA	SMA Negeri 4	C085
86	Juliano Parera	XI-10 BAHASA	SMA Negeri 4	C086
87	Khezia Lapang Atei A	XI-10 BAHASA	SMA Negeri 4	C087
88	Ria Agustin	XI-10 BAHASA	SMA Negeri 4	C088
89	Richard Melkhy	XI-10 BAHASA	SMA Negeri 4	C089
90	Rima Januarini	XI-10 BAHASA	SMA Negeri 4	C090
91	Ronny Wahyu	XI-10 BAHASA	SMA Negeri 4	C091
92	Sindy Astria	XI-10 BAHASA	SMA Negeri 4	C092
93	Tania Priskila	XI-10 BAHASA	SMA Negeri 4	C093
94	Tedi Setiawan	XI-10 BAHASA	SMA Negeri 4	C094
95	Triana Kartika	XI-10 BAHASA	SMA Negeri 4	C095
96	Vivi Meynawati	XI-10 BAHASA	SMA Negeri 4	C096
97	Wendi Anugroho	XI-10 BAHASA	SMA Negeri 4	C097
98	Yana Lestari	XI-10 BAHASA	SMA Negeri 4	C098
99	Yowanda Angga Reksa	XI-10 BAHASA	SMA Negeri 4	C099
100	Yudha	XI-10 BAHASA	SMA Negeri 4	C100
101	Zutha Isnaini	XI-10 BAHASA	SMA Negeri 4	C101
102	Agung Prasetyo	XI-01 APK	SMK Negeri 2	D102
103	Aldiansyah	XI-01 APK	SMK Negeri 2	D103
104	Aldi Hidayat	XI-01 APK	SMK Negeri 2	D104
105	Annisa	XI-01 APK	SMK Negeri 2	D105

106	Annisa Febriwati	XI-01 APK	SMK Negeri 2	D106
107	Ayu Novita Berliani	XI-01 APK	SMK Negeri 2	D107
108	Apridianto	XI-01 APK	SMK Negeri 2	D108
109	Doni Wardana Putra	XI-01 APK	SMK Negeri 2	D109
110	Eka Setya Fuji Rahayu	XI-01 APK	SMK Negeri 2	D110
111	Fajar Wanto	XI-01 APK	SMK Negeri 2	D111
112	Fardiah	XI-01 APK	SMK Negeri 2	D112
113	Halimatussa'diyah	XI-01 APK	SMK Negeri 2	D113
114	Ilmi Wahyuni	XI-01 APK	SMK Negeri 2	D114
115	Irfan Tegar Prakoso	XI-01 APK	SMK Negeri 2	D115
116	Laila Hasanah	XI-01 APK	SMK Negeri 2	D116
117	Jumia Marsita	XI-01 APK	SMK Negeri 2	D117
118	Muhammad Bahrudin	XI-01 APK	SMK Negeri 2	D118
119	Muhammad Abdi Yuandi	XI-01 APK	SMK Negeri 2	D119
120	Muhammad Reza Fahlepi	XI-01 APK	SMK Negeri 2	D120
121	Nilda	XI-01 APK	SMK Negeri 2	D121
122	Nor Aida	XI-01 APK	SMK Negeri 2	D122
123	Nurul Hidayah	XI-01 APK	SMK Negeri 2	D123
124	Pella Mahrita Dewi	XI-01 APK	SMK Negeri 2	D124
125	Pemarini	XI-01 APK	SMK Negeri 2	D125
126	Penti	XI-01 APK	SMK Negeri 2	D126
127	Resafonika	XI-01 APK	SMK Negeri 2	D127
128	Rizki Rahma Sari	XI-01 APK	SMK Negeri 2	D128
129	Siti Fatimah	XI-01 APK	SMK Negeri 2	D129
130	Sukma Tina Haryani	XI-01 APK	SMK Negeri 2	D130
131	Yana	XI-01 APK	SMK Negeri 2	D131
132	Wanda	XI-01 APK	SMK Negeri 2	D132

133	Yudi Erlangga	XI-01 APK	SMK Negeri 2	D133
134	Yuliani Ananda Putri	XI-01 APK	SMK Negeri 2	D134
TOTAL = 134 Students				

To more specific of the samples, the writer served the highlights of the fourth schools, available in the table 3.2. The writer also listed the teachers' of the fourth schools data, available in the appendices section.

Table 3. 3

The Highlight of Major Subgroup

School	Accreditation	English Teachers	Students' Sample
MAN Model	A	4	33
MA Muslim at NU	A	3	36
S	A	4	3

	MAN 4			2
	S MKN 2	B	6	3 3
	TOTAL		1 7	1 34

D. Research Instrument

Sandra states that survey is spesifically thought as written questionnaire and it is clearly different with interview.[11]Hornby states that questionnaire is a written or printed list of questions to be answered by a number of people especially as part of a survey.[12]Interview is asking participants questions in one on one or small group setting.[13]In any other hand both survey and interview are different.

In this study, the writer used questionnaire only as the main instrument, because both questionnaire and interview was different as mention previously. Another reason that the writernot use an interview as additional of the instrument was mention by Wido. He stated that the interview differs from the ordinary questionnaire because of the personal presence of the interviewer while the respondents supply their answers. One of the disadvantages is that this one-to-one approach takes much longer than an ordinary questionnaire. Another disadvantages is that the personal presence of

---

[11]Sandra Lee Mckey, 2008. *Researching Second Language Classroom,* Lawrence Erlbaum Associates, Inc., Publisher, p. 35

[12]*Ibid,* A.S Hornby, *Oxford Dictionaries: Advanced Learner's...,*p. 952.

[13] Dana Lynn Driscoll, *Introduction to Primary Research: Observations, Surveys, and Interviews*, Library of Congress Cataloging in Publication Data, Vol. 2, 2010, p. 154

the interviewer may reduce the respondents' spontaneity. Anonymity is gone, and so the willingness to be completly frank and honest might be reduced.[14]

In this study, the writer used likert scale as the kind of questionaire. A likert scale shows a set of statements of the topic and asking the respondent to chose whether they strongly agree, agree, are undecided, disagree, strongly disagree.[15] A likert scale provides a range of responses to a given question or statement.[16] Then, the writer also used Bahasa Indonesia in order to respondents more comfortable and get the point better of the questionnaire. Zoltan stated that, "questionnaire research makes the inherent assumption that the respondents can read and write well. It is therefore understandable that for respondents with literacy problems or with limited L2 proficiency.[17]

E. Endorsment of the Data

1. Try Out

The writer tried out the test instrument before it applied to the real sample in the research. The writer gave test of try out to second grade students at SMA- N.U Palangka Raya. To get the data of try out, the writer used some procedures as follows:

a. The writer made and prepare test of try out.

---

[14] Wido H. Toendan, 2013. *"Research Methods"*, University of Palangka Raya, p.128
[15]Donald Ary, et al., 2010. *Introduction to Research in Education.* Wadsworth: Wadsworth Cengange Learning, p. 209
[16]Louis Cohen, et al., 2000.*Reserch Methods in Education: Fifth Edition*, London: Routledge Falmer. p. 253
[17]*Ibid,* Zoltan Dornyei and Tatsuya Taguchi, *Questionnaire in….,* p.7.

b.   The writer gave test of try out to the students

c.   The writer asked the students to do test of try out.

d.   The writer collected the student's answer.

e.   The writer calculated and gave score to the students' answer.

f.   The writer analyzed the obtain data to know the instruments validity, and instruments reliability.

2. Validity

Validity is the degree to which the evidence and theory support the interpretations of test scores entailed by proposed uses for tests.[18]Validity is defined as the extent to which scores on a test enable one to make meaningful and appropriate interpretations.[19]In questionnaire, to measure the validity is whether respondent who complete the questionnaire do so accurately, honestly and correctly and second whether those who fail to return their questionnaire would have given the same distribution of answer as did the returnes.[20]Face Validity is taken to ensure that the questionnaire is valid. Face validity refers to the extent to which examinees believe the instrument is

---

[18]Donald Ary, et al., 2010. *Introduction to Research in Education.* Wadsworth: Wadsworth Cengange Learning, P. 225

[19]Donald Ary, Lucy Cheser Jacobs, Chris Sorensen, and Asghar Razavieh, 2010. *Introduction to Research 7in Education*, Canada: Wadsworth, p.224.

[20]Louis Cohen, et al., 2000.*Reserch Methods in Education: Fifth Edition*, London: Routledge Falmer, p.128

measuring what it is supposed to measure.[21] Doing pilot study was not only to know the students' difficulties in answer the questionnaire, but also measured the construct validity of the questionnaire.

In this research the writer calculated the results of the pilot study using SPSS 20.0 Program. The total of the item was 10 items and respondents in totally there were 134 students. The. By comparing and analyzing between the pilot study results and the critical values of the Pearson Product Moment Correlation Coefficient as stated in Donald' book the data were found as follow:

Table 3. 4

The Validity of the Research Using SPSS 20.0 Program

o.	tem	Val ue	Criti cal Value	Validit y
	tem 1	.091	.632	Invalid
	tem 2	.727	.632	Valid
	tem	.776	.632	Valid

[21]*Ibid*.Louis Cohen, et al., 2000.*Reserch Methods in Education…*p.228.

	3			
	tem 4	.629	.632	Valid
	tem 5	.791	.632	Valid
	tem 6	.771	.632	Valid
	tem 7	.725	.632	Valid
	tem 8	.740	.632	Valid
	tem 9	.106	.632	Invalid
0	tem 10	.198	.632	Invalid

3. **Reliability**

Reliability is the degree of consistency with which it measure whatever it is measuring.[22]The reliability of a measuring instrument is the degree of consistency with which it measures whatever it is measuring. This quality is essential in any kinds of measurement.[23]

In order to assure the reliability of a survey, several measures can be used.[24]

a. First, the same survey can be given on two occasions to the same individuals. Then the researcher can check to see how consistently the respondents gave the same response to the same item.

b. The second way of assuring reliability is to have two forms of a survey and have individuals take both forms. The consistency of response on these two forms could again be checked.

c. The final way to achieve reliability is to check the internal consistency of responses in a survey. In this case, if a survey contains several items that ask similar questions but in different forms, then the researcher can check to see how consistently the respondents have answered these questions.

---

[22] Donald Ery, et al., 2010.*Introduction to Research in Education.* Wadsworth: Wadsworth Cengange Learning, p. 236

[23] *Ibid,* Donal Ary, et al, *Introduction to Research…*, p.236

[24]*Ibid,* Sandra Lee Mc.Kay, *Researching Second….,* p.41.

It was using SPSS 20.0program in finding the reliability. The degree of alpha's cronbach alpha is higher than r table (0.632). The result of reliability above as follows:

Table 3. 5

Result of Reliable Using SPSS 20.0 Program

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.779	.752	10

Table 3. 6

Items' Total Statistic Using SPSS 20.0 Program

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
item_1	26.06	15.796	-.064	.437	.814
item_2	26.56	12.662	.639	.887	.737
item_3	26.38	11.317	.664	.923	.726
item_4	26.38	12.917	.508	.880	.752
item_5	26.94	11.796	.704	.787	.723
item_6	27.31	11.962	.680	.740	.727
item_7	26.50	12.400	.626	.610	.736
item_8	26.81	11.762	.624	.910	.733
item_9	26.13	15.717	-.045	.571	.811
item_10	25.88	15.317	.071	.610	.796

F. Data collection procedure

To collect the data needed, questionnaires with open-ended questions was given to the participants. Indonesian language was chosen to help the students understand the question better so they will not have a problem in answering the questions.

To collect the data, there were several steps should be done, they are as follows:

1. Preparing the questionnaire
2. Giving the questionnaire to the respondents.
3. Collecting the responses.
4. Calculating the result of responses.
5. Analyzing the data obtained using SPSS Version 20.
6. Concluding the students' perceptions of English as a Medium of Instruction of Senior High Schools in Palangka Raya.

G. Data analysis

To analyze the data obtained from the field, several techniques were conducted of this research, namely data reduction and data displaying.

3. Data Reduction

In this research about students' perception which is known as attitudinal information. The interval scale used and the data needed was collected by using the questionnaires opened ended and Likert type questions.

There were three steps to analyze the data; they are item scores, the distribution of frequency, and then central tendency, calculating mean using formula, median, and modus, interpreting the data result and giving the conclusion.. To analyze the data (mean,median and modus/mode), below the steps applied:

a) Mean

$$\overline{X} = \frac{\sum X}{N}$$

Where:

$\overline{X}$ = Mean value

Σ = Sum of

X = raw score

N = Number of case. [25]

b) Median

The median is defined as that point in a distribution of measure which 50 percent of the cases lay[26]. Example:

$$18 \quad 20 \quad 22 \quad 25 \quad 25 \quad 30$$

Median: any point from 22.5 to 24.5 fits definition of the median.

[25] *Ibid,* Donald Ary, et al, *Introduction to Research…*, p.109.
[26] *Ibid*, Donald Ary, et al, *Introduction to Research…*, p.110

c)   Modus / Mode

The mode is the value in a distribution that occurs most frequently[27]. Example:

<div align="center">

14   16   16   17   18   19   19

</div>

Calculating the deviation score and standard deviation using the formula:

1)   Deviation Score

$$x = \overline{X} - X$$

x = Deviation Score

X = raw score

$\overline{X}$ = Mean

2)   Standard Deviation

$$S^2 = \frac{\sum x^2 N - 1}{}$$

$$s = \sqrt{\frac{\sum x^2}{N-1}}$$

$$s = \sqrt{\frac{\sum x^2 - \frac{(\sum X)^2}{N}}{N-1}}$$

Where : $\sum x^2$ = sum of the squares of each score (i.e., each score is first squared, and then these squares are summed)

---

[27] *Ibid,* Donald Ary, et al, *Introduction to Research…*, p.109.

$(\sum X)^2$ = sum of the score squared (the scores are first summes,

and then this total is squared)

N   = Number of cases

4. Data Displaying

Coding categories is the first thing to do for the writer when decide compiling survey research.[28] The writer adopted the Fukuda's way to display her data results. The writer used questionnaire with the opened ended questions and likert type scale (strongly agree, agree, strongly disagree, disagree) as the instrument for collecting the data. In addition, the table also includes the percentage of respondents for each response and finally the mean for the question.

There were several possible alternatives to display the information is compiled in a table;

a) One is to simply report the *frequency* of each response. Hence, in the example of having students rank the importance of each skill, one could simply describe how many students ranked writing as one, and how many ranked listening as one, and so on.

b) A second alternative is to describe the results in *percentages*. If writers choose to describe the results in terms of frequency or percentages they could also display these results in a figure using a bar graph or pie

---

[28] Sandra Lee Mc.Kay, *Researching Second....,* p.42

chart. Visually displaying results in this way often makes it easier to highlight the results of the survey.