# INVESTIGATING PRESERVICE TEACHERS' KNOWLEDGE, BELIEF, ATTITUDE ABOUT CLIMATE CHANGE IN RELATION TO PREPAREDNESS TO INTEGRATE CLIMATE CHANGE ISSUES IN ELT A THESIS

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#### DECLARATION

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Certify that the thesis entitled "Investigating Preservice Teachers' Knowledge, Belief, Attitude About Climate Change In Relation To Preparedness To Integrate Climate Change Issues In Elt" is my own work and I did not do any plagiarism or inappropriate quotation against the ethic and rules commended by Ministry of Education of Republic Indonesia Number 17, 2010 regarding plagiarism in higher education. Therefore, I deserve to face court if I am found to have plagiarized this work.

> Palembang, March 2024 The Undersigned,

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### **DEDICATION**

This thesis was presented to my family; my father, my mother and my brother, who has been the pillar of my academic career with their unfailing support. Their support, empathy, and kindness have strengthened my faith and motivated me to do greater things. Their love has been my compass in trying times, and their confidence in my skills has kept me on course. This work is evidence of the persistence and closeness that characterize our family. This writer appreciates their continuous support and their willingness to take part with her during the highs and lows of this academic journey. This achievement is for them and mine.

### Motto:

"Allah does not put responsibilities on anyone that are beyond their capacity" (Al-Baqarah - 286)

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Palembang, March 2024 The writer,

Tasya Aliyah Fathinah

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### INVESTIGATING PRESERVICE TEACHERS' KNOWLEDGE, BELIEF, ATTITUDE ABOUT CLIMATE CHANGE IN RELATION TO PREPAREDNESS TO INTEGRATE CLIMATE CHANGE ISSUES IN ELT

#### ABSTRACT

The purpose of this study was to investigate whether or not there was a significant relationship between the teachers' knowledge on climate change, belief on climate change, attitude on climate change and preservice teachers' preparedness in integrating climate change on ELT. The participants in this study were Indonesian Preservice Teachers'. In order to conduct this study, a quantitative correlational research approach was used by questionnaire as the study's tools. The data was analyzed using Pearson Product- Moment Correlation in SPSS 26. The result showed that there was significant correlation, except for attitude on climate change to and preservice teachers' preparedness in integrating climate change on ELT.

## Keywords; Correlation, Climate Change, ELT, Knowledge, Belief, Attitude, Preparedness A thesis by an English Education Study Program Student, Faculty of Teacher Training and

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#### **CHAPTER I**

#### **INTRODUCTION**

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

#### **1.1 The Background of the Study**

Climate change, the most urgent and important global concern, has threatened the future of our planet and its entire people. According to the United Nations Framework Convention on Climate Change (UNFCC, 1992) climate change is an increase in natural climate variability that has been observed over comparable time periods and is directly or indirectly related to human activity. Since the mid-twentieth century, human activities have been driving the global warming trend. As discussed in NASA (2023) the greenhouse effect is necessary for life on Earth, but humancaused emissions in the atmosphere trap and restrict heat loss to space. Putri (2023) stated that based on data from the Ministry of Environment and Forestry (KLHK), the area of forest and land fires in Indonesia has reached 90,405 hectares (ha) between January and July 2023. All of the fires were found to have emitted more than 5.9 million tons of carbon dioxide equivalent (CO2e). Furthermore, 499 instances of forest and land fires (karhutla) were reported by the National Disaster Management Agency (BNPB) between January and August 2023. Forest fires and forestry land conversion operations are the two main contributors to Green House Gas (GHG) emissions that cause global climate change in Indonesia.

Climate change is a major threat that is occurring right now. The Earth is becoming hotter, as stated by Ahima (2020) hotter days and nights, as well as heat waves, are becoming more frequent and powerful as the Earth's temperature increases. As heat waves become increasingly frequent, severe, and longer, we expect to see an increase in heat-related illnesses and mortality, particularly among children, the elderly, those with chronic health conditions, and those living in poor or neglected neighborhoods. Furthermore, people are witnessing more extreme weather events such as floods and strong storms. As stated in Bronkhorst & Bhandari (2021) that in terms of climate risk, Indonesia ranks in the top third of countries, highly susceptible to all types of flooding and extreme temperatures. Extreme weather conditions put Indonesia's agricultural output, which provides a living for around 28% of the population and accounts for 15% of GDP, at danger. Rising sea levels put millions of residents of coastal communities in danger. Indonesia is the tenth highest GHG producer in the world, primarily due to emissions from the energy sector and changes in land use, despite its sensitivity to climate change (Rahmanulloh, 2023).

Although the effects are felt throughout society, the next generation, specifically children, is more in danger. Children, who are in a critical stage of development, are inextricably linked to their surroundings and may be affected by the long-term effects of climate change. Comini (2021), a UNICEF representative, stated that the climate change issue is a crisis involving children's rights. Indonesia is one of the top 50 nations in the world where environmental degradation and climate change pose the greatest dangers to children. So, it is critical to prioritize children's safety and well-being.

Children, as the next generation, play a critical role in dealing with the effects of climate change. Rising global temperatures, ecosystem damage, and extreme weather events can all have a negative impact on their health. As a result, education is critical in providing them with knowledge and awareness about climate change issues. Given the importance of the situation, education on specific environmental issues at a young age is critical to developing an environmental ethos (Moshou & Drinia, 2023). Education is an important tool for achieving this level of awareness, which is ultimately shown as behavioral change among those who have adopted a pro-environmental lifestyle (Gómez et al., 2019). Climate change education for children involves not only providing knowledge, but also developing long-term attitudes and values. Their understanding of environmental responsibility will help in the development of more sustainable behavior in the future. Thus, education about

climate change is an important first step toward developing a generation that is aware of its consequences and committed to environmental protection. As the children grow older and gain a better understanding of the implications of specific issues in their lives, they will be "building" environmental awareness. Environmental awareness includes an awareness of environmental risks and potential solutions, as well as beliefs, attitudes, and decision-making between competing interests (Moshou & Drinia, 2023)

However, the success of this education is also dependent on the teacher's understanding and readiness as an educator. Teachers in the future must have a solid understanding of climate change issues, as well as strong beliefs and a positive attitude. This is a line with theory of planned behavior by Ajzen (2005) that explain an individual's attitude towards a behavior is influenced by their beliefs about its consequences, also known as behavioral beliefs. Belief is linked to subjective appraisals of one's surroundings, self-awareness, and knowledge of the environment. Therefore, future teachers must understand how to select topics with current social impact that are adjusted to the curriculum and applied within educational settings, as well as how to seek further progressive involvement of the educational community and use collaborative problem-solving strategies (Gómez et al., 2019).

In the field of English language teaching, incorporating climate change issue into the curriculum not only promotes environmental awareness, but also essential language skills and critical thinking abilities. As the world grapples with the consequences of climate change, educators must provide their students with the knowledge and language proficiency required to participate in meaningful discussions, articulate informed opinions, and contribute to solutions. English Language Arts teachers can address ethical issues related to climate change through literature and media influencing students' understanding and attitudes. (Beach et al., 2020) Engaging future teachers in climate change knowledge and awareness is not only in their own best interests as educators, but also as an essential component of collaboration to create a society that cares about this global issue. Teachers can become change agents by understanding the issue of climate change and inspiring and guiding the next generation to take positive steps toward environmental sustainability.

As a result, examining the future teachers' knowledge, beliefs, and attitudes toward climate change is an important first step toward making sure that climate change education is effective and has a positive impact on students. Pre-service teachers are the role models for tomorrow's students. Their actions and inactions to mitigate climate change may influence how their future students perceive and act on environmental issues (Tolppanen & Kärkkäinen, 2022). Based on the ideas above, this research aimed to find out the preservice teacher's knowledge, belief and attitude in relation to their preparedness on integrating climate change issues in ELT.

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

Based on the background above, the problems are formulated as follows:

- 1. Is there any significant correlation between preservice teachers' knowledge on climate change and their belief on climate change to integrate climate change issue into ELT?
- 2. Is there any significant correlation between preservice teachers' knowledge on climate change and their attitude on climate change to integrate climate change issue into ELT?
- 3. Is there any significant correlation between preservice teachers' knowledge on climate change and their preparedness to integrate climate change issue into ELT?
- 4. Is there any significant correlation between preservice teachers' belief on climate change and their attitude on climate change to integrate climate change issue into ELT?

- 5. Is there any significant correlation between preservice teachers' belief on climate change and their preparedness to integrate climate change issue into ELT?
- 6. Is there any significant correlation between preservice teachers' attitude on climate change and their preparedness to integrate climate change issue into ELT?

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

In relation to the problem of the study above, the objectives of this research are to:

- To find out the correlation between preservice teachers' knowledge on climate change and their belief on climate change to integrate climate change issue into ELT
- 2. To find out the correlation between preservice teachers' knowledge on climate change and their attitude on climate change to integrate climate change issue into ELT
- 3. To find out the correlation between preservice teachers' knowledge on climate change and their preparedness to integrate climate change issue into ELT
- 4. To find out the correlation between preservice teachers' belief on climate change and their attitude on climate change to integrate climate change issue into ELT
- 5. To find out the correlation between preservice teachers' belief on climate change and their preparedness to integrate climate change issue into ELT
- 6. To find out the correlation between preservice teachers' attitude on climate change and their preparedness to integrate climate change issue into ELT

#### **1.4 The Significances of the Study**

This research is expected to provide information and knowledge of the researcher, the academicians and ELT pre-service teachers.

1. For Researchers

This study is designed to be useful to future researchers. Researchers, particularly those who work in the field of climate change education, can use the findings of this study to inform future research.

2. For Academicians

This study was designed to be useful for academics. Academics can apply the findings of this study to improve their justifications, assessments, and so on.

3. For ELT Pre-Service Teachers

The findings of this study were designed to help pre-service teachers prepare their knowledge, attitudes, and beliefs about teaching climate change in ELT.

4. For Students

These findings of this study were intended to help students understand the significance of being aware of climate change.

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