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**A STUDY ON THE LEVEL OF COGNITIVE FACTORS,
AFFECTIVE FACTORS AND WRITING PERFORMANCE OF
STUDENTS IN PAPER 4 OF THE MALAYSIAN UNIVERSITY
ENGLISH TEST IN MALAYSIA**

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Abstract:

The aim of this study is to analyse the level of cognitive (background knowledge, thinking maps use, critical thinking) factors, affective (writing self-efficacy, second language (L2) writing anxiety) factors and writing performance among students. This research adopts a quantitative approach through a survey methodology. The sample comprises 400 Malaysian University English Test (MUET) students from 26 schools in Penang, Malaysia. Data has been collected using six instruments: five questionnaires as well as one argumentative writing task. Descriptive statistics, including mean, percentage, frequency, and standard deviation, have been used to answer the research question. The outcomes indicate that the levels of background knowledge, writing self-efficacy, critical thinking, thinking maps use, and L2 writing anxiety are moderate. Because writing is an integral part of MUET, the outcomes of this study can serve as a springboard from which teachers can gain a deeper appreciation for background knowledge, writing self-efficacy, critical thinking, thinking maps use, and L2 writing anxiety. As a result, it may shed light on what teachers may do to assist these L2 writers in improving their background knowledge, writing self-efficacy, critical thinking, thinking maps use and overcoming their writing anxiety, which possesses a negative impact on their output.

**Keywords:**

ESL, Cognitive Factors, Affective Factors, Students' Writing Performance

Introduction

In today's rapidly evolving world, the English language has been elevated to a critical communication language and the primary means of instruction in education. Almost every field in the world uses English, which includes engineering and technology, medicine, research, education, banking, business, film industry, trade and commerce, scientific transportation, science, tourism, internet, advertising, as well as pharmacy, to name a few (Rao, 2019). Several countries, including Malaysia, learn English as a Second Language (ESL). Arif, Noah, Affendi and Yunus (2020) stated that in numerous universities as well as primary and secondary schools in Malaysia, the English language is mandatory.

Apart from listening, speaking, and reading, writing is among the four language skills which are necessary for communication. Additionally, writing is also a method of expressing thoughts, memories, and feelings in written form. Putra (2012) asserted that writing is critical in language classes and other subject classes since it is one of the few language abilities that will always remain relevant in education. To ascertain an individual's intellectual capacity and communication ability, the best platform is always the writing ability (Stapa & Ibaharim, 2020). According to Graham (2019), writing is a fundamental ability that all language students, regardless of their level, should be able to demonstrate that they have mastered. Moreover, students who demonstrate great writing skills have a better chance of meeting the educational and employable standards placed on them.

The Malaysian University Examination Test (MUET), which includes writing as one of its components, is required for students who wish to pursue higher education. To be granted admission to universities, Malaysian pre-university students must pass the MUET, an English language proficiency test. Four skills consist of listening, speaking, reading, and writing—are tested through the MUET. According to the 2015 MUET Regulations, Test Specifications, Test Format, as well as Sample Questions papers, the purpose of the MUET is to assess pre-university students' English language skills in preparation for admittance into tertiary education. The MUET curriculum aims to prepare pre-university students to meet the English requirements of the preferred courses in the university. A band scale with a range of 1 (lowest) to 6 (highest) is used to classify the combined scores, ranging from 0 to 300 (Malaysian Examinations Council, 2006). For Malaysian students, meeting the required band is a requirement for admission to Malaysia's public universities. Based on their MUET scores, local graduates who were admitted to a public institution had to enrol in an adequate number of credit-bearing English courses.

The Malaysian English Language curriculum requires all students to grasp the fundamental ability to write (Puteh, Rahamat, & Karim, 2010). There are several reasons why Malaysian ESL students need help with writing assignments, including cognitive challenges and low language proficiency in English (Ghulamuddin, Mohari, & Ariffin, 2021). Note that poor writing is seen in students' exams. According to Yunus, Halemam, Junaidi and Suliman (2020), 25.45% of 329,024 national school students failed the Ujian Pencapaian Sekolah

Rendah (UPSR) English writing paper 2018. Zakaria and Abdul Aziz (2019) discovered that 80,113 out of 388,899 2018 SPM students failed their English papers. Local studies that were done recently presented that many MUET students still need help with writing. According to Jee and Aziz (2021), as cited in Parnabas, Areff, Baharom, Singh, and Yusop (2022), one of the greatest difficulties pre-university students in MUET confront is extended writing.

According to research, improving writing performance is correlated with variables like writing self-efficacy. Numerous research show that writing self-efficacy improves ESL writing proficiency (Chea & Shumow, 2017; Kirmizi & Kirmizi, 2015). This element appears to have a favourable impact on how well students perform in writing. Studies on this topic of ESL writing are scarce, and the findings are insufficient despite the fact that earlier research shows the critical nature of background or topical knowledge in ESL. Among the four previous studies examined (Gustilo & Magno, 2015; He & Shi, 2012; Meihami, Husseini, & Sahragard, 2018; Tedick, 1990), close familiarity with the subject influenced writing performance.

Studies on ESL and English as a Foreign Language (EFL) instruction have focused on motivation, writing anxiety, as well as self-efficacy (Armendaris, 2009; Jebreil, Azizifar, Gowhary, & Jamalinesari, 2015; Mahyuddin et al., 2006; Salem & Al Dyyar, 2014), amongst other studies. However, very few studies have examined writing using the five above-mentioned elements in one study in Malaysia, particularly with MUET students. To fill the gap found in the research, this study examined Malaysian MUET students' background knowledge, writing self-efficacy, critical thinking, thinking maps, L2 writing anxiety, and writing performance.

Specifically, the research question is:

1. The level of cognitive (background knowledge, thinking maps use, critical thinking) factors, affective (writing self-efficacy, second language (L2) writing anxiety) factors and writing performance among students in Paper 4 of the Malaysian University English Test (MUET) in Malaysia

Literature Review

Background Knowledge

Essay topics are among the factors that may affect writing in an L2 that require special consideration since they initiate as well as direct the writing process that results in samples for evaluation (He & Shi, 2012). According to Gustilo and Magno (2015), knowledge of the subject, content, or topic is essential to writing success. Bachman and Palmer (1996) claimed that the phrase "topical knowledge," also known as "content knowledge," or "prior knowledge" or "background knowledge," refers broadly to "knowledge structures in long-term memory." The phrases content knowledge, prior knowledge, topical knowledge, as well as background knowledge, which are used somewhat conversely in the literature—have been distinguished by a number of researchers.

This research focuses on background knowledge, which Alexander, Schallert and Hare (1991) define as the relationship between a person's prior knowledge as well as the content of a passage that is specific. Background knowledge is essential in learning because it allows us to make use of new perspectives. According to social constructionists, it is important for

teachers and students to create meaning consistently through teacher narratives, dialogues, and humour (Pakirathan & Kepol, 2018). Furthermore, Pakirathan and Kepol (2018) cited that it is critical because students are required to produce writing unique to their subjects as well as the social discourse in which they find themselves. It has been noted that socially constructed experiences of students have been transferred into L2 writing background knowledge as well as content knowledge by ESL students.

Writing Self-Efficacy

According to the social cognitive theory (Bandura, 1997), self-efficacy refers to a person's perception of his or her ability to complete tasks given at a certain point in time. Bandura (1997) claimed that compared to people's true skills, these personal effectiveness judgments could provide a more realistic picture of task fulfilment. Bandura (1997) as well as Schunk and Pajares (2010), concluded that self-efficacy influences people's decisions, objectives, encouragement, determination, and expected outcome. According to a social cognitive view, self-efficacy is a generative competence in which one's motivational, cognitive, emotional, and behavioural skills must be skilfully linked to accomplish a variety of objectives (Bandura, 2006). Therefore, it can be concluded that a student with low self-efficacy is capable of easily changing his self-efficacy confidence when challenged with a task, even though he previously achieved a positive result.

Bandura (1997) argued that when assessing self-efficacy, strength is a crucial factor to remember. As per Bandura and Schunk, (1981), strength means "how robust an individual's sense of self-efficacy is". Bandura (1997) further added that people confident in their abilities view difficult jobs as hurdles one must overcome rather than risks to be avoided. Such a positive outlook promotes interest and enthralling activity participation (Pajares, 1995). In short, one of the most effective methods to assess a person's capability for a certain performance is to attempt it. Consequently, Bandura (1997) stated that in a wide variety of domains, self-efficacy beliefs are shown to predict academic performance substantially, and writing also benefits from that. Bruning and Kauffman (2016) identified the causes of writing self-efficacy by referencing the work of psychologist Albert Bandura and others. The significance of examining writing self-efficacy Bandura's theory of observed self-efficacy mentions that the self-perception of a child's writing efficacy is capable of influencing his or her eventual writing development.

Critical Thinking

Among the variables that may influence L2 writing performance, critical thinking is definitely crucial in 21st-century learning. According to Bloom, Engelhart, Furst, Hill and Krathwohl (1956), critical thinking is described as "intellectual abilities and skills" in which people can apply relevant information and techniques from previous experiences to new problems and situations. On the other hand, Bloom and his colleagues described six stages of critical thinking in 1956, which can be applied to any cognitive learning experience. This taxonomy progresses from basic subject understanding to more complex or advanced stages of critical thinking, culminating in advanced reasoning based on the concepts under study.

Critical thinking has become particularly relevant in the information age when people are constantly bombarded with information. The cultivation of critical thinking in higher education has been promoted at a global scale in recent years. Markle, Brenneman, Jackson, Burrus and Robbins (2014) claimed that it is a component of the tertiary curriculum that has

piqued the interest of assessment organizations. Alternatively, Huitt (1998) further added that when confronted with a problem, analytical thinking allows people to interpret and rely on knowledge and evidence critically.

One of the most difficult things for students is the development of ideas in writing. Writing ideas down entails logical thinking – the capacity to reason logically and shape an opinion. Students who have not acquired the habit of exercising critical thinking have difficulty generating innovative ideas in writing. Examiners can glean a great deal about another person from their writing. Note that students' dependency on teachers has been greatly reduced by providing a set of cognitive resources encouraging them to use modern approaches such as critical thinking. Though critical thinking has been ignored, language teachers and scholars have not paid sufficient attention.

Thinking Maps

Oakley (2004) stated that thinking maps are considered one of the lesson techniques in enhancing the experience of learning by making learning interesting to students. It offers various opportunities for students to improve by engaging with the text and with other students. David Hyerle, one of the founders of thinking maps, claimed that it would motivate students to acquire new information about a subject while considering what they already know. Meanwhile, Alikhan (2014) posited that thinking maps can assist students at various levels by allowing them to remember things after it has been visualized. According to Hyerle (1996), it is believed that thinking maps are a visual language made up of eight different visual structures, each of which represents a different distinct process. Hyerle and Yeager (2007) also mentioned the usage of thinking maps in the classroom as visual organizers to help students order their comprehension and exhibit critical thinking. Nevertheless, the thinking maps strategy consists of a collection of eight interactive, unique graphic organizers which is connected to thinking patterns.

To determine the positive impact thinking maps have on the application of Higher Order Thinking Skills (HOTS), a number of studies have been conducted. Other than that, the use of thinking maps and the Reader-Response strategy by teachers in literature classes helped students generate ideas more quickly and forced them to analyse the texts critically. The study demonstrates that using thinking maps to help students develop their HOTS can be successful (Omar & Albakri, 2016). Subsequently, Omar and Albakri (2016) engaged in a qualitative study to examine the use of thinking maps in ESL sessions by teachers using the i-Think program. As per the observations, it was discovered that the teacher divided the class into groups to encourage debate as well as interaction while they completed the circle map's questions. Through the process, students were able to generate thoughts as well as arguments in support of their responses. In a different study, it was presented that mathematics teachers sometimes use i-Think mind maps to brush up on students' HOTS in their classes (Abdullah et al., 2016).

Second Language Writing Anxiety

Writing anxiety, according to Bloom (1980), is a name for one or a set of actions or feelings that prevents a person from starting, working on, or finishing a writing assignment that they are cognitively capable of. MacIntyre and Gardner (1991) described L2 anxiety as the sensation of tension as well as trepidation specifically linked with L2 settings, which include listening, speaking, as well as writing. On the other hand, Cheng, Horwitz and Schallert

(1999) argued that anxiety related to writing is considered a "language-skill specific anxiety," as opposed to anxiety that is common in the classroom (p. 417). As a result, writing anxiety is defined as a certain sort of behaviour that happens throughout the writing process, such as bodily anxiety, cognitive anxiety, and anxiety brought on by avoidance behaviour (Cheng, 2004).

Meanwhile, Heaton and Pray (1982) discovered numerous causes of writing anxiety based on their observations and interviews with anxious writers. 1) insufficient time to plan, write, as well as rewrite; 2) lack of effective writing abilities, which include writing training as well as practise, organising thoughts, brainstorming ideas, and writing mechanics such as punctuation, handwriting, and vocabulary; 3) comments which are negative from teachers (Hyland, 2003). When asked to write, those with writing anxiety may suffer increased anxiety, manifesting in their behaviours, attitudes, and written work (Jebreil et al., 2015). Moreover, Aripin and Rahmat (2021) argued that one of the language hurdles that prevents authors from functioning successfully in a writing activity is writing anxiety.

For many years, language educators and scholars have been concerned about anxiety in L2 learning (Aghajani & Gholamrezapour, 2019). Bayat and Uyumaz (2021) stated that individuals whose writing experiences have generally resulted in failure have high levels of writing anxiety and tend to avoid writing because they are afraid of failing. Note that anxiety interferes with one's ability to perform well in writing. Writing anxiety can be identified by the writing behaviours which are displayed by ESL authors during the writing process (Aripin & Rahmat, 2021). Aghajani and Gholamrezapour (2019) discovered that students who are panicked, scared, or concerned during the writing session cannot manage their emotions, resulting in bad writing.

Writing Performance

Writing is frequently contrasted with performance; at times, they are said to be divergent and at odds with each other. Instead of viewing writing and performance being two different methods for different activities portrayed in the textbooks, Harris, Jones, and Adams (2016) argue that writing and performance are parts of the same body and propose that if performance is an inscriptional practice, writing is also a physical practice. It is a making, creative, and critical practice. These are not particularly disputable aspects of creative writing, especially performance writing. Hence, the task of writing is not only to translate what students think about a proposed subject; it also helps students to build and assess their knowledge. Woolfolk Hoy, Davis, and Anderman (2013) emphasized the significance of writing development to assist students in conveying and performing their knowledge. Thus, writing performance is an important area to look into.

Since writing performance is significant, students should be provided with ways to improve their writing skills. According to Harris, Jones, and Adams (2016), writing performance and problem-solving in relation to the definition of writing and performance are both associated with each other since writing is considered an act of performance. As a result, it is important to emphasize certain methods and techniques which is capable of helping students to improve their skills of writing.

Methodology

This research employed a survey design that applies the quantitative method. It examines the students' level of background knowledge, writing self-efficacy, critical thinking, thinking maps use, L2 writing anxiety, as well as students' writing performance.

Participants

According to Krejcie and Morgan (1970), 400 Semester 2 MUET students from 26 schools in Penang, Malaysia, have been selected randomly for this research, depending on the simple random sampling technique.

Instruments

The instruments utilized for data collection are questionnaire surveys (to measure the level of cognitive and affective variables) and a writing task to assess writing performance. The research instrument is divided into five sections, namely: Section A is related to the demographics of the respondents, which was constructed by the researcher and consists of gender, location of school, language used at home, email address, and parents' occupations. Sections B to E are the research variables.

Writing Task

The writing topic has been selected due to its familiarity as well as openness. Note that topic familiarity affects the quality of critical thinking. According to Stapleton (2001), a known topic generates better critical thinking. Additionally, familiar topics allow students to use their background knowledge of the subject to their advantage (Indah, 2017). Following were the subject and participant directions: During English Week at your school, the head prefect gave a speech that you attended. The head prefect made the following remark: We are less social now thanks to social media. Do you agree with the statement? Student essays must be at least 250 words long. Students will be given 50 minutes to complete this task. Consequently, the work of each student was evaluated by an experienced MUET teacher utilizing the Malaysian Examination Board's Standard Assessment Criteria. Similarly, essays will be assessed according to a few criteria that fall under these categories. The first is task fulfilment, and the second is language and organisation. Task fulfilment would simply mean whether the writer has fulfilled the task given. Correspondingly, language and organization are related to the writer's organization of his or her ideas, as well as how the writer presents his or her ideas in writing. The maximum score is 60 points.

Questionnaire

Questionnaires on L2 writer self-efficacy, background knowledge, thinking maps, L2 writing anxiety, and critical thinking were used in this study.

Second Language Writer Self-Efficacy Scale (L2WSS)

The L2 Writer Self-Efficacy Scale (L2WSS), which has been created to assess the multidimensional structure of self-efficacy in ESL/EFL writing, will be used in this study (Teng, Sun, & Xu, 2018). The L2WSS includes 20 items to assess self-regulatory efficacy, linguistic self-efficacy, as well as performance self-efficacy, which was developed and evaluated utilizing a variety of thorough validation techniques. It bridges Self-Regulated Learning (SRL) theory with social cognitive theory. Additionally, the survey's 20 items yielded a Cronbach's Alpha internal reliability coefficient of 0.95 after validity as well as reliability tests conducted on the questionnaire.

Background Knowledge Questionnaire

The interaction between test takers' prior knowledge and the subject of a task is seen in the current study as a complicated process that cannot be assumed or predicted. After the speaking tests, a background knowledge questionnaire was filled out to determine the relative degree of topic-related Background Knowledge (BK). (Khabbazzbashi, 2017). Items 1, 3, 4, 5, and 7 of the questionnaire were carefully worded to emphasize familiarity with the subjects, thoughts that could be used, having something to say, as well as interest in the subject matter, which were more performance-independent. Here, eight questions made up the questionnaire, and there were five possible answers: 1 for strongly disagree, 2 for disagree, 3 for uncertain, 4 for agree, and 5 for highly agree. Cronbach's Alpha internal reliability coefficient of the survey, which included eight questions, was calculated as 0.94 as a result of validity and reliability evaluations of the questionnaire.

Thinking Maps Questionnaire

The questionnaire items will be adapted from the Wandut (2018) study. The questionnaire is made up of 14 items, which included five response options: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). It was created to obtain feedback from students on how mind mapping affected their approach to writing narrative texts. The questionnaire's validity and reliability assessments yielded a Cronbach's Alpha internal reliability coefficient of 0.97 for the survey questions.

Second Language Writing Anxiety Inventory (SLWAI)

The L2 Writing Anxiety Inventory (SLWAI) is a 22-item questionnaire created by Cheng (2004) regarding the anxiety experienced by student writers when writing in English. This is viewed as having two independent cognition components, physiology, as well as behaviour. Note that it has three subscales: Cognitive anxiety (as indicated by negative expectations and performance), Somatic anxiety (as indicated by unpleasant emotions like tension), as well as Avoidance behaviour (as indicated by avoidance in writing). Since it has been demonstrated to be incredibly dependable and valid through correlation and factor analysis, this inventory was chosen to gauge writing anxiety (Cheng, 2004). Correspondingly, the survey asked respondents to choose one of five responses: strongly disagree (1), disagree (2), agree (4), and strongly agree (5). The questionnaire's validity and reliability assessments yielded a Cronbach's Alpha internal reliability coefficient of 0.94 for the survey's 22 questions.

Critical Thinking Questionnaire

The questionnaire items will be adapted from the Critical Thinking inventory developed by Sarigoz (2012). The survey consists of 21 questions on a five-point Likert scale: (1) never, (2) rarely, (3) sometimes, (4) often, and (5) always. The questionnaire's validity and reliability studies yielded a Cronbach's Alpha internal reliability coefficient of 0.94 for the survey's 21 questions.

Data Analysis

Based on the subject's responses to the five different questionnaires mentioned above, descriptive statistics are used to determine the levels (e.g., low, moderate, or high) of the factors, namely background knowledge, writing self-efficacy, critical thinking, use of thinking maps, and L2 writing anxiety of the MUET students. As presented in Table 1, the following cut-off points were used to determine this category. Employing the following criteria, the measurement ranges for background knowledge, writing self-efficacy, critical

thinking, utilizing thinking maps, and L2 writing anxiety were analysed: low (1.00-2.33), medium (2.34-3.67), and high (3.68-5.00) (Hasnah & Jamaludin, 2017).

Table 1: Respondent's Assessment Level based on Mean

Scale	Level
3.67 – 5.00	High
2.34 – 3.66	Moderate
1.00 – 2.33	Low

Results

Demography of Respondents

Table 2 presents that female participants occupy a large population (70% of the sample), followed by males (30%). Note that most Form 6 students are from urban areas. Malay and mixed languages are being used by students at home regularly.

Table 2: Demographic Information

Variable	Category	Frequency
Gender	Male	118
	Female	282
Location of school	Urban	245
	Rural	155
Language used at home	Malay language	192
	English language	13
	Chinese language	49
	Tamil language	23
	Mixed language	123

Findings

The Level of Students Writing Performance

For the writing performance, 2.0% students received a band 2.5, 35.3% a band 3, 45.3% a band 3.5, 17.0% a band 4, and .5% a band 4.5. None of the students obtained a band 5 or band 5+.

Table 3: Writing Performance

Band	Frequency	Percent
2.50	8	2.0
3.00	141	35.3
3.50	181	45.3
4.00	68	17.0
4.50	2	.5
Total	400	100.00

*The Level of Background Knowledge, Writing Self-Efficacy, Critical Thinking, Thinking Maps, Second Language Writing Anxiety***Table 4: Descriptive Statistics of Background Knowledge, Critical Thinking, Self-Efficacy, Writing Anxiety, and Thinking Maps**

Constructs	N	Items	Mean	SD	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Background Knowledge	400	BK1	3.68	0.828	1.6	3.7	39	41.6	14.1
	400	BK2	3.38	0.783	1.9	6.1	48.8	37.4	5.6
	400	BK3	3.11	0.773	0.8	11.9	53.3	30.8	2.9
	400	BK4	3.67	0.742	2.1	12.5	58.6	23.3	2.9
	400	BK5	3.51	1.047	4.5	7.2	37.1	32.4	18.3
	400	BK6	3.26	0.696	1.6	3.2	64.5	26.8	3.4
	400	BK8	3.14	0.809	3.2	12.7	54.9	24.9	4.2
	Overall mean score		3.3574	.55280					
Self-efficacy	400	SE1	3.23	0.777	1.9	10.9	54.4	28.1	4.8
	400	SE2	3.50	0.835	1.3	6.4	42.4	39.3	10.3
	400	SE3	3.19	0.805	2.4	13.5	50.9	29.2	4.0
	400	SE4	3.24	0.773	0.8	13.5	51.5	29.4	4.8
	400	SE5	3.20	0.794	1.6	3.2	64.5	26.8	3.4
	400	SE6	3.45	0.807	1.6	7.2	44.6	38.5	8.2
	400	SE7	3.41	0.781	1.6	7.2	44.6	38.5	8.2
	400	SE8	3.67	0.786	1.9	2.4	36.6	47.7	11.4
	400	SE9	3.69	0.755	1.9	4.0	41.9	45.9	6.4
	400	SE13	3.70	0.793	1.1	6.4	42.4	40.8	9.3
	400	SE14	3.19	0.750	0.8	14.1	54.6	26.5	4.0
	400	SE15	3.66	0.824	1.9	3.7	34.7	46.4	13.3
	400	SE17	3.24	0.754	0.8	12.7	51.7	30.8	4.0
	400	SE18	3.19	0.710	0.8	11.4	59.7	24.4	3.7
	400	SE19	3.42	0.714	0.8	5.3	50.4	37.9	5.6
	Overall mean score		3.3747	.54909					
Critical thinking	400	CT1	3.28	0.681	0.5	7.7	58.6	29.4	3.7
	400	CT2	3.31	0.701	0.5	8.5	54.1	33.2	3.7
	400	CT3	3.43	0.734	1.1	6.6	45.4	42.2	4.8
	400	CT5	3.43	0.708	1.1	5.6	46.4	43	4
	400	CT6	3.37	0.710	0.8	6.6	52.0	36.1	4.5
	400	CT7	3.28	0.699	0.8	9.3	53.8	33.4	2.7
	400	CT8	3.68	0.740	1.1	4.8	42.7	44.6	6.9
	400	CT9	3.42	0.718	0.5	7.7	45.1	42.4	4.2
	400	CT10	3.37	0.740	0.8	8.0	49.9	36.1	5.3
	400	CT11	3.35	0.707	0.3	9.0	49.6	37.4	3.7
	400	CT12	3.27	0.686	0.3	9.5	56	31	3.2

Constructs	N	Items	Mean	SD	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
	400	CT13	3.31	0.688	1.1	7.7	53.1	36.1	2.1
	400	CT15	3.27	0.681	0.5	9.3	55.2	32.6	2.4
	400	CT16	3.29	0.714	0.5	9.8	53.3	32.6	3.7
	400	CT17	3.36	0.748	1.1	8.2	49.9	35.8	5.0
	400	CT18	3.32	0.711	0.8	6.6	57.6	29.7	5.3
Overall mean score			3.3426	.53399					
Writing anxiety	400	WA1	3.67	0.940	3.4	10.6	39.8	35.0	11.1
	400	WA2	3.34	0.920	2.7	13.8	40.1	34.2	9.3
	400	WA3	2.84	1.071	12.5	23.9	36.3	22.0	5.3
	400	WA4	2.98	1.000	7.7	21.8	40.8	23.9	5.8
	400	WA5	3.69	0.961	5.8	18.3	43.8	25.7	6.4
	400	WA6	2.78	1.000	12.2	22.8	43.2	18	3.7
	400	WA7	2.71	1.000	13.5	24.9	41.9	16.4	3.2
	400	WA8	2.77	0.928	10.1	23.6	48.0	15.4	2.9
Overall mean score			3.0012	.7257					
Thinking maps	400	TM1	3.26	0.912					
					4.2	10.6	48.5	28.1	8.5
	400	TM2	3.32	0.851	3.2	8.5	48.5	32.6	7.2
	400	TM3	3.45	0.847	2.7	7.4	39.8	42.2	8
	400	TM4	3.37	0.857	2.7	8.5	46.4	34.0	8.5
	400	TM5	3.40	0.870	3.2	7.4	44.0	36.6	8.8
	400	TM6	3.69	0.809	2.7	4.5	44.6	39.8	8.5
	400	TM7	3.47	0.819	3.2	4.5	43	41.1	8.2
	400	TM8	3.47	0.834	3.2	5.0	44.8	38.5	8.5
	400	TM9	3.44	0.843	3.2	7.7	50.7	32.6	5.8
	400	TM10	3.30	0.821	3.2	7.4	51.2	30.8	7.4
	400	TM11	3.32	0.841	2.9	4.2	45.9	40.6	6.4
	400	TM12	3.43	0.796	2.4	4.2	49.6	36.1	7.7
	400	TM13	3.42	0.792	2.9	5	43.5	39	9.5
	400	TM14	3.47	0.847	0.5	9.8	53.3	32.6	3.7
Overall mean score			3.4022	.7220					

As a whole, the participants have a medium level ($M = 3.35$, $SD = 0.55$) of background knowledge on a five-point Likert-type scale. Items BK 1 as well as BK 4 have a higher mean value (above 3.67) in comparison to other items. Other than that, the overall mean value for self-efficacy in this study is 3.37 ($SD = 0.54$). Items SE 8, SE 9, SE 13, and SE 15 have a higher mean value (above 3.67) compared to other items. At the same time, CT has a mean value of 3.34 ($SD = 0.53$). Only item CT 8 has a higher mean value (above 3.67) compared to other items. Note that thinking maps have a mean value of 3.40 ($SD = 0.72$). TM 6 has a higher mean value (above 3.67) compared to other items. WA has the lowest mean value of

3.00 (SD = 0.72) compared to other variables. Items WA 1 and WA 5 have a higher mean value (above 3.67) compared to other items.

Based on the descriptive statistics, it can be concluded that TM has the highest level ($M = 3.40$) compared to other variables, and WA is the lowest of all ($M = 3.00$). BK, SE, and CT are placed between TM and WA, respectively.

Discussion of Findings

The overall findings showed that students' background knowledge, writing self-efficacy, critical thinking, thinking maps use, and L2 writing anxiety are moderate. The results of the research on writing self-efficacy parallel the studies by Shah et al. (2011), Mukminatien and Suryati (2022), Göncü and Mede (2022), and Li (2022). These four studies resulted in a moderate level of self-efficacy in writing. Shah et al. (2011) on 120 Malaysian ESL students presented that students show a self-efficacy level which is moderate ($M = 3.3638$, $SD = 0.48064$) as well as a writing self-efficacy level which is moderate ($M = 3.2467$, $SD = 0.5710$), which paralleled their writing performance level which is also moderate.

This outcome conformed to the results of Sawyer, Graham, and Harris (1992) mentioned that low self-efficacy can possibly affect the ability of students to write. Higher self-efficacy students were more adept at negotiating rules and mechanics while maintaining their concentration. In Mukminatien and Suryati's (2022) study involving 81 students, it was revealed that there was a moderate level of writing self-efficacy ($M = 3.25$ High, 3.49 Moderate, 3.20 Low, 3.31 Average) across proficiency levels. Li (2022) discovered that 595 college students' English writing self-efficacy was at a level which is moderate ($M = 3.0619$, $SD = 0.5978$). On the other hand, Göncü and Mede (2022) presented that 176 Turkish EFL students' level of writing self-efficacy was also moderate.

The outcomes of the research on writing anxiety parallel the studies by (Balakrishnan, Abdullah, and Khoo, 2020; Jagabalan, Tan and Nimehchisalem, 2016; Singh and Rajalingam, 2012). For example, Balakrishnan et al. (2020) reported that students encountered moderate anxiety regarding English language learning ($M = 2.68$). Meanwhile, Jagabalan et al. (2016) demonstrated a moderate level of writing apprehension ($M = 58.37$, $SD = 4.15$) among the pre-university students in argumentative writing. Singh and Rajalingam (2012) found that the writing apprehension levels among the 320 pre-university students were moderate ($M = 36.02$, $SD = 8.890$).

On the other hand, the researcher's findings contradict other studies that found that the level of writing apprehension is high. Amal Saleh's (2021) study presented that the majority of student participants have been highly apprehensive ($M = 1.35$ and $SD = .557$) when writing in English. Alternatively, Göncü and Mede (2022) assessed that the students had writing anxiety in English of either a high or moderate level. De Vleeschauwer (2023) discovered that 813 students had higher anxiety ($M = 63.10$) in writing.

The study's findings on critical thinking parallel those of Pei, Zheng, Zhang, and Liu (2017). The results of Pei et al. (2017) study indicated that undergraduate English majors in China do not possess Critical Thinking Skills (CTS), which is strong. On the other hand, our findings contradict other studies discovering that the level of critical thinking is rather high. Zulazmi

and Surat (2021) revealed that 310 secondary school students have a high level of critical thinking disposition, with a 3.39 mean score.

The study outcomes for background knowledge parallel Field He and Shi's (2012) studies. Overall writing scores for the general knowledge assignment were higher for 50 participants taking ESL classes at City College than for the particular knowledge task ($M = 3.23$ vs. $M = 1.72$) across all levels. Moreover, our findings contradict other studies by presenting high background knowledge levels. Gustilo and Magno (2015) demonstrated that the level of background knowledge disposition among 323 ESL freshmen college students in a university is high, with a mean score of 4.78.

Conclusion

Although several studies have examined the levels of writing self-efficacy, writing anxiety, critical thinking, as well as writing performance, a lack of research focusing on students' background knowledge and thinking maps usage levels was found. This contributes to a difference in their writing performance. This research identified the level of students' background knowledge, writing self-efficacy, critical thinking, thinking maps, L2 writing anxiety, and writing performance. According to the findings, students' background knowledge, writing self-efficacy, critical thinking, usage of thinking maps, L2 writing anxiety, as well as writing performance are all at a moderate level.

Since writing is an integral part of the MUET, the results of this research could serve as a springboard from which teachers can gain a deeper appreciation for background knowledge, writing self-efficacy, critical thinking, thinking maps use, and L2 writing anxiety. As a result, it may shed light on what teachers may do to assist these L2 writers in improving students' background knowledge, writing self-efficacy, critical thinking, thinking maps use, and overcoming their writing anxiety, which negatively impacts their writing performance.

Like any study, this one has limitations, although it produced important findings. First, only one writing test was the basis for the participants' writing performance. If more than one performance on various writing assignments had been achieved over a period of time, the scores would have been more dependable. This study is also expected to provide references to future studies.

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