CHAPTER I

INTRODUCTION

A. Background of the Study

In junior high school, English taught as foreign language. It consists of four skills namely listening, speaking, reading, and writing. But the researcher focused on writing skill. Writing is a process of exploration that offers benefits students and content teacher alike. As students write to make their ideas clear and comprehensible, they experience the fun of discovery, and so do their teacher.[1] According to the statement above, it can be concluded that in exploring and measuring students' ideas, teachers assesed them through writing.

Based on PPLK 2 at SMP N 1 Balong, writing also taught in every chapter of handbook PR Bahasa Inggris untuk SMP/MTS (Kelas VII Semester 1) by. Bachtiar Bima M. and Cicik Kurniawati. Researcher known students' development in every learning. But not all of students constantly have good development. So, it can be concluded that every student have differences in writing skill.

Based on the observation during real teaching at SMP N 1 Balong, researcher found the variation of students' writing skill. There are high, and low writing skill level.[2] Mostly, students who have low writing skill level, they have problem in vocabularies. Although, the researcher allowed the

[1] Vicky Urquhart and Monette Mclver, Teaching Writing in the Content Areas, (Alexandria: Association for Supervision and Curriculum Development, 2005), 3.

[2] See on Page 44

students to look up dictionary while they were writing. Various grammar, vocabulary, and spelling recommendations can be found in good dictionary.[3]

In fact, according to the observation, not only have problem in vocabulary but also they have problem in grammatical, diction, and punctuation. Other, speech sound, and meaning of sentences giving problem to students too although already taugh in the classroom every meeting.

In the context of teaching writing skill, there are some aspects that correlated with linguistic intelligence. Which includes Semantic, Phonology, Syntax, and Praxis. In junior high school, there are several simple writing skill lesson, such introducing My self, describing someone and so forth, to measure students' writing skill that correlated with linguistic intelligences.

Linguistic intelligence can be defined as the capacity in using words effectively, whether orally (e.g., as a storyteller, orator, or politician) or in writing (e.g., as a poet, playwright, editor, or journalist). That intelligence includes the ability to manipulate the syntax or structure of language, the phonology or sounds of language, the semantics or meanings of language, and the pragmatic dimensions or practical uses of language. Some of these uses include rhetoric (using language to convince others to take a specific course of action), mnemonic (using language to remember information), explanation (using language to inform), and metalanguage (using language to talk about itself).[4] So, every learners have linguistic intelligence, but they are

[3] Sydney L. Langosch, Writing American Style an ESL/EFL Handbook, (New York: Barron's Educational Series,1999), 3.

[4] Thomas Armstrong, Multiple Intelligence in the Classroom (Third Edition), (Virginia: ASCD,2009), 6.

not conscious if they have it, so the researcher wants to measure and correlate the linguistic intelligence of learners and their writing skill. Based on statement above, this study is entitled ***"The Correlation* Between Students' Linguistic Intelligences and Their English Writing Skill of Seventh Grade Students at *SMP N 1 Balong in Academic Year 2015/2016."***

B. Limitation of the Study

Based on the background of study above, this study is focused on subject and object research. The subject of research is Student Lingusitic Intelligence. That include semantics, phonology, syntax, and praxis. While the object of research is focused on students' writing skill of SMP N 1 Balong. According to the statement above this study is focused on the correlation between students' linguistic intelligences and their english writing skill of seventh grade students at SMP N 1 Balong in academic year 2015/2016.

C. Statement of the Problem

To Make the problem clearly and avoid far-ranging discussion, this study identified as follow:

Is there any correlation between students' English linguistic intelligences and their English writing skill of seventh grade student at SMP N 1 Balong in academic year 2015/2016?

D. Objective of the Study

The objective of the study as below:

To Identify whether there is any correlation between students' English linguistic intelligences and their English writing skill of seventh grade students at SMP N 1 Balong in academic year 2015/2016.

E. Significances of the Study

1. Theoretical Significance

   The result of this research is expected to add reference. How to know the students' ability in writing skill and students linguistic intelligence development. It can be contribute to determine the appropriate method in developing English lesson especially ability in writing.

2. Emperical significances

   The result of this research is expected to be benefical for:

   a. Teacher

      For the teachers, the research can help them to determine the appropriate method in English writing section. Furthermore, they can help student linguistic intelligence grow better.

   b. Student

      The result of this research is expected to help student to know the quality of their linguistic intelligence. So, can motivate student to develop their writing skill.

c. Writer

The result of this research is expected to add the writer's knowledge and experiences about influences of linguistic intelligences in student writing skill.

F. Organization of the Thesis

Chapter 1 is Introduction. This chapter serves to describe background of the study, limitation of the problem, statement of the problem, objective of the study, significances of study, and organization of the thesis.

Chapter 2 is review of related literature. This chapter convers some parts consist of theoretical background, previous research finding, theoretical framework, hypothesis. Theoretical background, some material are discussed.

Chapter 3 is research metodology. This chapter is general explanations of research design, population, sample, data collection instrument, technique of data collection, technique of data analysis.

Chapter 4 of this study is research result and discussions. This chapter convers some parts consist of research location of SMP N 1 Balong Ponorogo, data description about linguistic intelligence and writing skill of seventh grade students, analysis of the data, and discussion of the result of the study.

Chapter 5 is closing. This chapter is conclusion and recommendation about result of research.

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Theoretical Background

Theoretical background is important component in thesis. Theoretical background discussed about the theory of variables that will search by researcher. In this chapter discussed about intelligences, kinds of intelligences, linguistic intelligence, and English writing skill.

1. Intelligence

a. Definition of Intelligence

Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test taking-smarts.[5] From the statement above intelligence is important for learner, because ideas, plan, and the other is lacked by learner to take action. But, each student have differences in ability of intelligence. So, rapidity in thinking and learning also different.

The differences in intelligence are possessed by each student. So, It influence in learners ability. Intelligence differenciate will make learners variaty too. Because, not all student can master all the

[5] Linda S. Gottfredson, Mainstream Science on Intelligence: An Editorial with 52 Signatories, history, and bibliography (Editorial), (Ablex Publishing Corporation,1997), 13.

intelligence. With different intelligence on each student, especially in linguistic intelligence, learners have different difficulties in their ability in writing primarily in English. Writing something that must be mastered by every learners. Especially, in learning process in the classroom or public society.

b. Kinds of Intelligence

According to Howard Gardner there are seven types of differences that everyone seems to possess to a greater or lesser degree. As the theory evolved, he added an eight intelligence to the list. These eight intelligences are:

1) Linguistic intelligence
2) Body-kinesthetic intelligence
3) Spatial intelligence
4) Musical intelligence
5) Logical-mathematical intelligence
6) Intrapersonal intelligence
7) Interpersonal intelligence
8) Naturalist intelligence[6]

c. Linguistic Intelligence

Linguistic Intelligence is the understanding of the phonology, syntax, and semantics of language, and its pragmatic uses to convince other of a course of action, help one to remember information, explain

[6] Thomas Armstrong, The Multiple Intelligences of Reading and Writing Making The Word Come Alive, (Virginia: Association for Supervision and Curriculum Development,2003), 13-14.

or communication knowledge, or reflect upon language it self. Examples include the storyteller, orator, poet, editor, and novelist.[7]

Lingustic intelligence also called word smart, because involves sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals.[8] It means Learners have linguistic intelligence and will develop step by step. In childhood, children use it as media to learn in speaking, writing, and learning language. In adult linguistic intelligence use as profession like writer, poet, editor, novelist and accomplish certain goal. This intelligence includes the ability to effectively use language oneself rhetorically or poetically especially in writing.

Every people have different ability in lingusitic. So, not all people have sign to use as profession, but just as simple writer.

Language intelligence is intelligence in the language acquisition, there are many kinds of language intelligences:

1) Semantics

Semantics is the Study "toolkit" for meaning: knowledge encode in the vocabulary of the language and in its patterns for building more elaborate meanings, up to the levels of meaning.[9]

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[7] Ibid, 13.

[8] Leila Vakili Samiyan, The Relationship Between Linguistic Intelligence and L2 Learning Strategis among EFL Learners with Intermediate Level of Proficiency (Int. Journal of Literature, Language, and Linguistics,1,2013),89.

[9] Patrick Griffith, An Introduction to English Semantics and Pragmatics, (Edinburgh: Edinburgh University Press, 2006),1.

So every meaning have pattern for elaborate vocabulary in sentence, and make meaning of sentence clearly.

In semantic, there are some aspects to learn. These are:

a) Conceptual and associative meaning
b) Semantic features
c) Semantic role
d) Agent and theme
e) Instrument and experience
f) Location, source, and goal
g) Lexical relation
h) Synonymy
i) Antonymy
j) Hyponymy
k) Prototypes
l) Homophones and homonyms
m) Polysemy
n) Word play
o) Metonymy
p) Collocation[10]

2) Phonology

Phonology is essentially the description of the system and pattern of speech sounds in a language. Phonology is concerned

[10] George Yule, The Study of Language 3rd edition, (New York: Cambridge University Press, 2006), 100-109.

with the abstract or mental aspect of sounds in language rather than with actual physical articulation of speech sounds.[11] So, when we study about phonology we can know how to speech a sound of word correctly.

In phonology, there are some aspects to learn. These are:

a) Phonemes
b) Phones and allophones
c) Minimal pairs and sets
d) Phonotactics
e) Syllables and clusters
f) Co-articulation
g) Assimilation
h) Elision
i) Normal pairs.[12]

3) Syntax

Syntax is a central component of human language. Language has often been characterized as a systematic correlation between certain types of gestures and meaning, as represented simplistically. [13] So, syntax concentrate on the structure and

[11] George Yule, The Study of Language 3rd edition, (New York: Cambridge University Press, 2006), 43.
[12] George Yule, The Study of Language 3rd edition, (New York: Cambridge University Press, 2006), 44-49.
[13] Robert D. Van Valin Jr., An Introduction to Syntax, (New York: Cambridge University Press, 2004),1.

ordering of components within a sentence. We can know the sentence structure correctly.

In syntax, there are some aspects to learn. These are:

a) Generative grammar
b) Syntactic structures
c) Deep and surface structure
d) Structural ambiguity
e) Recursion
f) Symbols used in syntactic description
g) Tree diagrams
h) Phrase structure rules
i) Lexical rules
j) Complement phrase
k) Transformational rules[14]

4) Praxis

According ETS Praxis study companion matter we can know in this test is discussed about language art. So, praxis can help learners in language art development, especially in language acquisition and vocabulary development.[15]

And kinds of language intelligence focused on the using instrument measurement.

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[14] George Yule, The Study of Language 3rd edition, (New York: Cambridge University Press, 2006), 86-98.

[15] The Praxis Study Companion:Middle School English Language Art (www.ets.org/praxis), accessed february 12th, 2016.

2. English Writing Skill

a. Writing

Without a doubt, the most important invention in human history is writing. It provides a relatively permanent record of information, opinions, beliefs, feelings, arguments, explanations, theories, etc. Writing allows us to share our communication not only with our contemporaries, but also with future generations. It permits people from the near and far distant past to speak to us.[16] From the statement above, writing have important meaning in life, every information we can get everytime and everywhere.

Writing is a recursive process. Students should learn strategies for invention and discovery. Audience, purpose, and occasion define all types of writing. Effective writing fulfills the writer's intention and meets the audience needs. All teachers can use writing to improve content learning.[17] So, student must learn recursive to be good writer, and capable to convey self intention when meets the audience needs.

According to J. B. Heaton, writing skill is complex and sometimes difficult to teach, requiring mastery not only of grammatical and rhetorical devices but also of conceptual and judgemental elements. The following analysis attempts to group the

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[16] Robbert Todd Carrol, Student Success Guide: Writing Skill (1990),1. www.skepdic.com/refuge/studyskills.pdf accessed december 24th, 2015

[17] Vicky Urquhart, Monette Mclver, Teaching Writing in the Content Areas, (Virginia: Association for Supervision and Curriculum Development, 2005) 1.

many and varied skills necessary and varied skill necessary for writing good prose into five general components or main areas.

1) Language use: the ability to write correct and appropriate sentences;
2) Mechanical skills: the ability to use correctly those convensions peculiar to the writen language – eg. Punctuation, spelling;
3) Treatment of content: the ability to think creatively and develop thoughts, excluding all irrelevant information;
4) S tylistic skills: the ability to manipulate sentences and paragraphs, and use language effectively;
5) Judgement skills: the ability to write in an appropriate manner for a particular purpose with a particular audience in mind, together with an ability to select, organise and order relevant information.[18]

All verified that writing is complex. It possess component and element what makes writing varied. Because, every student have different ability in writing. So, five general component or main areas make student have many variation in ability. And variation or differences in linguistic intelligence.

B. Previous Research Finding

Before the researcher holds this research, the researcher studied previous research as follow :

[18] J. B. Heaton, Writing English Language test (New York: Longman Inc, 1989), 135.

Narges Moheb and Mohammad S. Bagheri research entitled Relationship Between Multiple Intelligences and Writing Strategies of Iran Language Institude [19] and **Leila Vakili Samiyan** research entitled The Relationship Between Linguistic Intelligence and L2 Learning Strategies among EFL Learners with Intermediate Level of Proficiency. **Research.** Journal of literature, Languages, and and Linguistics.[20]

In Narges Moheb, and Mohammad S. Bagheri research serves the problem statement about the relationship, result change levels, sex of the participant, types of intelligence which impact on writing strategies using by learners. Then according to previous research above, they concluded that Multiple Intelligence of the students have relationship with Strategy with General and Before Writing Strategies used by learners. None of the intelligences are correlated with During or After Writing Strategies. Others, Multiple Intelligence in advanced students have more significant relationship with Writing Strategies than among high levels. On the other hands, There are relationship between some of intelligences and some Writing Strategies used by females Interestingly, none of the intelligences are correlated with any of Writing Strategies among males. Although, the combination of intelligences can slightly predict general writing strategies none of the intelligences can separately predict any of Writing Strategies.

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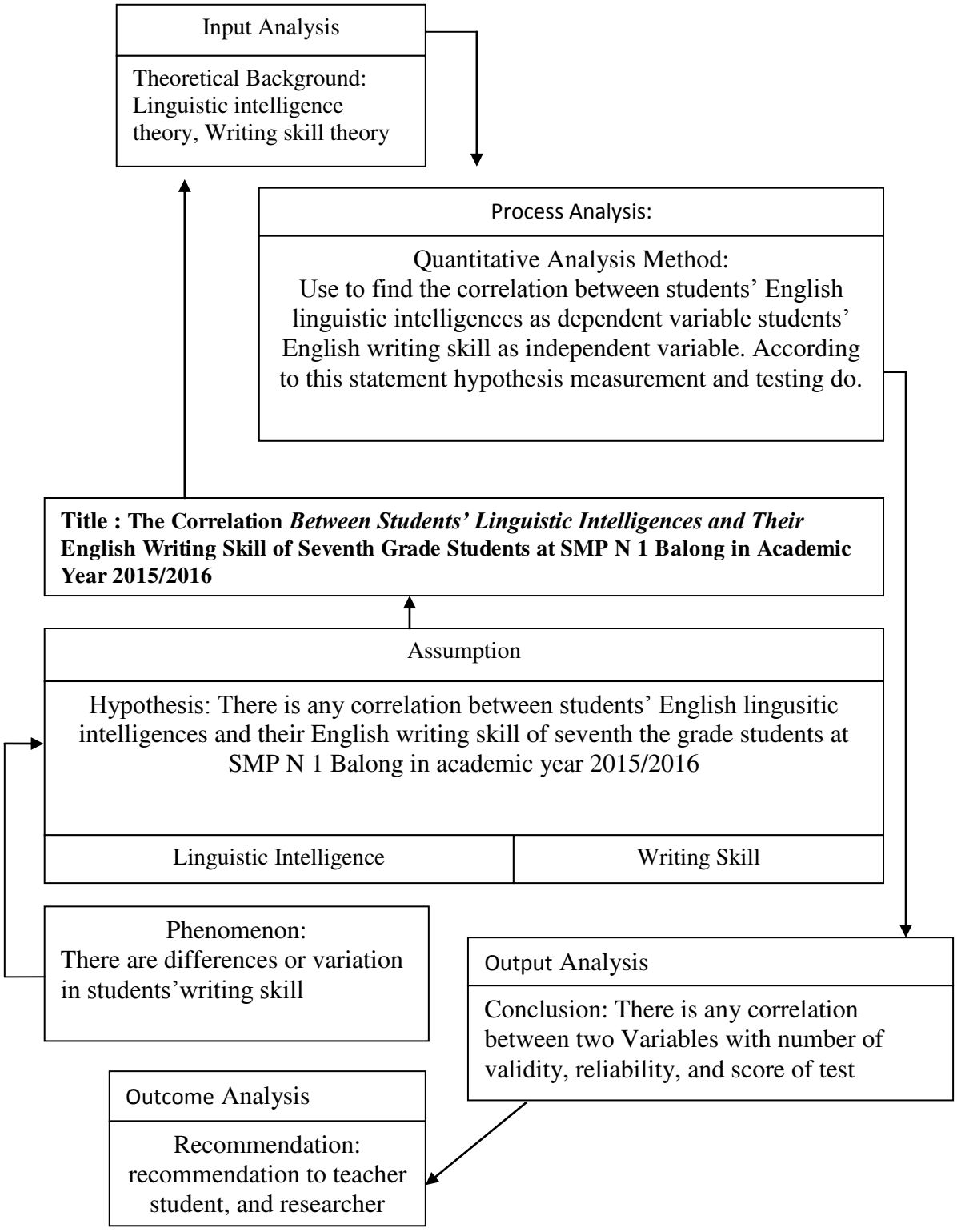
[19] Nagres Moheb, Mohamad S. Bagheri, Relationship Between Multiple and Writing Strategies, (Finland: Academy Publisher, 2013) (Journal),777.

[20] Leila Vakili Samiyan, The Relationship Between Linguistic Intelligence and L2 Learning Strategies among EFL Learners with Intermediate Level of Proficiency, (Mashhad: School of human science, foreign language department, international University of Imam Reza,2013) (Journal), 89.

Then the researcher also took Leila Vakili Samiyan as previous of study. She concerned on the relationship between Linguistic intelligence and L2 learning strategies and different categories of learning strategy. She concluded that study were conducted to investigate two variables (LI and L2 Learning Strategies), and intended to examine their correlation in foreign language learning context. The research attempted to explore whether or not there was a significant relationship between above mentioned variables. Based on the findings of the current research, the relationship between Linguistic Intelligence, Compensation, Metacognitive and Affective strategies was found to be significant, while there was not any correlation between Linguistic Intelligence and the other three strategies. The second research question tried to find that which strategies were used more frequently among Intermediate EFL students.

According to the previous research above, the researcher argues that, this research does not conduct yet by another researcher. More, the researcher focused on linguistic intelligence and correlated it with writing skill.

C. Theoretical Framework



According to the chart above, those can be described, that the researcher looks at a phenomenon, there are differences or variations in writing skill. Then writing skill are trying to correlate with linguistic intelligence. After that, researcher serves a title and current hypothesis related the theory. Next, researcher serves analyzing process, in analyzing process researcher serves quantitative analysis to find the correlation between students' English linguistic intelligences as dependent variable students' and English writing skill as independent variable by using validity measurement, reliability measurement, and test. After test and measurement do, researcher found the correlation between students' linguistic intelligence and students' writing skill as output analysis. Finally, close with conclusion and recommendation as outcome analysis.

D. Hypothesis

There is significant correlation between students' English lingusitic intelligences and their English writing skill of seventh grade student at SMP N 1 Balong in academic year 2015/2016

CHAPTER III

RESEARCH METHODOLOGY

This chapter serves the research methodology that used in this study. The existence of the research methodology has a good of guiding in the research in order to work systematically. The research methodology covers a set of research activities concluded by researcher. It involves research design, population and sample, data collection instrument, technique of data collection, technique of data analysis.

A. Research Design

Research is simply the process of arriving as dependable solution to a problem through the planned and systematic collection, analysis and interpretation of data. Research design is mapping strategy it is a essentially a statement of the object of the enquiry and the strategis for collecting the evidence, analyzing the evidence and reporting the finding.[21]

This research applied a correlative research. Correlation research methods are used to assess relationships and pattern of relationship among variables in a single group of subject.[22] Correlative research use for expressing the degree of relationship quantitatively to sets of measures of variables, we usually take the score of an index that is known as coefficient of correlation. It is kind of ratio which expresses the extent to which changes in one variable

[21] Yogesh Kumar Signh, Fundamental of research Methodology and statistic, (New Delhi: New Age International, 2006), 77.

[22] Donald Ary et. Al., Introduction to Research in Education, 8th ed. (Canada: Wadsworth Cengage Learning, 2010), 351.

one are accompanied with changes in the order variable.[23] The research has goal for finding whether there is correlation between Students' Lingustic Intelligence and their English writing skill or not.

B. Population and Sample

1. Population

   A population is defined as all members of any well-difined class of people, events, or objects.[24] From the definition of population, the researcher can say that population is whole subject of the research. Population is a large group of individual who have general characteristic. The population of this research was all students at the seventh grade of SMP N 1 balong in academic year 2015/2016. The total population was 224 Students.

2. Sample

   Sample is the small group that is observed.[25] Sample unit should be suitable with criteria of the research.

   According to Andhita Dessy Wulansari, researcher used cochran sampling formulation to formulate sample. The formulation is as follow:

   $$n = \frac{n_0}{1+\frac{(n_0-1)}{N}}$$

   Notes:

   $$n_0 = \frac{t^2 pq}{d^2}$$

[23] Yogesh Kumar Signh, Fundamental of research Methodology and statistic, (New Delhi: New Age International, 2006), 304.

[24] Donald Ary et. Al., Introduction to Research in Education, 8th ed. (Canada: Wadsworth Cengage Learning, 2010), 148

[25] Ibid., 148

t = score of $Z_{\alpha/2}$ in table normal stadart

(if α = 0,05 then t = 1,96; if α = 0,01 then t= 2,57)

p = H_0 percentage that found in opportunity as big as 0,5

q = H_1 percentage that found in opportunity as big as 1-0,5 = 0,5

d = degree of carefullnes that desirable (α)

N = number of population

n = number of sample[26]

For determining sample of 224 students, researcher took with the formulation below:

$$n_0 = \frac{(1,96)^2.(0,5).(0,5)}{(0,05)^2} = 384,16$$

$$n = \frac{384,16}{1+\frac{(384,16-1)}{224}}$$

$$= \frac{384,16}{2,7105}$$

n = 141,7 → 142 students

According to that formula above, the total sample in this research is 142 students. On the other hand, every class have 28 students. It means that the researcher showed take different formula to determine the total sample of research:

$$n_t = n\,\frac{N_1}{N}$$

$$= 142\,\frac{28}{224}$$

n_t = 17,75→ 18 students

[26] Andhita Dessy Wulansari, Penelitian Pendidikan: Suatu Pendekatan Praktik dengan Menggunakan SPSS.(STAIN PO PRESS, 2012), 48.

The calculation of total sample above, shows that in this research, the researcher took 18 students as respondent each class.

C. Data Collection Instrument

Instrument is used to get data. In this research researcher uses a test essay writing to test writing language intelligence ability, on the other hand the researcher use questionnaire. Questionnaires rely on written information supplied directly by people in response to questions asked by the researcher.[27] Then, the researcher also used documentation method to get some data about student's writing skill. In this research, data collection instrument is shown in this table as below.

Table 3.1 Instrument of Data Collection

Title of Research	Variabel	Indicator	No. Item of Instrument
The Correlation Between Students' Linguistic Intelligences and Their English Writing ability for Seventh Grade Student of SMP N 1 Balong in Academic Year 2015/2016	Variable X: Lingustic Intellegence: • Semantic • Phonology • Syntax • Praxis	The sensitivity to written language: • Semantic • Syntax the ability to use language to accomplish goals: • Praxis • Phonology the ability to learn new languages: • Praxis	 1-5 6-11 11-16 17-22 24, 25, 28-35
	Variable Y: Writing Skill	The students score in writing	Documentation

[27] Martyn Denscombe, The Good Research Guide 2nd edition. (New York: Mc Graw Hill, 2003), 145.

D. Technique of Data Collection

In this research, the researcher used questionnaire, data documentation to collect data.

1. Questionnaire

Questionnaire is the idea of formulating precise written question, for those whose opinions or experience you are interested in, seems an obvious strategy for finding the answers to the issues that interest you.[28]

In this research, two instrument were used to find out score about students' Lingustic intelligence in SMP N 1 Balong in Academic year 2015/2016.

a. Multiple intelligence inventory by Walter McKanzie

This questionnaire has 90 items and consists of 9 sections, each measuring one type of intelligences with 10 items. The researcher focused in section 7 that indicates Linguistic intelligence strength.

b. A Likert type of Linguistic Intelligence questionnaire derived from Gardner's MI Models and a questionaire devised by Chislett MSc and Chapman.

It consists of 32 related questions, for each of which 4 options are considered. In each question that count as follow:

1) Mostly Agree = 4 points
2) Slightly Agree = 3 points
3) Slightly Disagree = 2 points

[28] Loraine Blaxter at al., How to Research; 3rd Ed., (New York: Open University Press, 2006), 201.

4) Mostly Disagree = 1 point

2. Documentation

The documentary sources identified below are written sources. There are alternative types of documents for research, which take the form of visual sources (pictures, artefacts etc.) and even sounds (music). These also constitute some form of 'document' which has a value for research but, because they are used relatively rarely within the social sciences, the initial comments are restricted to written forms of documents..[29]

In this research, documentation was used to get some data about students' writing skill in VII grade of SMP N 1 Balong Ponorogo in academic year 2015/2016. The data were gotten from the result of linguistic intelligence questionnaries and students' score in writing skill.

E. Technique of Data Analysis

The data that have been collected by using research instrument to be analyzed. Dealing research construction, it correlates between two variables and two data that were obtained are interval. This, to know whether or not there is significant correlation between students' linguistic intelligence and their English writing ability for seventh grade students of SMP N 1 Balong in academic year 2015/2016. In this research, there were some quality that used to measure a compatibilty, efficiency, and consistency.[30]

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[29] Martyn Denscombe, The Good Research Guide (2nd Edition), (Philadelpia: Open University Press,2003),212.

[30] Ngalim Purwanto, Prinsip-Prinsip dan Teknik: Evaluasi Pengajaran, (Bandung, Remaja Rosdakarya, 2009), 137.

1. Validity

Validity is an important key to effective research. Instrument measurement variable is valid in empiric if researcher spread instrument to respondent who not real respondent approximately 20-30 respondents.[31]So, the researcher checked the validity of instrument in SMP N 1 Balong and the total respondent were 18 students of seventh grade who selected randomly. In this form, resercher using validity technique of correlation product moment by Karl Pearson.[32] The formulation is as follow:

$$R_{xy}= \frac{n\,(\sum xy)-(\sum x)(\sum y)}{\sqrt{(n(\sum x^2)-(\sum x)^2)(n\sum y^2-(\sum y)^2)}}$$

Notes:

r_{xy} = The correlation coefficient between X variable and Y variable.

$\sum x$ = the total Number of score multiplication of X variable (students' Linguistic intelligence) and Y variable (English Writing ability).

$\sum y$ = the total number of scores of Y variable.

$\sum x^2$ = the total number of square score X variable.

$\sum y^2$ = the total number of square score Y variable.

The steps of the data analysis applied in this research are:

a. Determining $\sum x$, $\sum y$, $\sum xy$, $\sum x^2$, $\sum y^2$.

b. Computing by applying the formula of product moment correlation.

c. Determining of significant standart 5% and 1%.

[31] Andhita Dessy Wulansari, Penelitian Pendidikan: Suatu Pendekatan Praktik dengan Menggunakan SPSS.(STAIN PO PRESS, 2012), 82.

[32] Retno Widyaningrum, Statistik: Edisi Revisi, (Yogyakarta: Pustaka Felicha, 2013), 105.

d. Determining the correlation criteria by appliying the indexes of corellation as follow:[33]

Scale	Interpretation
0,800 – 1,000	High correlation
0,600 – 0,800	Sufficient correlation
0,400 – 0,600	Fair Correlation
0,200 – 0,400	Low correlation
0,000 – 0,200	Very low correlation

e. Making conclusion by comparing the second, third, and fourth steps.

According to the formulation above, the researcher checked questionaire from 18 students and found that r_{table} was 0,444. It means that $r_t > 0{,}444$ and it can be said that the data is valid.

Table 3. 2

The Result of Validity Test

Item Number	"r" Calculate	"r" critical	Criterion
1	0,456	0,444	VALID
2	0.498	0,444	VALID
3	0,682	0,444	VALID
4	1,737	0,444	VALID
5	0,448	0,444	VALID
6	0,959	0,444	VALID
7	0, 929	0,444	VALID
8	0,711	0,444	VALID
9	0,639	0,444	VALID
10	0,737	0,444	VALID
11	0,588	0,444	VALID
12	0,832	0,444	VALID
13	0,510	0,444	VALID
14	0,732	0,444	VALID
15	0,853	0,444	VALID
16	0,468	0,444	VALID
17	0,960	0,444	VALID
18	0,929	0,444	VALID
19	0,816	0,444	VALID

[33] Suharsimi Arikunto, Prosedur Penelitian Suatu Pendekatan Praktik, (Yogyakarta: Rineka Cipta, 2002), 276.

20	0,713	0,444	VALID
21	0,449	0,444	VALID
22	0,729	0,444	VALID
23	0,436	0,444	INVALID
24	0,576	0,444	VALID
25	0,449	0,444	VALID
26	0,381	0,444	INVALID
27	0,421	0,444	INVALID
28	0,475	0,444	VALID
29	0,706	0,444	VALID
30	0,542	0,444	VALID
31	0,469	0,444	VALID
32	0,616	0,444	VALID
33	0,499	0,444	VALID
34	0,575	0,444	VALID
35	0,981	0,444	VALID

According to the table above, they were 35 items of questionaire. But there were 3 invalid items, it means that they were 32 valid questionaires which take to students.

2. Reliability

Reliability is constancy or carefulness of instrument evaluation. In quantitative research, reliability is an essentially a synonym for dependability, consistency, and replicability over time, over instruments, and over groups of respondent.[34] Instrument measurement variable is reliable if researcher spread instrument to respondent who not real respondent approximately 20-30 respondents.[35]To measure reliability used Alpha Cronbach formulation. The step are below:

[34] Louis Cohen et al., Research Method in Education, (New York: Madison Avenue, 2007), 146.

[35] Andhita Dessy Wulansari, Penelitian Pendidikan: Suatu Pendekatan Praktik dengan Menggunakan SPSS.(STAIN PO PRESS, 2012), 86.

a) Find varians (σ^2) every item.

b) Find $\sum \sigma^2$

c) Find Total Varians ($\sum \sigma_t^2$)

d) Find Reliability

The formula as below:

Varians (σ^2):

$$\sigma^2 = \frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right)^2$$

Note:

x^2 = quadrate of x variables

x = x variables

n = number of respondent

Alpha Cronbach formulation:

$$r_{11} = \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum \sigma^2}{\sigma_t^2}\right)$$

Notes :

k = Number of Item[36]

[36] Andhita Dessy Wulansari, Penelitian Pendidikan: Suatu Pendekatan Praktik dengan Menggunakan SPSS.(STAIN PO PRESS, 2012), 90.

Table 3.3

Table of Varians

Item Number	Varians
1	0,694
2	0,666
3	0,584
4	0,534
5	0,766
6	0,877
7	0,666
8	0,839
9	0,444
10	0,645
11	0,444
12	0,638
13	0,472
14	0,608
15	0,432
16	0,444
17	0,645
18	0,361
19	0,361
20	0,321
21	0,432
22	0,321
23	0,331
24	2,024
25	0,583
26	0,311
27	0,098
28	0,237
29	0,432
30	0,250
31	0,432
32	0,432
33	0,385
34	0,250
35	0,250
Total	18,198

Formulating Reliability (Alpha Cronbach):

$= \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum \sigma^2}{\sigma_t^2}\right)$

$= \left(\frac{35}{34}\right)\left(1 - \frac{18{,}198}{19{,}694}\right)$

$= (1,294)(0,595)$

$= 0.769$

From the formulation above, the researcher found reliability. If $r_{11} > r_{table}$ so, the instrument is reliable. And if $r_{11} < r_{table}$ so the instrument is not reliable. The result of linguistic intelligence is 0,769. It can be conclude 0,769 > 0,444 so the research instrument are reliable.

CHAPTER IV

RESEARCH RESULT

In previous chapter, the researcher has already checked validity and reliability that used to determine how much item that can be used to test. In this chapter researcher serves the research result. It involves research location (see appendix 4), general research, and specific research. In general research described teaching writing in SMP N 1 Balong, in specific research serves data description, data analysis, discussion and intepretation.

A. General Description

According to PPLK 2 or teaching practice at SMP N 1 Balong, the researcher observed teaching writing in seventh grade students. Writing section did not teach everyday or every meeting. But, writing section was certainly tought every unit. That was divided into eight times meeting, but one section could spend two times meeting every week. But writing section usually spent one time meeting in teaching writing class. One chapter were tought in four sections. That were listening, speaking, reading, and writing.

For instance, in teaching writing, especially descriptive text material, the time allotment was 2 X 45 minutes. For the reason, teacher needed to observe that there was linguistic intelligence to evolve students' ability.

Related to students linguistic intelligence, its intelligence involves sensitivities to spoken and written language, the ability of learning languages,

and the capacity for using language to accomplish certain goals.[37] So, especially in seventh grade, indirectly, students were asked to evolve themselves about linguistic intelligence. But the researcher focused on written language. In this case, teacher gave problem or material to students (e.g descriptive text) and required them to solve that problem, that was about language features and generic structure of descriptive text. According to the material was given to students, they learned how to solve problems such language features and generic structure of descriptive text then the goals of descriptive text were students developed main idea and used their sensitivity in written. In this case, teacher in assessing students' linguistic intelligence capacity easily. Student linguistic intelligence, there were four categories. That were semantics, phonology, syntactics, and praxis. In SMP N 1 balong, students were taught writing in part of english lesson, but indirectly students were learned about semantics, phonology, syntactics, and praxis but not all at once. Writing was taught two times every chapter. Related linguistic intelligence students were taught step by step each part. According to George Yule, there is semantics, semantics is study meaning, phrases, and sentences.[38] In this section, students summarized a descriptive text. In summarizing, students should be able to hold all in diction, punctuation, grammatical, and meaningful. About diction, students ought to use appropriate words in making sentence. In punctuation, students must

[37] Leila Vakili Samiyan, The Relationship Between Linguistic Intelligence and L2 Learning Strategis among EFL Learners with Intermediate Level of Proficiency (Int. Journal of Literature, Language, and Linguistics,1,2013),89

[38] George Yule, The Study of Language 3rd edition, (New York: Cambridge University Press, 2006), 100.

compose descriptive text with correct punctuation, such commas, dots, etc. Furthermore, students must use correct grammatical, and the paragraph is meaningful. So, the readers easily read that text. Then, Students must comprehend sentence pattern to build more relevant like in grammar section. In this section, students were given material about simple present tense. This grammar was used to compose description text in the next part. Others, teacher offered new vocabularies to students in comprehending meaning, next teacher gave exercises like sentence gaps. Then phonology, it is the study about articulation of speech sound.[39] In phonology, students imitated teacher said like listen and repeat. In this section students were asked for hear and repeat how teacher said the words or sentences by drilling the articultion of word and sentences clearly. Next, students practiced them in front of the class. There is syntactics, syntactics is about sentence structure.[40] In syntactics students can make sentence correctly either grammatically or semantically. After students known the meaning, students learned about the structure, like generic structure in descriptive text, etc. In this part, students were asked to write a descriptive text with appropriate diction, correct grammatically, meaningful, and structuralized. The last is praxis, praxis is about language art.[41] Students must know the culture or character of foreign language, students must know, memorize, and develop new vocabularies. In this part, varies examples of descriptive text were given in simple composity.

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[39] George Yule, The Study of Language 3rd edition, (New York: Cambridge University Press, 2006), 43.

[40] Ibid.

[41] The Praxis Study Companion:Middle School English Language Art (www.ets.org/praxis), accessed february 12th, 2016.

B. Specific Description

1. Data Description

The population of this research was the students of seventh grade at SMP N 1 Balong. The Sample was taken by Cochran sampling formulation. As explained above, the total sample was 142 students from 18 students each class. The list of sample is shown as follow.

a. The Data of Linguistic Intelligence

In this research, to get the score of students' linguistic, the researcher used A Likert type of linguistic intelligence questionaire derived from Gardner's MI Models and a questionaire devised by Chislett MSc and Chapman. It consists of 32 related questions, for each of which 4 options are considered (Mostly Agree = 4 points, Slightly Agree = 3 points, Slightly Disagree = 2 points, Mostly Disagree = 1 point).

Based on the questionaire, the researcher of the students' linguistic intelligence score as follow:

Table 4.1

The Students' Linguistic Intelligence Score

7A Class

No.	Name	Score
1	Bayu Roh'azi	86
2	Pingky Nur Widia	82
3	Ardi Muhamad	82
4	Vanesa Kusuma	90
5	Fatkhurrozi	91
6	Lia Agustin	93
7	Jesica Shelcillya	84
8	Silvi Eka Pertiwi	85
9	Elly Elviana	91
10	Hesti Putri Ken Ristri	93
11	Lia Purwaningsih	88
12	Firda Katrina	89
13	Febri Anwar	90
14	Anisa Lulu	85
15	Dwi Ayu Avita Sari	88
16	Tedi Dwi Pradika	89
17	Dika Alvira	92
18	Anggraeni Nur K	87

7B Class

No	Name	Score
1	Andika Vernando P	89
2	Mukhlis Nur Al Aiyini	91
3	Anisa Salsabila	76
4	Erin Yuliana Putri	73
5	Endang Tri Utami	77
6	Noor Diana Anindya A.R	86
7	Didik Hariyadi	82
8	Muhammad Andri Dwi S	95
9	Riska Priyanti	81
10	Masayu Putri M	95
11	Ahmad Rifki Fauzi	81
12	Muhammad Nasrul P	84
13	Nofa Rohma Dulmanab	85
14	Imron Krisnatul M.F	89
15	Tantowi Yahya	88

16	Ananda Azizul Hakim	87
17	Rahmat Dhiki Nurhuda	87
18	Ihsan Faturrohman F	95

7C Class

No.	Name	Score
1	Ayu Agustyas Ningrum	98
2	Devy Anindya Shaharani	72
3	Diego Pria Pratama	80
4	Putri Kurnia Zahra	82
5	Alvi Amalia Aswinda P.	80
6	Ani Imelia Maulida	93
7	Nurul Rapita Sari	80
8	Kharisma Wahyu Pratiwi	100
9	Bayu Ramdani	81
10	Andrean Alfarizqi	80
11	Elfrida Bayu Muhtadi	82
12	Putra Azizs Prasetya	97
13	Nanda Kristina Nabila R	93
14	Ananda Yoga Prasetya	82
15	David Rohmad Wijaya	89
16	Fina Lailatul Maghfiroh	93
17	Mega Lestari	81
18	Bayu Ramdani	85

7D Class

No.	Name	Score
1	Alfina Fia Narbila	86
2	Desita Maya Anggraini	82
3	Dwi Bagus Ramadan	87
4	Fauziah Ardyningtyas	76
5	Febi Sugianto	83
6	Coryo Albert Conan A	80
7	Agus Wahyudi	96
8	Sri Wahyuni Wulandari	82
9	Dea Fitri Cahyanti	100
10	Sindy Ayu Zahwarani	101
11	Robby Kurniawan R	84
12	Ariya Shyahrul Aljannah	84
13	Ristya Silvy Reza Qirana	89
14	Lady Janice	84

15	Gege Bangun Wijaya	75
16	Citra Ayu Kusdianto	85
17	Denny Hardani	81
18	Hanifa Rizfa Indana	79

7E Class

No.	Name	Class
1	Bagas Khoiri Mustofa	108
2	Siti Umaroh	103
3	Dedy Saputra A.H	79
4	Andhika Yoga Pangestu	83
5	Intan Wahyu Setyo Rini	82
6	Zafhira Ramadani	89
7	Amanda Nadylla Kustina	75
8	Abby Yusna Mahendra	77
9	Aditya Dwi Nur M	76
10	Nindy Putri Nurmalitasri	101
11	Diki Andri Saputra	79
12	Fitri Dwi Murtanti	96
13	Gonggo Budi Wijaya	82
14	Sri Rahayu	84
15	Pramudya	84
16	Amelia Shabrina C	82
17	Nur Fadilah Syamsa H	83
18	Azwan Fazliyudin	78

7F Class

No.	Name	Score
1	Putra Aditya Pangestu	79
2	Angga Febriyantoro	78
3	Bagus Renaldi	75
4	Prastiyan Dwi Hilmawan	73
5	Ngainul Faldiana	85
6	Nadia Octavia Nooriyant	77
7	Nurani Intan Muji R	98
8	Reni Sri Widya Ningrum	98
9	Akbar Abdul Fukhroni	76
10	Rena Sri Widya Angraini	98
11	Aprilia Krisna Mukti	93
12	Wahida Aprilia Putri	94
13	Salsa Kurniasih	97

14	Nadya Pricilia	99
15	Natasya Sal Sabila	89
16	Andy Hardianto	71
17	Agus Dwi Giono	70
18	Nanda Risma Ariyani	89

7G Class

No.	Name	Score
1	Agnes Arianti Putri	82
2	Nita Selviana Maharani P	82
3	Artika Wardani	87
4	Hernita Lucky W	85
5	Kiki Andriansyah	85
6	Nanda Aulia	94
7	Anisa Dwi Ratnasari	93
8	Dadang Setiyo Bawono	75
9	Alfina Febrianti	90
10	Rijul Alex Candra S	81
11	Onky Lavio Ridha F	86
12	Feri Nur Syamsudin	75
13	Ahmaddy	76
14	Bagus Defri Saputra	80
15	Dandi Sukoco	79
16	Fatkur Prasetyo	83
17	Ricki Ahmad Prayoga	85
18	Yuans Yudhistira	75

7H Class

No.	Name	Score
1	Arif Fadhilah	85
2	Noval Septian Rifani	86
3	Surizky Eka Annisa Putri	81
4	Niken Suryani	75
5	Vikko Isnaini	80
6	Tantri Putri Nurhidayah	80
7	Siti Nurhandayani	85
8	Dila Asfa Sajidah	79
9	Astin Vitasari	83
10	Devi Tri Ratna W	84
11	Dino Setyadi Nugroho	77
12	Elma Dwi Kurnia Sari	80

13	Risky Prasetyo	77
14	Hani Yunianto	84
15	Munadhiatul Afaf	90
16	Oki Zainal Arifin	82
17	Arizal Muhammad F	87
18	Dima Syalsafira	88

b. The Data of Students' English Writing Skill

The data of students' writing skill gotten from teacher documentation of writing assesment in the last meeting before Final Test. The data got to measure students' writing skill level. From the level, the researcher known students who get high, intermediate, and low writing skill level. The categories that shown the analysis of students' writing skill score were explained in the next detail.

Table 4.2 The Students' English Writing Skill Score

7A Class

No.	Name	Score
1	Bayu Roh'azi	82
2	Pingky Nur Widia	85
3	Ardi Muhamad	84
4	Vanesa Kusuma	85
5	Fatkhurrozi	84
6	Lia Agustin	81
7	Jesica Shelcillya	83
8	Silvi Eka Pertiwi	85
9	Elly Elviana	85
10	Hesti Putri Ken Ristri	83
11	Lia Purwaningsih	81
12	Firda Katrina	84
13	Febri Anwar	85
14	Anisa Lulu	83
15	Dwi Ayu Avita Sari	85
16	Tedi Dwi Pradika	84
17	Dika Alvira	85
18	Anggraeni Nur K	83

7B Class

No	Name	Score
1	Andika Vernando P	80
2	Mukhlis Nur Al Aiyini	78
3	Anisa Salsabila	84
4	Erin Yuliana Putri	82
5	Endang Tri Utami	81
6	Noor Diana Anindya A.R	80
7	Didik Hariyadi	80
8	Muhammad Andri Dwi S	78
9	Riska Priyanti	82
10	Masayu Putri M	80
11	Ahmad Rifki Fauzi	80
12	Muhammad Nasrul P	78
13	Nofa Rohma Dulmanab	78
14	Imron Krisnatul M.F	77
15	Tantowi Yahya	77
16	Ananda Azizul Hakim	80
17	Rahmat Dhiki Nurhuda	80
18	Ihsan Faturrohman F	78

7C Class

No.	Name	Score
1	Ayu Agustyas Ningrum	82
2	Devy Anindya Shaharani	82
3	Diego Pria Pratama	78
4	Putri Kurnia Zahra	85
5	Alvi Amalia Aswinda P.	82
6	Ani Imelia Maulida	83
7	Nurul Rapita Sari	85
8	Kharisma Wahyu Pratiwi	85
9	Bayu Ramdani	78
10	Andrean Alfarizqi	84
11	Elfrida Bayu Muhtadi	80
12	Putra Azizs Prasetya	77
13	Nanda Kristina Nabila R	85
14	Ananda Yoga Prasetya	82
15	David Rohmad Wijaya	84
16	Fina Lailatul Maghfiroh	85
17	Mega Lestari	84
18	Bayu Ramdani	78

7D Class

No.	Name	Score
1	Alfina Fia Narbila	83
2	Desita Maya Anggraini	80
3	Dwi Bagus Ramadan	76
4	Fauziah Ardyningtyas	78
5	Febi Sugianto	75
6	Coryo Albert Conan A	75
7	Agus Wahyudi	67
8	Sri Wahyuni Wulandari	79
9	Dea Fitri Cahyanti	80
10	Sindy Ayu Zahwarani	80
11	Robby Kurniawan R	75
12	Ariya Shyahrul Aljannah	76
13	Ristya Silvy Reza Qirana	80
14	Lady Janice	79
15	Gege Bangun Wijaya	75
16	Citra Ayu Kusdianto	80
17	Denny Hardani	78
18	Hanifah Rizfa Indana	78

7E Class

No.	Name	Class
1	Bagas Khoiri Mustofa	77
2	Siti Umaroh	76
3	Dedy Saputra A.H	78
4	Andhika Yoga Pangestu	75
5	Intan Wahyu Setyo Rini	74
6	Zafhira Ramadani	79
7	Amanda Nadylla Kustina	78
8	Abby Yusna Mahendra	75
9	Aditya Dwi Nur M	75
10	Nindy Putri Nurmalitasri	80
11	Diki Andri Saputra	78
12	Fitri Dwi Murtanti	79
13	Gonggo Budi Wijaya	74
14	Sri Rahayu	79
15	Pramudya	74
16	Amelia Shabrina C	78
17	Nur Fadilah Syamsa H	80
18	Azwan Fazliyudin	75

7F Class

No.	Name	Score
1	Putra Aditya Pangestu	77
2	Angga Febriyantoro	74
3	Bagus Renaldi	76
4	Prastiyan Dwi Hilmawan	78
5	Ngainul Faldiana	78
6	Nadia Octavia Nooriyant	84
7	Nurani Intan Muji R	79
8	Reni Sri Widya Ningrum	85
9	Akbar Abdul Fukhroni	75
10	Rena Sri Widya Angraini	85
11	Aprilia Krisna Mukti	80
12	Wahida Aprilia Putri	76
13	Salsa Kurniasih	79
14	Nadya Pricilia	85
15	Natasya Sal Sabila	79
16	Andy Hardianto	76
17	Agus Dwi Giono	75
18	Nanda Risma Ariyani	80

7G Class

No.	Name	Score
1	Agnes Arianti Putri	78
2	Nita Selviana Maharani P	70
3	Artika Wardani	80
4	Hernita Lucky W	80
5	Kiki Andriansyah	85
6	Nanda Aulia	85
7	Anisa Dwi Ratnasari	80
8	Dadang Setiyo Bawono	78
9	Alfina Febrianti	70
10	Rijul Alex Candra S	80
11	Onky Lavio Ridha F	65
12	Feri Nur Syamsudin	70
13	Ahmaddy	78
14	Bagus Defri Saputra	78
15	Dandi Sukoco	60
16	Fatkur Prasetyo	75
17	Ricki Ahmad Prayoga	78
18	Yuans Yudhistira	75

7H Class

No.	Name	Score
1	Arif Fadhilah	70
2	Noval Septian Rifani	75
3	Surizky Eka Annisa Putri	75
4	Niken Suryani	78
5	Vikko Isnaini	83
6	Tantri Putri Nurhidayah	65
7	Siti Nurhandayani	70
8	Dila Asfa Sajidah	80
9	Astin Vitasari	78
10	Devi Tri Ratna W	78
11	Dino Setyadi Nugroho	80
12	Elma Dwi Kurnia Sari	80
13	Risky Prasetyo	70
14	Hani Yunianto	75
15	Munadhiatul Afaf	78
16	Oki Zainal Arifin	70
17	Arizal Muhammad F	75
18	Dima Syalsafira	80

2. Data Analysis

In this research, the researcher took 142 students as research samples. Those samples were the seventh grade students of SMP N 1 Balong in academic year 2015/2016.

a. Analysis Linguistic Intelligence to the Seventh Grade Students at SMP N 1 Balong in Academic Year 2015/2016

The analysis was conducted to determine the linguistic intelligence of seventh grade students at SMP N 1 Balong in academic year 2015/2016. The linguistic intelligence could be determined from the score of linguistic intelligence which made into score interval. The steps were explain:

1) To determine M_X
2) To determine SDx
3) To determine top up of linguistic intelligence
4) To determine bottom of linguistic intelligence
5) To make an analysis of students' linguistic intelligence

Table 4.3 Analysis Data of Linguistic Intelligence

X	F	Fx	x=(X-Mx)	x^2	$f.x^2$
108	1	108	23	529	529
103	1	103	18	324	324
101	2	202	16	256	512
100	2	200	15	225	450
99	1	99	14	196	196
98	4	392	13	169	676
97	2	194	12	144	288
96	2	192	11	121	242
95	3	285	10	100	300
94	2	188	9	81	162
93	7	651	8	64	448
92	1	92	7	49	49
91	3	273	6	36	108
90	4	360	5	25	100
89	9	801	4	16	144
88	4	352	3	9	36
87	6	522	2	4	24
86	5	430	1	1	5
85	11	935	0	0	0
84	9	756	-1	1	9
83	5	415	-2	4	20
82	14	1148	-3	9	126
81	7	567	-4	16	112
80	9	720	-5	25	225
79	6	474	-6	36	216
78	2	156	-7	49	98
77	5	385	-8	64	320
76	5	380	-9	81	405

75	7	525	-10	100	700
73	2	146	-12	144	288
72	1	72	-13	169	169
71	1	71	-14	196	196
70	1	70	-15	225	225
∑		12264			7702

$M_x = \frac{\sum fx}{n}$

$= \frac{12264}{144}$

$= 85{,}167 \approx 85$

After determining M_X , then the researcher determined SD_X . It was conducted to know how much the standart of deviation of linguistic intelligence score. The formula was explain:

$SD_x = \frac{\sqrt{\sum fx^2}}{N}$

$= \frac{\sqrt{7702}}{144}$

$= \frac{87{,}76}{144}$

$= 0{,}609 \approx 1$

After determining M_X and SD_X , then the researcher determines top up and bottom of linguistic intelligence score. It is conducted to know the limitation of standart category from linguistic intelligence score.

Top up of linguistic intelligence score $= M_x + 1.SD_x$

$= 85 + 1.1$

$= 85 + 1$

$= 86$

Bottom of linguistic intelligence score $= M_x - 1.SD_x$

$= 85 - 1.1$

$= 85 - 1$

$= 84$

The linguistic Intelligence of seventh grade students at SMP N 1 Balong can be determined by accumutating data above. The analysis can be seen clearly as the table below:

Table 4.4 The Analysis of Linguistic Intelligence

Interval	F	Category	Percentage
86 – 108	59	High	40,97%
85	11	Fair	7,63%
70 – 84	74	Low	51,38%

From the calculation above, it was known that the students' linguistic was very variaties. There were 40,97% or 59 students included high category and score were between 86-108. Then 7,63% or 11 students were fair category then score was 85, and 51,38% or 74 students included low category by in line the score were between 70-84. So, the researcher concluded that the students' linguistic intelligence, in this case, was low.

b. Analysis English Writing Skill to the Seventh Grade Students of SMP N 1 Balong in Academic Year 2015/2016

The analysis was conducted to determine the English writing skill of seventh grade students at SMP N 1 Balong in academic year 2015/2016. The English writing skill could be determined from its score which made into score interval.

The steps were explain:

1) To determine M_y
2) To determine SD_y
3) To determine top up of the English writing skill score
4) To determine bottom of the English writing skill score
5) To make an analysis of students' English writing score

Table 4.5 Analysis Data of Students' English Writing Skill

Y	F	Fy	y=(Y-My)	y2	f.y2
85	17	1445	6	36	612
84	9	756	5	25	225
83	7	581	4	16	112
82	7	574	3	9	63
81	3	243	2	4	12
80	25	2000	1	1	25
79	8	632	0	0	0
78	26	2028	-1	1	26
77	5	385	-2	4	20
76	6	456	-3	9	54
75	16	1200	-4	16	256
74	4	296	-5	25	100
70	7	490	-9	81	567
67	1	67	-12	144	144
65	2	130	-14	196	392
60	1	60	-19	361	361
∑		11343			2969

$$M_y = \frac{\sum fy}{n}$$

$$= \frac{11343}{144}$$

$$= 78{,}770 \approx 79$$

After determining M_y , then the researcher determined SD_y. It was conducted to know how much the standart of deviation of students English speaking ability score. The formula was as follows:

$$SD_y = \frac{\sqrt{\sum fy^2}}{N}$$

$$= \frac{\sqrt{2969}}{144}$$

$$= \frac{54{,}48}{144}$$

$$= 0{,}378 \approx 0$$

After that, researcher did not determine top up and bottom of students' English writing skill because $SD_y = 0$. The analysis of students' English writing score was in the table below:

Table 4.6 The Analysis of Students' English writing score

Interval	F	Category	Percentage
79 – 85	76	High	52,77%
60 – 78	68	Low	47,22%

From the calculation above, it was known that the students' English writing skill were placed in two categories. There were 52,77% or 76 students include high category and the score were between 79-85, and 47,22% or 68 students included low category by scoring between 60-78. So, the researcher concluded that the students' English writing skill, in this case, was high.

c. The Correlation between Students' Linguistic Intelligence and Their English Writing Skill of Seventh Grade Students at SMP N 1 Balong

This research is conducted to find out whether there is correlation between students' linguistic intelligence and writing skill or not. There are two variables, independent variable and dependent variable. Independent variable is linguistic intelligence, while dependent variable is students' English writing skill.

To know the correlation between those variables, the researcher takes some steps. The steps were explain:

1) Preparing the correlation map, the upper side was X variable with the lowest interval in the left side.

Variable X has H=108 and L=70

R = H - L + 1 $\qquad$ k = $\frac{R}{i}$

= 108 – 70 + 1= 39 $\qquad$ = $\frac{39}{5}$ = 7,8 ≈ 8

It means the lowest interval is 70–74 and the highest is 105-109.

Variable Y has H=85 and L=60

R = H – L + 1 $\qquad$ k = $\frac{R}{i}$

= 85 – 60 + 1 $\qquad$ = $\frac{26}{3}$

= 26 $\qquad$ = 8,66 ≈ 9

It means the lowest interval is 60-62 and the highest 84-86. See table. 4.7

Table 4.7 Correlation Map

Y \ X	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	f(y)	y'	fy'	y'^2	$f.y'^2$	x'y'
60-62								**+24** 1	1	6	6	36	36	24
63-65						**+10** 1	**+15** 1		2	5	10	25	50	25
66-68							**+12** 1		1	4	4	16	16	12
69-71				**0** 1	**+3** 1	**+12** 2	**+27** 3		7	3	21	9	63	42
72-74				**0** 1	**+2** 1	**+8** 2			4	2	8	4	16	10
75-77			**-10** 10	**0** 7	**+5** 5	**+10** 5			27	1	27	1	27	5
78-80		**0** 10	**0** 19	**0** 18	**0** 10	**0** 2			59	0	0	0	0	0
81-83			**+12** 12	**0** 5					17	-1	-17	1	17	12
84-86	**+30** 5	**+60** 15	**+6** 3	**0** 3					26	-2	-52	4	104	96
f(x)	5	25	44	35	17	12	5	1	144	-	7	-	329	226
x'	-3	-2	-1	0	1	2	3	4	-					↓
fx'	-15	-50	-44	0	17	24	15	4	-49					↓
x'^2	9	4	1	0	1	4	9	16	-					↓
$f.x'^2$	45	100	44	0	17	48	45	16	315					↓
x'y'	30	60	8	0	10	40	54	24	226	→	→	→	Cross Check	

2) Determining Cx' and Cy'

$Cx' = \frac{\sum fx'}{N}$ $\quad$ $Cy' = \frac{\sum fy'}{N}$

$= \frac{-49}{144}$ $\quad$ $= \frac{7}{144}$

$= -0{,}3402$ $\quad$ $= 0{,}0486$

3) Determining SDx' and SDy'

$SDx' = i\sqrt{\frac{\sum fx'^2}{N} - \left(\frac{\sum fx'}{N}\right)^2}$

$= 1\sqrt{\frac{315}{144} - (-0{,}34)^2}$

$= \sqrt{2{,}1875 - 0{,}1156}$

$= 1{,}4394$

$SDy' = i\sqrt{\frac{\sum fy'^2}{N} - \left(\frac{\sum fy'}{N}\right)^2}$

$= 1\sqrt{\frac{329}{144} - (0{,}0486)^2}$

$= \sqrt{2{,}2847 - 0{,}0023}$

$= 1{,}5107$

4) Computing r_{xy} to the formula:

$r_{xy} = \frac{\frac{\sum x'y'}{N} - Cx'.Cy'}{SDx'.SDy'}$

$= \frac{\frac{226}{144} - (-0{,}3402)(0{,}0486)}{1{,}4394.1{,}5107}$

$= \frac{1{,}5694 + 0{,}0165}{2{,}1745}$

$= 0{,}7293$

3. Discussion and Intepretation

Hypothesis test was used to measure the correlation between students' linguistic intelligence and their English writing skill. According to the data analysis above, it can be identified that the coefficient correlation product moment between students' linguistic intelligence and their English writing skill was 0,7293. This data acquired from the correlation product moment group data. The hypothesis test can be viewed by determining the significant standart 5% and 1% in the product moment table (r_t). Whether, $r_{xy} > r_t$ meant that there is significant correlation between students' linguistic intelligence and their English writing skill. While, $r_{xy} < r_t$ it meant that there was no correlation between students' linguistic intelligence and their English writing skill.

According to Leila Vakili Samiyan Linguistic Intelligence involves sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals.[42]

Based on theory above researcher found about written language. Written language in linguistic intelligence there was about semantics, phonology, syntax, and praxis. So, reseacher concluded that linguistic intelligence correlated with writing skill.

From the calculation above can be identified that r_{xy} = 0,729. while r_{table} with degrees of freedom calculate by formula below.

[42] Leila Vakili Samiyan, The Relationship Between Linguistic Intelligence and L2 Learning Strategis among EFL Learners with Intermediate Level of Proficiency (Int. Journal of Literature, Language, and Linguistics,1,2013),89.

df = N – nr

= 144 – 2

= 142

From the formula above, it was known that df = 142. In the standart significant table 142 was none, so that the near was 150.[43] Furthermore, standart significant of 150 in 5% r_t was 0,159. It meant $r_{xy} > r_t$. While, standart significant 150 in 1% r_t is 0,208. It meant $r_{xy} > r_t$.[44] Based on the proof above the researcher concluded that there was significant correlation between students' linguistic intelligence and their English writing skill of seventh grade students at SMP N 1 Balong in academic year 2015/2016. It meant that the hypothesis which promoted by the researcher was true.

[43] Retno Widyaningrum, Statistik: Edisi Revisi, (Yogyakarta: Pustaka Felicha, 2013), 230
[44] Ibid, 121.