### THE CORRELATION BETWEEN STUDENTS' PERCEPTIONS AND THEIR LEVELS OF HIGHER ORDER THINKING SKILLS AT SMAN 1 PALEMBANG

A Thesis by

GUSTI VIRANDA CHORENA Student Number 06011281621031 English Education Study Program Language and Arts Education Department



# FACULTY OF TEACHER TRAINING AND EDUCATION UNIVERSITY OF SRIWIJAYA PALEMBANG

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Approved by,

Advisor,

<u>Drs. Soni Mirizon, M.A., Ed.D.</u> NIP. 196711041993031002

Certified by,



**Coordinator of English Education Study Program**,

Hariswan Putra Jaya, S.Pd., M.Pd. NIP. 197408022002121003

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Gusti Viranda Chorena

#### 06011281621031

This thesis was defended by the writer in the final program examination and was approved by the examination committee on:

Day : Monday

Date : January 13<sup>th</sup>, 2021

**ACADEMIC ADVISOR APPROVAL:** 

Academic Advisor : Drs. Soni Mirizon, M.A., Ed.D.

15020

Palembang, January 29th, 2021

**Certified by** 

Head of English Education Study Program,

Hariswan Putera Jaya, S.Pd., M.Pd.

NIP. 197408022002121003

#### DECLARATION

I, the undersign,

Name	: Gusti Viranda Chorena
Student Number	: 06011281621031
Study Program	: English Education

Certify that thesis untitled "The Correlation between Students' Perceptions and Their Levels of Higher Order Thinking Skills at SMAN 1 Palembang" is based on my thinking results and I did not do any plagiarism or inappropriate quotation againsts the ethic and rules commended by the Ministry of Education of Republic Indonesia Number 17, 2010 regarding plagiarism in higher education. Therefore, I deserve to face the court if I am found to have plagiarized this academic assessment.

Palembang, January 29th, 2021

The Undersign,

Gusti Viranda Chorena NIM. 06011281621031

#### **DEDICATION**

This thesis is dedicated with all of my sweat and tears to my Mama, Papa, and Embom. Thank you for all of your pray, love, and supports through the ups and downs during my campus life. I am more than blessed to grow stronger day by day.

#### ΜΟΤΤΟ

Be motivated and helpful.

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The Writer,

Gusti Viranda Chorena NIM. 06011281621031

#### **CHAPTER I**

#### **INTRODUCTION**

This chapter introduces (1) the background of study, (2) the problems of study, (3) the objectives of study, (4) the significance of study, and (5) the hypotheses of study.

#### 1.1 The Background of Study

To face 21<sup>st</sup> century changes and challenges, included in teaching and learning activities, all elements are required to have open mindset and be able to see things from some points of view. In learning English, it is actually about not only mastering procedural knowledge such as structure of a sentence and way to deliver the idea, but also understanding the culture and technology development from around the world, which are linked through understanding the language. During the learning process, students need to integrate one ability and another, such as writing with reading or listening with speaking in order to understand and practice English well into their daily activities. According to this, Scott (2017) mentions that categories of 21<sup>st</sup> century skills are learning skills (4Cs; critical thinking, creativity, collaboration, and communication skills), life skills (FLIPSs; flexibility, leadership, initiative, productivity, and social skills), and literacy skills (IMTs; Information, Media, and Technology skills). As the part of needed 21<sup>st</sup> century skills, learning skills play important role in the process. The first ability of 21<sup>st</sup> century skills is all about problem solving techniques. The second ability is about generating new ideas and innovations. The third ability is about conducting teamwork to achieve predetermined goals. The fourth ability is about creating a good way to deliver ideas (Applied Educational Systems, 2019).

Meanwhile, higher order thinking skills (HOTS) concept is a discussion that continues to be developed until now, but Benjamin Samuel Bloom was the first person who conducted the root of HOTS concept. Bloom (1964) in his research classified the hierarchy in his taxonomy into three domains namely cognitive, affective, and psychomotor domains. In addition to the first taxonomy with its three domains, the cognitive domain is the most demanding focus on the discussion. Anderson, Airasian, Cruikshank, Mayer, Pintrich, Raths, & Wittrock (2001) revised the cognitive domain from Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation into Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. Then, Brookhart (2010) classified the definitions of higher order thinking into three main categories: higher order thinking in terms of (1) transferring, (2) critical thinking, and (3) problem solving. Recently, the hierarchy of cognitive domain is classified into two: lower and higher orderthinking skills. Remembering, Understanding, and Applying are included in lower order-thinking skills (LOTS), while Analyzing, Evaluating, and Creating are included in higher order-thinking skills (Arase, Kamarudin, & Hassan, 2016). This term has been adapted to alter curricula around the world along with each learning objectives. HOTS are usually associated with 21st century skills that required students to think critically to solve their problems (Setyarini, Muslim, Rukmini, Yuliasri, & Mujianto, 2018).

In educational aspect, HOTS concept and 21<sup>st</sup> century skills cannot be separated since they are becoming one of modern issues around the world. They are usually associated with 21<sup>st</sup> century skills because students are required to think critically to solve their problems combining some abilities (Setyarini, Muslim, Rukmini, Yuliasri, & Mujianto, 2018). The skills in learning English are aimed to help students become an open-minded individual with qualified thinking skill as reflection of the language mastery process. King, Goodson, and Rohani (2012) also support this statement, HOTS are based on LOTS such as categorizing, relating students' prior knowledge of the learning objectives, and integrating simple application. Each learning with influenced input is expected to give desired output. In order to conduct a harmonized learning process, there must be a dynamic interaction among teachers as facilitator and students as the concerns. Attractive teaching strategies and supportive learning environments influence student's

perversity, self-monitoring, and flexible behavior as do the growth of HOTS (Setyarini & Ling, 2019).

The integration of 21<sup>st</sup> century skills and HOTS is expected to be implemented in every learning process where teachers as facilitator and creator of creative learning activity, and students as active and critical participants. This is of course different from the prior learning process where generally each subject is taught with different approaches and each type of learning content is taught separately (Mulyasa, 2015). Nowadays, learning process is directed to make students able to survive and understand how to implement the skills of collaborative work in the rapid development of technologies with recent developed methods of learning conscious, sustainable, active, and creative in facing changes and challenges in this digital era. Refers to Ministry of Education and Culture of Republic Indonesia Regulation No. 36 year 2018 in Basic Framework and Curriculum Structure of Senior High School/Madrasah Aliyah in the Introduction in the Objective section of 2013 Revised Curriculum. "Kurikulum 2013 bertujuan untuk mempersiapkan manusia Indonesia agar memiliki kemampuan hidup sebagai pribadi dan warga negara yang beriman, produktif, kreatif, inovatif, dan afektif serta mampu berkontribusi pada kehidupan bermasyarakat, berbangsa, bernegara, dan peradaban dunia. ((2013 Curriculum aims to prepare Indonesian people to have the abilities to live as individuals and faithful, productive, creative, innovative, and affective citizens also be able to contribute to the life of society, nation, state, and world civilization))" (Kementrian Pendidikan dan Kebudayaan [Kemendikbud], 2018, p.3). The learning process that is expected to associate HOTS and 21st century skills requires strong synergy among all education practitioners, starting from the curriculum to the components below it.

To improve the required skills, Ministry of Education and Culture of Republic Indonesia formulated a new curriculum, which is expected to keep up with the time changes. The formulated curriculum is 2013 Revised Curriculum or mostly abbreviated as Kurtilas. In its implementation, since the policy of using 2013 Revised Curriculum for all schools was made until now, this curriculum has gone through some revisions considering educational and socio-economic reasons (Wiguna, 2018). This curriculum is a tool in achieving national education goals and guidelines for implementing education itself. National education goals as stated in Basic Competency in Model Silabus SMA/MA/ SMK/MAK: Bahasa Inggris, indicates that students are expected to be able to integrate one competence with the other competence in relation to improve pedagogical process (Kemendikbud, 2017, p.5). In line with this, Mkrttchian and Belyanina (as cited in IGI Global, 2018) mention that pedagogical process is promoting dynamic interaction between teachers and students to achieve learning objectives and guiding to the problem solving within changes and challenges (i.e. the alteration of their qualities, behavioral and personal improvement). These goals are designed to make Indonesian students aware of the importance of mastering 21<sup>st</sup> century skills.

Unfortunately, some teachers and students lack of understanding HOTS concept and spirit of the curriculum currently used. The writer considered doing the study to secondary school students, especially in senior high school. Students in senior high school are mostly in the phase of mid-adolescence, where students' cognitive developments continue to increase. They are being able to set their targets and become interested in things that are more rational and related to the meaning of life. The writer chose SMAN 1 Palembang since they are using 2013 Revised Curriculum and known as one of the A-accredited schools. This school is expected to apply the concept of HOTS in every teaching and learning processes better than ordinary schools, so that the school prepare their students to compete globally in the future. Accordingly, Mulyana, Hidayat, and Sholih (2013) state that students will have the desire to achieve well in a lesson if they have good perceptions. Otherwise, Sukmawati, Haris, and Mustari (2019) state that each student has different point of view according to the level of knowledge and understanding of the object being perceived.

At first glance, perceptions appear to be able to affect student's performance in mastering a subject and their ability to work on questions being assessed. This was also stated by Husodo, Dyah, and Susantiningrum (2019) that there was a significant positive effect on students' perceptions of learning strategies and their peer groups toward students' HOTS. This correlation exists because students who got the highest scores could perceive the learning strategies used by the teacher positively and take the advantage of peer groups, which have a positive impact on students' thinking abilities so that they can increase their HOTS. Therefore, the writer was very interested in exploring the correlation between students' perceptions and their levels if given HOTS nuanced questions. Moreover, study on HOTS has not plentifully been done at University of Sriwijaya and hopefully this study can lead future deeper studies.

#### **1.2** The Problems of Study

The problems of the study are formulated into the following questions:

- What are the students' perceptions of higher order thinking skills in learning English at SMAN 1 Palembang?
- 2) How are the students' levels of higher order thinking skills in answering questions at SMAN 1 Palembang?
- 3) Is there any significant correlation between the students' perceptions and their levels of higher order thinking skills at SMAN 1 Palembang?

#### **1.3** The Objectives of Study

Based on the problems above, the objectives of the study are:

- To find out the students' perceptions of higher order thinking skills in learning English at SMAN 1 Palembang.
- 2) To find out the students' levels of higher order thinking skills in answering questions at SMAN 1 Palembang.
- To find out the significant correlation between the students' perceptions and their levels of higher order thinking skills at SMAN 1 Palembang.

#### 1.4 The Significances of Study

This study is expected to be beneficial for the students, teachers of English subject, and SMAN 1 Palembang. For the students, it could help them realize the importance of critical thinking so that they are ready to prepare themselves into global competition in 21<sup>st</sup> century era. For the teachers, it could help them in varying the teaching style and strategies to improve students' abilities in applying higher order thinking skills in learning English. For the school, it would help to understand better the students' abilities so that the school can provide learning assistance and HOTS supporting facilities in learning English.

#### **1.5** The Hypotheses of Study

H<sub>0</sub>: There is no significant correlation between Students of SMAN 1 Palembang Perceptions and Their Levels of HOTS.

H<sub>1</sub>: There is a significant correlation between Students of SMAN 1 Palembang Perceptions and Their Levels of HOTS.

The correlational score of the results would show whether or not there is a significant correlation between perception and level of HOTS, also test these hypotheses using some criteria. This research used significance level of 0.05 in two-tailed testing to determine obtained or probability value.  $H_0$  is accepted if the probability value is lower than the critical value, hence  $H_1$  is rejected. It can be concluded that there is no significant correlation between the two variables. Meanwhile the contrary might be happened, where the probability value is higher than the critical value,  $H_0$  is rejected hence  $H_1$  is accepted. It can be concluded that there is a significant correlation between the two variables.

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