

**THE CRITICAL THINKING DISPOSITION,
EPISTEMIC BELIEFS, AND ACADEMIC
PERFORMANCE OF THE STUDENTS OF ENGLISH
EDUCATION STUDY PROGRAM OF SRIWIJAYA
UNIVERSITY**

A THESIS

by

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English Education Study Program

Language and Arts Education Department



FACULTY OF TEACHER TRAINING AND EDUCATION

SRIWIJAYA UNIVERSITY

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DECLARATION

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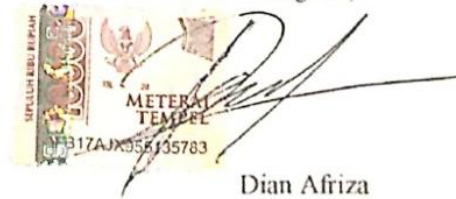
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Certify that thesis entitled "The Critical Thinking Disposition, Epistemic Beliefs, and Academic Performance of The Students of English Education Study Program of Sriwijaya University" is my own work and I did not do plagiarism or inappropriate quotation against the ethics and rules commended by the Ministry of Education of Republic Indonesia No.17, 2010 regarding plagiarism in higher education. Therefore, I deserved to the court if I am found to have plagiarized this work.

Palembang, 1st August 2022

The Undersigned,



Dian Afriza

DEDICATION

I am sincerely dedicated this thesis to:

- The Almighty God, Allah SWT. who given me health, strength, and motivation to finish this thesis.
- My beloved parents, Supani and Suparti, and to my supporting and beloved brothers, Kak Andri Supani, Kak Hendra Septiawan, and Kak Alan Efriadi. Thank you for your love without limits, never-ending prayers to me, your support, and for everything you present for me.

Motto:

“If we are tired because of doing good deeds, then in fact that fatigue will disappear and good deeds will last. But if we take pleasure in sin, then surely that pleasure will be lost and the sin will remain.”

-Umar Ibn Khattab-

" I am going to place on the earth a Khalifa."

- Al Baqarah: 30 –

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Lahat, 28th July 2022

The Researcher,

A handwritten signature in black ink, appearing to read 'Dian Afriza', written in a cursive style.

Dian Afriza.

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ABSTRACT

The objective of this study was to investigate whether or not there was a significant correlation between critical thinking disposition and academic performance, a significant correlation between epistemic beliefs and academic performance, and a significant correlation among critical thinking disposition and epistemic beliefs towards academic performance of English education students of Sriwijaya University. The sample of this study was 209 students of second, fourth, and sixth semester of English Education Study Program of Sriwijaya University in academic year 2021/2022. The instruments of this study were the questionnaires of the California Critical Thinking Disposition Inventory (CCTDI) and Epistemic Beliefs Inventory (EBI), and documentation of Grade Average Point (GPA), analyzed by using Pearson Product-Moment Correlation in SPSS 25. The findings showed that there was a significant correlation between critical thinking disposition and academic performance (p -value: 0.001 and r -obtained: .106), no significant correlation between epistemic beliefs and academic performance (p -value: 0.234 and r -obtained:-0.083), and no significant correlation between critical thinking disposition and epistemic beliefs towards academic performance (p -value: 0.492). Moreover, the contribution of critical thinking disposition explained 10.6% of academic performance variance, and critical thinking disposition aspects (truth seeking, open-mindedness, & analyticity) explained 10.1%, explained 4.1%, of academic performance variance.

Keywords: *Correlation, Critical Thinking Disposition, Epistemic Beliefs, Academic Performance*

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CHAPTER I

INTRODUCTION

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

1.1 Background of the Study

Education field is constantly changing in order to keep the pace with the dynamic world such as the phenomenon of Industry 4.0 which has brought enormous rapid changes in education (Pitaloka et al., 2020). Critical thinking is currently one of the most important educational goals. Critical thinking has become one of the competencies, goals, and objectives to be achieved in education in many countries. Critical thinking is a life skill that is used effectively in all aspects of daily life. Critical thinking skills have long been recognized as an important outcome of the learning process by educators. Critical thinking is now recognized as one of the skills required to prepare students for education and the workforce by the Partnership for 21st Century Skills. According to the Common Core State Standards, critical thinking as a cross-disciplinary skill is critical for students and workers (Lai, 2011). Critical thinking skills are also referred to as one of the basic capital or intellectual capital that is essential for everyone and is an essential component of human maturity (Liliasari, 2001).

Education has principles, methods and objectives. It can be specified that education is learning, knowledge, skill and habit of a group transferred from one generation to the next through teaching and training (Jaya, 2016). Education professionals have long been concerned with academic success and the factors that impact it (Abbasi & Izadpanah, 2018). Students' capacity is the most significant predictor of their success, but it cannot predict academic accomplishment alone; hence, academics have sought to evaluate the effect of non-educational elements on academic development, and critical thinking is one of these aspects (Fong et al., 2017; Sepahi et al., 2014; Vierra, 2014). Since critical thinking develops a person's physical and mental abilities to prepare him for such challenges of a rapidly changing world, it is possible for a person to

search for truth in the interconnection of events and achieve his purpose of achieving comprehensive understanding since this world today is an era of information explosion and humans need to find a way to screen information (Trenholm, 2020). Students need critical thinking abilities as a way to cope with social, scientific, and functional challenges. These pupils have problem-solving abilities. The abilities necessary for addressing issues critically include reasoning, estimating, problem solving, decision making, and eventually assessing the findings. This process can be done independently or cooperatively (Magrabi et al., 2018). Critical thinking is vital in learning, according to educational experts, and the ability to detect, develop, and assess discussions, as well as thoroughly investigate, integrate, and evaluate resources, is the cornerstone of educational accomplishment in higher education (Li, 2016).

According to Nieto and Valenzuela (2012), critical thinking is dependent on a set of skills and dispositions. Whereas most theories revealed that critical-thinking disposition is a complex construction integrated through motivation and habits of mind, it is also an important component in critical thinking in addition to critical-thinking disposition skills. This is consistent with Ennis (1993)'s assertion that critical thinking is a combination of two important components, cognitive and disposition skills. The capacity of pupils to participate in including problem solving is referred to as cognitive abilities, inference, evaluation, explanation, and self-correction. Meanwhile, The disposition is a level of cognitive that is embedded in pupils' ideas or behaviors in order to develop ability to think critically. According to Facione (1990), critical-thinking dispositions are defined as "consistent internal motivation to engage problems and make decisions through critical thinking." To put it another way, critical-thinking dispositions are the fuel, and critical-thinking skills are the vehicle. Sulaiman (2018) stated that a vehicle cannot transport a passenger to a destination without sufficient fuel. Indeed, the vehicle is important, but it is difficult to imagine being an authentic critical thinker without appropriate dispositions; thus, it is impossible to be critical without thinking about thinking (Sulaiman, 2018).

Several authors have suggested a positive link among both skills and dispositions; in other phrases, someone with high critical thinking abilities is more likely to use these. A person with a disposition toward critical thinking, on the other hand, would be able to exercise skills when required. However, some research has cast doubt on such a link. For example, in a first study carried out by Giancarlo and Facione (1994) shows the positive correlation between these tests' skills and dispositions suggests that 16.8 percent of the variance in critical thinking skills can be attributed to differences in dispositions, and vice versa. In other words, 16.8 percent of all the different variables or factors that can explain the performance on these two tests can be explained by the elements measured in the other test.

According to Bailin (1999), teaching skills and nurturing specific dispositions are insufficient for training individuals to think critically. A person may be aware of terms like justification, conclusion, evidence, reasoning, or argument but not understand their value, relationships, or purposes. Students must also comprehend the requirement for knowledge generation and evaluation, which is accomplished by offering and assessing reasons. In addition, Bailin (1999) argues that involvement in action is required for the sort of knowledge we're discussing. A training that goes beyond active learning, on the other hand, should focus on building that knowledge; that is, on grasping the essence of the activity and its aim. Kuhn (1991); Kuhn and Weinstock (2002)'s research on the relationship between epistemological ideas and critical thinking has validated this claim. on argumentation skills. Kuhn identified a relationship between constructive epistemology (which rejects the idea of real knowledge but accepts that different points of view may be evaluated and appraised based on their worth or relevance) and the development of argumentation skill in this environment. The argument will be redundant whether knowledge is supposed to be truly unbiased, real, or merely exponentially increasing, as absolutists think, or whether it is considered to be inherently subjective, as multiplists believe. There is no space or necessity for a comparative appraisal of the different statements that support reasoning. Argument will become the basis upon which knowledge is formed only

when it is understood as the product of a constant process of inquiry, comparison, evaluation, and judgment of many, and often conflicting, points of view. The development of epistemological notions is linked to a variety of mental capacities, such as morality (Bendixen et al. (1998) and problem solving (Kardash & Scholes, 1996; Schraw et al., 1995). Students with more mature epistemological views are therefore more likely to participate in competent thinking (Nieto & Saiz, 2011).

The concept of epistemological belief is an important issue that relates to people's critical thinking tendencies and reflects their perspectives on learning and knowing. Whereas epistemological perspectives are described as individual concepts about knowledge and the nature of acquiring information, they also include ideas and beliefs about what knowledge is, how it is gained, its accuracy, and boundaries (Brownlee et al., 2001; Deryakulu, 2014; Hofer, 2001; Schommer, 1990). Individuals' epistemic perspectives have a significant influence on their cognitive and metacognitive processes (Schommer et al., 1992). In this context, experienced and critical students believe that there can be no complete and complete knowledge, but that some of the information will continue to develop, while less experienced students believe that only a small part of the knowledge has changed and developed, and that most of the knowledge has been completed and taken its final form (Schommer, 1990). In this regard, the degree of key information analysis resides in the context of the interpretations that humans ascribe to knowledge and the nature of knowledge. In other lines, critical thinking capabilities are successful in influencing individuals' epistemology ideas about knowledge and the nature of knowing.

Many research on the association between epistemic beliefs and academic achievement have been undertaken, according to a review of the literature (Aditomo, 2018; Asikainen & Gijbels, 2017; Bråten et al., 2014; Mohamed & El-Habbal, 2013). Moreover, the critical thinking disposition and academic performance relationship have been the subject of many studies (Akbyk, 2002; Bakhshi & Ahanchian, 2013; Cha & Kim, 2020; Comer et al., 2019; Doleck et al., 2017; Fong et al., 2017; Ghanizadeh, 2017; Guven & Kurum, 2007; Karagöl &

Bekmezci, 2015; Kökdemir, 2003; Ross et al., 2013; Sepahi et al., 2014; Shirrell, 2008; Vierra, 2014). In contrast note, there has been minimal research on the influence of English education pupils' critical thinking dispositions and epistemic beliefs on their academic performance. In addition, whereas the bulk of research in this field has concentrated on the association between critical thinking disposition, epistemic beliefs, and academic performance, few, if any, studies have focused on the relationship between critical thinking and academic achievement in English language courses. According to the EF EPI (English Proficiency Index), which is researched by Education First (EF), Indonesia was ranked 80th among 112 countries and regions in the world, fell six spots from the previous year, when it was ranked 74th out of 100 countries. The average score in Asian countries is 504. With a score of 466, Indonesia is below the regional average and part of the Low Proficiency Band category among ASEAN countries. Singapore was ranked first in English proficiency with a score of 636, followed by Philippines (592) and Malaysia (562) (EF, 2021). Moreover, for the academic performance and epistemic beliefs of Indonesian students, PISA 2015 examined students about their attitudes regarding the nature of science knowledge and the legitimacy of scientific techniques of inquiry (collectively known as epistemic beliefs). Students are said to favor scientific methods to inquiry if their epistemic beliefs are congruent with contemporary perspectives on the nature of science. Students in Indonesia were less likely to agree with current views on the nature of science, particularly how scientific concepts evolve, than students in other OECD nations. For example, about six out of ten Indonesian students said that concepts in science or science texts occasionally change, compared to eight out of ten OECD students (PISA, 2015). In addition, Better agreement regarding the tentative, changing, and cumulative character of scientific knowledge, as well as stronger support for empirical methods to scientific inquiry, are related with higher PISA science performance on average across OECD countries. A one-unit rise in the index equates to a 33-point difference on the science scale, or roughly one year of education. All of the blue bars show positive values, indicating that higher levels of agreement with the questions representing students' epistemic

views are connected with higher performance across all countries and economies. Higher-performing students, on the other hand, tended to "agree" with the propositions that comprise this index more than lower-performing students (PISA, 2015). This shows that Indonesia is still lack of quality education compared to countries that used to make Indonesia as one of the learning destinations in the world (Jaya, 2019) and less agreement with contemporary perspectives on the nature of science, specifically how scientific ideas grow, was shown to be associated to academic performance among Indonesian students.

Critical thinking disposition and epistemic beliefs are two important related aspects acquired by students to support their academic performace. As previously stated, critical thinking and epistemic cognition have been shown to have a relationship with academic achievement. According to Guven and Kurum (2007), excellent learners must comprehend the procedure of learning and reasoning. Efficient earning is linked to learners' understanding of how they should learn and think, including involves critical thinking connected to epistemic competences that are not separated and thus are unique in terms of practical application. It is a metacognitive system that generates rational outcomes from discussions and solves problems through careful evaluation (Dwyer et al., 2014). Because of the importance of critical thinking disposition and epistemic beliefs, particularly in the realm of education, numerous studies have been conducted to assess their relationship with various matters, particularly educational performance. As a result, critical thinking disposition and epistemic beliefs may also contribute to or influence students' academic performance, particularly education students. Therefore, the writer also conducted the correlational study of each aspects of critical thinking disposition and epistemic beliefs towards academic performance. Furthermore, to the best of the researcher's knowledge, there have been few, if any, studies that have looked into the relationship between critical thinking subscales and academic performance. Therefore, the writer also conducted the correlational study of each aspects of critical thinking disposition and epistemic beliefs towards academic performance.

In addition, based on the explanations above, to find out and reveal the further information and empirical evidence about the problems, particularly the critical thinking disposition, epistemic beliefs in relation to academic performance, this study is conducted.

1.2 Problems of the Study

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

- 1) is there any significant correlation between critical thinking disposition and academic performance of students of the English Education Study Program of Sriwijaya University?
- 2) is there any significant correlation between epistemic belief and academic performance of students of the English Education Study Program of Sriwijaya University?
- 3) is there any significant correlation between the predictor variables (critical thinking disposition and epistemic the belief) and the criterion variable (academic performance) of the students of the English Education Study Program of Sriwijaya University?
- 4) is there any significant contribution of the predictor variables (critical thinking disposition and epistemic beliefs) to the criterion variable (the academic performance) of the students the English Education Study Program of Sriwijaya University.

1.3 Objectives of the Study

This study is aimed at finding out whether or not:

- 1) there is any significant correlation between critical thinking disposition and academic performance of the students of English Education Study Program of Sriwijaya University.
- 2) there is any significant correlation between epistemic belief and academic performance of the students of English Education Study Program of Sriwijaya University.
- 3) there is any significant correlation between the predictor variables (critical thinking disposition and epistemic beliefs) and the criterion variable

(academic performance) of the students of English Education Study Program of Sriwijaya University.

- 4) there is any significant contribution of the predictor variables (critical thinking disposition and epistemic beliefs) to the criterion variable (academic performance) of the students the English Education Study Program of Sriwijaya University

1.4 The Significance of the Study

The findings of this study will redound to the benefit of English Education students specifically on the influence of epistemic belief and critical thinking disposition towards academic performance. Moreover, from this study, hopefully the lecturers and students gain useful and trusted information about the result and importance of the relationship among epistemic belief, critical thinking disposition, and academic performance of the students. Then, the writer hopes that this study will boost students' desire to develop their academic performance by involving competency on epistemic belief and critical thinking skill. Finally, the writer also hopes that the other researchers will find more information for their further studies related to these variables or other variables, and they also can develop this study based on more studies from other researchers.

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