

**THE USE OF METACOGNITIVE STRATEGIES AND
ARGUMENTATIVE FEATURES IN ACADEMIC WRITING
OF TERTIARY STUDENTS**

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**FACULTY OF LANGUAGES AND LINGUISTICS
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FULFILMENT OF THE REQUIREMENTS FOR THE
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**FACULTY OF LANGUAGES AND LINGUISTICS
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Field of Study: Language Acquisition

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ABSTRACT

The aim of this study is to provide an insight into the link between metacognitive strategies employed by Malaysian students in learning English as Second Language (ESL) for writing and the argumentative features found in students' argumentative essays. In addition, this study also aims to explore the various types of metacognitive strategies that are utilized by two different groups of students, namely students who attained high and low scores in their argumentative essay writing and to explore the argumentative features found in the argumentative essays of both groups of students. In order to ascertain the metacognitive strategies employed by students and the argumentative features in argumentative essay writing, this study adopts a mixed method design known as convergent parallel design. The data in this study consisted of quantitative and qualitative data. The Metacognitive Strategies Questionnaire (MSQ) for writing is used to collect data related to the types of metacognitive strategies used by the ESL learners, while Toulmin Model of Argument is used to trace the argumentative features found in their argumentative essays. The findings revealed metacognitive strategies enable students to plan, monitor and evaluate their writing. Therefore, the findings of this study revealed the types of metacognitive strategies used by the students in their writing and how these strategies helped them in their writing. However, the argumentative features produce by the high scorers and also the low scorers in their argumentative essays differ.

Keywords: Metacognitive strategies, Toulmin model of argument, argumentative features and argumentative essay.

ABSTRAK

Kajian ini bertujuan untuk mengkaji strategi-strategi metakognitif yang diguna oleh pelajar-pelajar Malaysia yang mempelajari Bahasa Inggeris sebagai Bahasa Kedua dalam penulisan esei dan untuk menyiasat ciri-ciri argumentasi yang berkaitan di dalam esei-esei argumentasi tersebut. Selain itu, kajian in juga mengaji jenis-jenis strategi metakognitif yang digunakan oleh pelajar-pelajar yang memperolehi markah tinggi dan pelajar-pelajar yang memperolehi markah rendah bagi esei argumentasi mereka. Untuk tujuan mengenal pasti jenis-jenis strategi metakognitif, Metacognitive Startegy Questionnaire (MSQ) bagi penulisan digunakan. Manakala, untuk menetapkan ciri-ciri argumentasi Toulmin Model of Argument pula digunakan. Kajian ini juga menggunakan reka bentuk kaedah bercampur dikenali sebagai reka bentuk selari tumpu. Data dalam kajian ini terdiri daripada data kuantitatif dan kualitatif. Hasil kajian ini menunjukkan bahawa strategi metakognitif membolehkan pelajar untuk merancang, memantau dan menilai pembelajaran mereka. Kajian ini menunjukkan jenis strategi metakognitif yang digunakan oleh pelajar dalam penulisan mereka dan bagaimana strategi ini membantu mereka dalam penulisan esei mereka. Walau bagaimanapun, ciri-ciri argumentasi dalam esei berbeza mengikut tahap penguasaan pelajar yang memperolehi markah tinggi dan markah rendah bagi esei argumentasi mereka.

Kata kunci: Strategi metakognitif, Toulmin model of argument, ciri-ciri argumentasi dan esei argumentasi.

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LIST OF SYMBOLS AND ABBREVIATIONS

ESL	:	English as a Second Language
EFL	:	English as a Foreign Language
L2	:	Second Language
MSQ	:	Metacognitive Strategies Questionnaire

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CHAPTER 1: INTRODUCTION

1.1 Introduction

In many contexts of our lives, writing is a skill that is always required. Most of us write for different purposes and also in different contexts. Some write for personal purposes or for leisure, while some write for education and also for profession purposes. The amount of writing one needs to do depends on the field that they are in. There are four language skills related to English language learning, namely the listening, speaking, reading and writing skills. Writing skill is one of the important language skills that learners need to master. Recently, there have been a number of studies conducted on problems and difficulties faced by students in writing (Pineteh, 2014; Ka-kan-dee and Kaur, 2014; Wingate, 2012; Giridharan, 2012 & Borglin, 2012). Writing is a crucial skill needed in the education context and it is essential for students as well as for professionals in all sectors to master the writing skills.

Academic writing is a style of writing which comprises a complex process involving conversations or thoughts that are being expressed in a written form between the writer and reader. It is closely linked to facts, investigations, ideas and also arguments. Academic writing plays a vital role in second language learning and it is a crucial factor for students when they move to tertiary education level. In tertiary education, argumentative writing is one of the most required genres to be written by tertiary students in academic writing. Studies have shown that argumentative writing is a difficult genre in academic writing (Ka-kan-dee & Kaur, 2014; Wingate, 2012 & Giridharan, 2012). It is also an important genre to be mastered by tertiary level students in order for them to express their point of view creatively and critically. At the tertiary level, academic writing and critical thinking are high in the list of important factors that

are constantly assessed. According to, Jones (2007) critical thinking is defined as a type of student learning that induces what is deemed as 'higher thinking skills' in higher education (cited in Hammer & Green, 2011, p. 304). While Giridharan (2012) added that several studies revealed that for students at higher education levels or post-secondary levels their academic success is determined based on their successful academic writing. O' Hare and McGuinness (2009) also mentioned that at the university level critical thinking is assessed based on the academic analyses of their written work on a subject-specific topic. Yet, research has shown that students graduate from universities without mastering the requisite proficiency in academic writing or necessary knowledge in critical thinking, (Borglin, 2012).

Although there are more importance and stress being given for academic writing in schools and the tertiary level, the outcome and the performances of the students in academic writing especially argumentative writing does not seem to be convincing or as expected (Giridharan, 2012). Students who learn English as a second or foreign language (ESL/EFL) at the tertiary level continue to encounter problems in composing argumentative essay writing (Ka-kan-dee & Kaur, 2014; Pineteh, 2014). The status and changes made to language policy in education system lead to inconsistency of English language teaching and learning in this country also may be a cause of deterioration of English academic writing. The changes in education policies in term of the changes made to the status of English as a medium to deliver certain crucial and critical subjects in schools. As English was introduced in the teaching of Mathematics, Science and Technology have also caused a lot of confusion among the students, parents, teachers and stakeholders. There should be a consistent Language Policy in Education for long period of time in order to garner better stability, grasp and mastery of the language and knowledge content.

1.2 Background of the Study

English language is recognized as a language of international communication. English is well-known as a global language or 'lingua franca' around the world. Most countries use English widely as a foreign or second language due to globalization. English is an essential second language and is widely used in the foreign countries especially ex-colonies of the British. In Malaysia, English is perceived as the second language (L2) and it is extensively used as a medium of communication. Although English is not considered as one of Malaysian languages such as the Chinese dialects or Indian languages, however, it still holds a strong position as an important L2 because it is used in most of the official matters, legal documentation and also international agendas (Asmah, 1997) (cited in Thirusanku & Yunus, 2014). As the usage of English rapidly increases, the urge to use English in various fields like scientific, technical and commercial has become necessary. The rapid growth of international trade and communication, science, technology and information technology have also indirectly promoted the importance of English language in this country.

1.2.1 Development of English Language Teaching and Learning in Malaysia

The development and changes made to the English language policy in Malaysia's education system are fundamental to the existence and use of the language in the society now. In the 60s, Malaysians were regarded as a society of very proficient and fluent speaker of the English language (Gaudart, 1987) (cited in Bawani, 2010, p.51). In the early 19th century, English language was used as the language of administration and those proficient in English had a competitive edge during the British rule (Bawani, 2010). At the point of independence, changes took place in many ways from 1957 to 1970. The status of English language was much debated and contradicting views arose between the Malay nationalists who were defending for a predominance of Malay language in this country and with those who believed that English language was the way

to strive in this competitive world (Bawani, 2010). Although there was emphasis given to strengthen Malay language as the national language, English language was given recognition of L2 in education policy (Thirusanku & Yunus, 2014). The aim of the education policy was to establish a balance between the national and international needs and challenges manifested through linguistics education policy.

As time passed, in the 70s, the Ministry of Education eliminated all English medium schools and Malay language became the medium of instruction in all the national schools at primary and secondary levels and tertiary institutions (Thirusanku & Yunus, 2014). Since, English medium schools were no longer in existence, teaching English was greatly emphasized and made compulsory to be taught in all the national schools. The aim of teaching English as a compulsory subject in national schools from primary school until high school is to enable students to speak, read and write in English fluently and also to uplift the proficiency level of students in the English language. As a part of English syllabus four language skills which are listening, speaking, reading and writing are taught and assessed in English (Sukatan Pelajaran Bahasa Inggeris KBSM, 2000). However, Samuel (2005) also asserted that after twenty five years of implementation of the Malay language as a medium of instruction in Malaysian schools, the English language proficiency among students and graduates is still relatively at the bottom line (cited in Suganthi, 2010, p.1). Darmi & Albion (2013) further supported that there has been a great decline in the standard of English and this has been a cause of main concern to many parties. Perhaps, the status of English language proficiency has been deteriorating as a result of the changes made in the education system. The inconsistency of English language policy in the Malaysian education system has resulted in the deterioration of competency and proficiency of Malaysian tertiary students (AL Noori, AL Shamary & Yuen, 2015). The decline in the standard of English among students in schools and universities has resulted in students being unable to have a good command

of the English language. Due to their weak command of the language, they could not grasp and comprehend the content resources and sources of information on other subjects which utilizes the English language as the medium of communication.

Hence, the command of English has declined to the extent of causing many graduates to be unable to get jobs due to their limited language skills (The Star, 12th January 2002) (cited in Suganthi, 2010, p.2). Many international and local companies have emphasized on employees' mastering English language proficiency as one of the criteria which is crucially needed as a part of their job requirement. As evidence, proficiency in English language is commonly stated as a pre-requisite for employment in job advertisements. Yet, many fresh graduates are unable to get their desired job due to a lack of English competency, inability to communicate in English and lack of proficiency in writing in English. Adnan, Daud, Alias & Razali (2012) asserted that poor command in English has been highlighted as one of the factors for unemployment among graduates in Malaysia as reported in local dailies.

1.2.2 Challenges in Academic Writing

Lord Dearing (1997) mentioned that the main purpose of tertiary education is to prepare students for the working world (cited in Adnan, et al., 2012, p.4). Teaching and learning process has to be transformed in order to enable graduates to face major challenges in competitive job market. In order to cope with their career and compete in the working environment, students need to have a better academic qualification and to be competent in English. In the academic context, researchers like Giridharan (2012) point out that, Asian students have not engaged and practised adequately in academic discourse in their writing class although they have learnt formal writing from secondary school. They often exposed to actual academic writing in the higher education. Therefore, not surprisingly many students face difficulties when they further their study

to tertiary level. Giridharan (2012) stated that school essays are relatively simpler compared to the assignments done at tertiary level, whereby in tertiary education the argumentative essays are a common genre. Although many students at tertiary level have basic knowledge of grammar rules, they are still unable to write as expected.

In tertiary education, writing effectively is greatly emphasized, whereby academic and research related writing requires students' to demonstrate a higher level of cognitive process and critical thinking. Writing skill needs to be mastered well as students' further their studies or even join the working world where English proficiency is crucial. Writing essays in the English language is not an easy task for many ESL/EFL learners. Many students face problems in expressing their ideas and thoughts in a written form. According to Bacha (2002) the main reason for ESL and EFL learners' failure to meet literacy expectations in tertiary level is derived from poor academic writing skills (cited in Giridharan, 2012, p. 579). Giridharan (2012) mentioned that academic writing is one of the important skills for tertiary students to obtain, yet, due to the lack of grammatical and vocabulary competency and practice in academic writing, academic writing has become overwhelming for most of ESL learners.

1.2.3 Metacognitive Strategies for Writing

According to Borglin (2012), L2 learners usually encounter problems with writing, especially academic writing. In academic writing, students need to use an appropriate strategy in order to approach and overcome their problem in writing argumentative or discursive essays. Metacognitive strategy is one of the strategies widely used and studied in the field of language learning. Metacognitive strategies are commonly studied in relation to the skills of listening, speaking and reading, whereas there have not been many studies on metacognitive in relation to writing (Panahandeh & Asl, 2014). Metacognition is known for its knowledge and beliefs about cognition, skills and

strategies that enable self-regulation of one's cognitive processes (Chamot, 2011). O'Malley and Chamot (1990) believe that metacognitive strategies enable students to plan, control and evaluate their learning and they play a vital role in improving learning. Brown (2004) asserted those without metacognitive approaches are definitely those learners without direction (cited in Magno, 2010). There is also a link between metacognitive strategies and critical thinking. It is believed that the use of metacognitive strategies by learners develop learners' critical thinking ability that may lead to better writing (Magno, 2010). In view of the importance of metacognitive strategies and academic writing, this study aims to look into the use of metacognitive strategies which are employed by students in argumentative essay writing by looking at the argumentative features found in their essays.

1.3 Statement of Problem

Studies in argumentative writing have shown that argumentative writing is problematic for Asian students because they are non-native speakers of English (Pineteh, 2014, Giridharan, 2012; Rafik- Galea, Zainuddin & Galea, 2008). Many Asian students might be reluctant than other students because of their cultural background. Asian students used to rote learning and they are not familiar with critical and creative thinking skills (Magno, 2013 & Rafik-Galea et al., 2008). In terms of writing argument, producing effective argumentation is not traditionally practised in Asian countries. Therefore, most of the Asian students find it difficult to think critically (Giridharan 2012 & Rafik- Galea et al., 2008). These students need to have a great deal of structured guidance when completing tasks that involve higher order thinking. However, tertiary education in the Asian countries requires their students to be critical and able to write good arguments. As explained before, since the use of metacognitive strategies are believed to influence the quality of writing, and producing good argumentative writing is a problem faced by many Asian students, this study will attempt to identify the

metacognitive strategies use when writing, as well as to explore if there is any difference in the argumentative features that are found in the essays of students with high and low scores.

1.4 Research Objectives

The purpose of this study is to investigate the metacognitive strategies utilised by students as well as argumentative features produced by students in academic writing. Previous studies indicated lack of metacognitive strategies used in academic writing contributed to poor academic performance of university students. This study aims to explore metacognitive strategies can be linked to students' argumentative essays writing performance. As metacognitive strategies permit students to plan, control and evaluate students' own learning, it plays an important role in academic writing. Additionally, this study also aims to compare the differences in terms of metacognitive strategies use and argumentative features found in writing between students who scored high and low respectively for their argumentative essay.

1.5 Research Questions

This study is guided by the following research questions in order to address the gaps identified in the past studies on metacognitive strategies and argumentative writing:

- I. What are the metacognitive strategies employed by tertiary students in writing essays?
- II. What are the argumentative features found in tertiary students' argumentative writing?
- III. How does the use of metacognitive strategies and argumentative features found in argumentative essays differ between tertiary students with high scores and low scores?

1.6 Significance of the Study

This study aims to identify types of metacognitive strategies used and argumentative features produced in writing argumentative essays by ESL learners in tertiary education. This study seeks to address the challenges faced by students in academic writing and concerns about the lack of metacognitive strategies use in academic writing of Malaysian university students. Generally, Malaysian students are not adequately exposed to academic writing in their writing lessons from school until they reach tertiary education. In higher education, academic writing is a genre that students are expected to master adequately. Students are required to develop their own ideas within a framework domain or discipline knowledge and engage their readers in academic discourse (Giridharan, 2012). Furthermore, students' ability to think and write critically is critical at the tertiary level. The significant of the study is also to examine the use metacognitive strategies between the students with high scores and low scores is to identify the type of metacognitive strategies use by high scorers for their writing which help them to produce better argumentative writing and this could be suggested to the low scorers which may help them to improve produce better argumentative writing.

1.7 Limitations of the Study

This study examines the metacognitive strategies used and the argumentative features found on the individual argumentative writing performance of ESL students. Due to the fact that the participants were limited to 50 students who are pursuing their foundation course and the findings cannot be applied to other population as it covers only ESL students from one college.

1.8 Definitions of Main Terms

1.8.1 Metacognitive Strategies

According to O'Malley and Chamot (1990) metacognitive strategies, direct and regulate the learning process. These strategies included the thinking, planning, monitoring and evaluating the learning process. Metacognition is the competence to use knowledge in order to lead and enhance thinking skills by monitoring one's thinking process, checking on the process being made towards achieving goals, ensuring accuracy and making a decision on the use of time and effort. Metacognitive strategies are also defined as the techniques for learners to understand, remember, use information unintentionally and control consciously.

1.8.2 Toulmin Model of Argument

Toulmin model of argument or logical reasoning (2003) is a model that has been used widely as an analytical tool in research that looks onto argumentative data, critical thinking and characteristics of persuasive discourse. According to Currie (1990) Toulmin model of argument served as a framework for discussion of assessment results in students writing and Karbach (1987) said it has been used as a heuristic device to encourage persuasive writing and thinking (cited in Rafik-Galea, et al. 2008).

1.8.3 Academic Writing

Academic writing is a type of text which the ideas and thoughts are delivered in a logical manner and justified with rational and valid reasons (Bayat, 2014). Gillet et.al (2009) classify the types of academic writing written in tertiary level namely the essays, research reports and theses (cited in Bayat, 2014, p157). In this study, academic writing is a compulsory course that has to be taken by all the Foundation of Art students as a course requirement in their second semester of the course.

1.9 Preview Organisation of the Dissertation

Generally, in higher education academic writing especially writing an argumentative essay may be challenging for most of the ESL and EFL learners. It requires learners to put in a pertinent effort and considerable practice in planning, composing, developing and organizing ideas in an argumentative essay. It also demands learners to put in a conscious effort, logical reasoning and critical thinking skill in determining the quality of their writing performance. The development of academic writing and cognitive process of a learner may differ between the high scores and low scores group of learners. It is highly influenced by their command and proficiency level of the target language plays a crucial role in their writing performance. It is undeniable that ESL and EFL learners need to master prerequisite writing strategies, techniques and skills in order to be able to write a good argumentative essay. The lack of those elements may cause a struggle in mastering academic writing. Therefore, this study will look into the metacognitive strategies used and the pertinent argumentative features produce by learners in their writing.

This dissertation consists of five chapters. The introduction provides the necessary background of the study, this chapter has also elaborated on the problem statement, objectives and research question of the study as well as the significance and the limitation of this study. This is followed by the second chapter which reviews the relevant literature review related to the field of study. The third chapter discusses the methodological framework and procedures used to carry out this study while the fourth chapter presents the analysis and discussion of the findings as well as summarize the findings. The fifth and last chapter summarizes the findings and discussion highlights the implication of the study and suggests some recommendation.

1.10 Chapter Summary

This chapter is a brief introduction concerning the role of metacognitive strategies and argumentative features produce in relation to academic writing. This chapter contains the description regarding the state of academic writing competence among tertiary students, especially in argumentative essays. Besides that, attention is focused on the importance of metacognitive strategies as significant elements to produce quality and critical academic written essays. In summary, the rationale of this study is to look at the use of metacognitive strategies and argumentative features produced by ESL tertiary students in academic writing. The following chapter will outline the related review of literature related to this study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter presents the relevant literature review associated with the present study. This study aims to explore the metacognitive strategies employed by tertiary students' and its link to students writing ability. Simultaneously, this study also investigates how metacognitive strategies may relate to argumentative features produced by students in argumentative essay writing as metacognitive strategies relate to the ability to plan, control and evaluate. This study examines the metacognitive strategies in relation to writing and examines the argumentative features found in argumentative essays of high scorers and low scorers Malaysian ESL learners. This chapter first outlines academic writing, argumentative writing, Toulmin model of argument, second language acquisition, second language learning strategies, metacognitive strategies, related past studies and end with a chapter summary.

2.2 Academic Writing

Academic writing is observed as the ability of learners to understand the significance of a context and produce the ideas in a written form. According to Kormos (2012) academic writing is not only known for its complexity but also involve laborious activity which requires a lot of time, concentration and determination from the learners. Writing process is not just merely listing down the ideas in a written form but it also requires the writer to present and express ideas effectively so that it enables the reader to comprehend and interpret the written text effectively.

For many students, academic writing is a difficult task to accomplish if they do not have adequate competency in English. Hence, due to lack of competence in academic

writing among ESL/EFL students at tertiary level, it affects their academic performance. Hinkel (2002) claims that second language learners need to have adequate language knowledge such as grammar rules and know more unfamiliar vocabulary in order to construct academic texts and organize coherent written academic discourses (cited in Giridharan, 2012, p. 581). Moreover, Nik, Hamzah & Rafidee (2010) mentioned that writers need to be selective with choice of words use, have adequate understanding in grammatical patterns and be able to compose various sentence structures related to the subject matter in writing. In order for readers to be able to comprehend and interpret the written text effectively, writers have to plan and organize their ideas clearly.

In the academic writing context, students are required to think critically and advance their ideas on the topic discussed. The ability of a student to write quality academic written work is very important at tertiary level because it is one of the course requirements in tertiary education (Giridharan, 2012). According to Thomas (2011) higher education institutions have to develop graduates that have the ability to make knowledgeable decisions and also able to connect with what they have learnt and practised throughout their learning process. Most of the subjects offered in tertiary education require students to apply critical thinking in their learning process and assessments. Critical thinking skills are equally given importance and assessed in academic writing. Apart from other language skills, writing is a subset of 'Academic Literacy' skills and deemed as the skill that should be mastered adequately by undergraduates and graduates (Al-Sawalha & Chow, 2012).

The concept of "academic writing" is often used in an unreflective manner. There are a few different definitions of academic writing. According to Borglin (2012) the characteristics of an academic text usually described as the academic literacy, sensitivity to style, writing convention within a specialized context, measures the critical and

analytical competencies in writing. In higher education, academic writing remarkably plays an important role. Writing is used in various ways in order to help students to clarify and evaluate their own thinking. Writing also has the potential to develop many aspects related to the development of thinking skills which include asking questions for clarification, elaboration and justification. Rafik-Galea et al., (2008) asserted that students are able to generate, apply, and internalize good thinking skills through this process of writing. They learn to stay focused, plan and organize their writing, because they are aware of their audience. In addition, they also apply principles of appropriateness, credibility, and relevance to their writing. Therefore, writing provides opportunities for learners to evaluate many aspects and enable abilities that are associated with critical thinking. Academic writing in tertiary education varies from high school academic writing. In the tertiary education context, argumentative writing is one genre that expects students to be critical in their writing. The next section elaborates on argumentative writing.

2.2.1 Argumentative Writing

According to Rudinow & Barry (1994), language is the fundamental medium of our thinking process because language cannot be separated from what and how we think (cited in Rafik-Galea et al., 2008). Generally, thinking and language are intertwined. Language is the medium of communication of our mind and thoughts are being expressed through words. This clearly can be seen in our writing.

In addition, Rafik-Galea et al., (2008) mentioned that writing is a powerful tool that helps to put their thoughts visible to the audience through writing. Learners also will be aware of their thought processes and they can manipulate and amend these processes in order to produce a good piece of writing which reflects both critical and creative thinking ability. In composing an argumentative essay, critical thinking skills are

utilized in order to arrange the ideas in a way which allows the readers to have a better understanding of the content written in the essay. It is an important skill for writers as they need to analyse and consider their thoughts before organizing and transferring them into written text. Critical thinking opens up a line of investigation especially in an argumentative genre as it is cognitively demanding and a typical form of academic writing (Dabaghi, Zahibi & Rezazadeh, 2013).

Moreover, Applebee et al., (1986) added that the role of writing in thinking is the combination of permanence written words, which allows learners to rethink and revise over a period time, explicitness required in writing, resources provided by conventional form of discourse in order to organise and think through new connection among ideas and active nature of writing which creates a medium to explore necessary implications within otherwise unexamined assumptions (cited in Rafik-Galea et al. 2008)

Argumentative essay writing is the most common type of assignments found in tertiary education. This genre also requires students to argue for and oppose a claim or thesis statement. Most students at tertiary level are unable to argue or propose a convincing thesis statement because they are not traditionally practised argumentation like the students in the West (Rafik-Galea et al., 2008). The procedure of argumentation is to compose an argument by analysing and looking for actual facts or evidence in order to support and back up the claim or thesis statement. To compose a good piece of argumentative writing especially is challenging for many ESL/EFL students. An argumentative writing begins with a stance and is supported with logical evidence in order to persuade or convince the reader to execute the action or to accept the data based on a controversy. There should be a proper guideline to follow to write a good argumentative essay; one of the ways is to incorporate the Toulmin model of argument

when writing an argumentative essay. The next section explains the Toulmin Model of Argument.

2.3 Toulmin Model of Argument

Scholars have attempted various successful ways to use the Toulmin model (2003) of argument as a teaching aid (cited in Hillocks, 2010; Verheij, 2006; Facione, 2006; Condon & Kelley, 2004 & Stapleton, 2001). Many researchers believed that the Toulmin model of argumentative writing gives a prerequisite scaffold for valid reasoning method and critical thinking process (cited in Hillocks, 2010; Verheij, 2006; Facione, 2004; Condon & Kelley, 2004 & Stapleton, 2001). Despite this, there are not many studies in Asia on the use of critical thinking in teaching writing skills (Giridharan, 2012). Previous studies on argumentative writing and thinking (Ferris, 1994; Crowhurst, 1991; Applebee, Langer, & Mullis, 1986) have proven that non-native speakers of English face problem in argumentative writing (cited in Rafik-Galea et al. 2008). Linguistic, rhetorical and critical thinking deficits impact on the argumentative essay writing task in English. Nonetheless, researchers also have asserted that the insufficient of thinking structure is the central problem to guide students' organization (cited in Hillocks, 2010; Verheij, 2006; Facione, 2004; Condon & Kelley, 2004 & Stapleton, 2001). Schroeder (1997) stated that the advantage in pedagogy by utilizing the Toulmin model as a framework for academic writing is because of Toulmin model of argument increase students' sense of the academic writing as a focused or functional unity (as cited in Rafik-Galea et al. 2008). Students also get better and clearer understanding of unfamiliar terms such as data and rebuttal and know their functions. This may help them to improve their thinking skill in argumentative writing.

The Toulmin model (2003) has been extensively utilised in the educational sector as an analytical tool in research into argumentative data, critical thinking and the

characteristics of persuasive and discursive discourse. In addition, the Toulmin model allows clearer and critical thinking for teachers as the modellers of disciplinary discourse and as assessors of students' spoken and written contributions (Mitchell & Riddle, 2000) (cited in Rafik-Galea et al., 2008). Toulmin model also responds to the need for being informed about the basic elements of its link in arguments. According to, Rafik-Galea et al., (2008) as a cognitive strategy, Toulmin model can function heuristically as a tool for grasping the overall gist of complex, diffusely organized arguments and individual micro-arguments which picturised in students' critical thinking ability.

There are several advantages in co-operating the Toulmin structure of an argument for writing. Wood (1995), asserted that the Toulmin model of argument model invites common ground and together with the audiences' participation in the form of shared "warrants" or beliefs which possibly increases the chances of interaction between audience and writer (as cited in Rafik-Galea et al. 2008). The optional elements of Toulmin model like "backing", "rebuttal", "qualifier" also encourage an exchange of point of views and common ground between the audience and reader because they require an arguer to anticipate other perspectives as well as to acknowledge and answer them directly. Argumentative writing and critical thinking are closely related. In order to write a good piece of argument one should be able to think critically and also present their claims and evidence in a logical manner. Tertiary students should be able to think and analyse critically when it comes to argumentative writing. In tertiary education students' ability to think critically is examined through their academic writing. Toulmin model one of the oldest model of argument widely use in teaching argumentative writing. It is also well established and effective way of writing an argumentative essay. The following section elaborates on critical thinking.

2.3.1 Critical Thinking

Thinking and writing are very much related and have a strong relationship with each other. The acts of writing enable writers to create ideas which lead writers to discover their own thinking. As critical thinking is directly linked to writing, Cavina (1995) asserted it as “a reasoning process through which one clarifies ideas, supporting them with relevant facts, taking into account the assumptions on which they are based, and assessing their implications” (cited in Rafik-Galea et al, 2008). Thus, critical thinking is a skill to think actively and rationally. It also plays a crucial role in analyzing and evaluating information. It is given great emphasis in various disciplines.

In education and working environment, critical thinking has great importance. There is a need to learn critical thinking skills among learners on different level of education. Critical thinking is greatly emphasized and assessed in the subjects by the university in order to mould students to be critical thinkers. Hence, critical thinking is a significant skill for university students. According to, Moore (2004) critical thinking has been labelled as a part of graduate attributes and skills agenda lately (cited in Hammer & Green, 2011). Moreover, O’ Hare and McGuiness (2009) asserted that the main difference of the assessment of critical thinking as a general skill derives from the fact that the attention is focused on critical thinking rather than the subject knowledge. Many other researchers have acknowledged the crucial role of critical thinking in students’ academic achievement (Bayat, 2014; Dabaghi, Zabihi & Rezazadeh, 2013; Magno, 2013). Critical thinking skills play an important role for learners to compose good academic essays.

Critical thinking has been perceived in different perspectives by many professionals. Pithers & Soden (2000), believed that critical thinking enables to pursue one’s questions through self-directed search and interrogation of knowledge, whereby the knowledge is

contestable and presents with proof to support ones' arguments (cited in Thompson, 2011, p. 1). Meanwhile, Paul and Elder (2001) considered critical thinking as "to be able to take one's thinking apart systematically, to analyse each part of it, assess it for quality and then improve it" (as cited in Magno, 2013, p. 22). According to Leicester (2010) defined critical thinking as an active, determined and planned effort required in order to understand the world with cautions evaluation of our thoughts of others, so that it enables one's to clarify and improve our understanding (cited in Ghadi, Bakar, Alwi & Talib, 2013, pp.1458-1459).

In brief, critical thinking can be observed as the ability to dissect information, looking for values in the information and abandoning the remaining irrelevant information. It is also defined as the ability to make reasonable judgement rationally and practically. Magno (2013) suggested that information should be scrutinized, analysed, undergo certain improvements and integrated. Critical thinking guides an individual to examine and assess on a particular issue before making a judgement. It is also given much emphasized as a significant aspect in higher education as it permits students to analyse, evaluate and explain concepts in a conscious and rational manner. Through the process of teaching and learning how to write argumentative essays critical thinking can be trained. However, it requires a lot of abstract and logical thinking which include commitment and analytical mind towards fulfilling the criteria and values that lead to good critical thinking ability. Critical thinking is a major skill that students need to acquire so that it enables the students to analyse the pertinent information they received and provide their own point of view based on their judgements. In academic writing context, students also need to be critical as it is crucial in organizing their ideas when they are writing arguments. It may be tough but important that one should learn to write argumentative essays as it develops better thinking ability as writing well reflects clearer thinking. Both writing and thinking together may pose difficulty for students to

master however mastering both these skills can empower students. In the field of language acquisition a lot of importance is given to the methods and strategies that one can use in order to become a successful learner.

2.4 Second Language Acquisition

This section will elaborate the aspects of Second Language Learning Strategies in Second Language Acquisition. Language acquisition is a complex process which involves both knowing information and knowing how to utilize it. Second Language Acquisition is a process which individuals learn and acquire an additional language to native language. According to Oxford (1990) acquisition occurs unconsciously and spontaneously. It does lead to conversational fluency and arises from naturalistic language use. In contrast, learning is conscious knowledge of language rules. It does not typically lead to conversational fluency and derives from formal instruction. However, the process of acquiring and learning a second language differs according to individuals. For some learners learning or acquiring a language may be a rapid process meanwhile for other learners it might be a gradual process. This also depends on factors like the environment, exposure and the ability of the different learners (Chamot, 2004). In the field of second language acquisition, second language learning strategies were widely studied. There are a lot of studies on second language learning that have proven students who use second language learning strategies are successful learners (Pezhman, 2012; Gerami & Baighlou, 2011; Chamot, 2004; O'Malley & Chamot, 1990; Oxford, 1990). The next section elaborates on second language learning strategies.

2.5 Second Language Learning Strategies

Since the 1970's during the emergence of the cognitive revolution, there has been an increasing interest in and great attention paid towards language learning, language learners and language strategies among researchers. The progress in cognitive

psychology had a good effect on language learning studies (Williams & Burden, 1997) (cited in Pezhman, 2012, p 164). Studies on second and foreign language learning indicated that in order for the process of successful learning language to take place, language learning strategies play an influential role (Pezhman, 2012; Gerami & Baighlou, 2011). Prior description of learning strategies paid more focus on the products of learning and behaviours that reflect the unobservable cognitive process. Definitions of learning strategies eventually managed to provide broader understanding of what learners think and do during language learning (Pezhman, 2012). However, Cohen (1990) mentioned that learning strategies are the conscious processes chosen by the learners, which lead to an action taken by learners in order to enhance their own second or foreign language learning (cited in Pezhman, 2012, p. 163). Learners who utilize strategies that help them in learning become successful learners. The next part describes the language learning strategies.

2.5.1 Definition of Language Learning Strategies

Learning strategies have been described by Wenden & Rubin (1987) as “sets of operations, steps, plans, and routines employed by the learners in order to facilitate the process of obtaining, storage, retrieval, and use of information.” (cited in Pezhman, 2012, p. 163). Richards & Platt, (1992) argued that learning strategies are known as intentional behaviour and thoughts that are utilized by learners during the learning process in order to help them for better understanding, learning and remembering new information (cited in Gerami & Baighlou, 2011, p. 1568). According to Cook (2001) learning strategies is a choice that learners make during the process of learning or using the second language which affects their learning (cited in Gerami & Baighlou, 2011, p. 1568). Griffiths (2007) defines language learning strategies as consciously chosen activities by learners for their own language learning (cited in Gerami & Baighlou, 2011, p. 1568).

In addition, Chamot and O'Malley (1990) asserted learning strategies as "special thoughts or behaviours that individuals employ in order to facilitate them in comprehending, learning, or retaining new information." Cohen (1990) said that learning strategies are consciously selected by learners and may result into steps taken in order to enhance the learning through the storage, retention, recall and application of information related to second or foreign language (cited in Pezhman, 2012, p. 163). While, Oxford (1990) defines language learning strategies as a "specific action taken by learners to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations". Language learning strategies are a fundamental tool that learners should be aware of and learners should also constantly practice to use language learning strategies, to familiarize themselves with strategies that can enhance their learning.

Most of the studies that have been conducted on language learning strategies mainly focus are to identify what good learners do in order to learn a better second or foreign language. Rubin, (1971) carried out a study focus on the strategies of successful language learners. In her study, she pointed out that, if such strategies could be identified, those strategies could be offered to the less successful learners which might help them in their learning (cited in Pezhman, 2012, p. 164). In the process of learning a new language, researchers have identified and described language learning strategies that learners might employ. Those language learning strategies have been classified by many scholars (Oxford, 1990; Bailystok, 1981; O' Malley, et al. 1985; Willing 1988; Stern, 1992; Ellis, 1994) (cited in Pezhman, 2012, p. 164). The classification of language learning strategies not only helped to categorize according to strategies. It is linked to a variety of cognitive processing stages in learning a language and also assisted in creating an instructional framework. (Pezhman, 2012).

2.5.2 Classification of Language Learning Strategies

Language learning strategies have been classified by many professional experts like O'Malley's (1985) who classified language learning strategies into three main categories which are known as the metacognitive strategies, cognitive strategies and socio-affective strategies (cited in Pezhman, 2012, p.164). Besides, Rubin (1987) classifications of language learning strategies into direct strategies and indirect strategies. Direct strategies are strategies that contribute directly to learning, which are the metacognitive and cognitive strategies whereas indirect strategies are the strategies that contribute to indirect learning, which are the communicative and social strategies. In addition, Rubin (1987) asserted that there are also three types of strategies that learners utilized and contribute either to direct or indirect language learning, which are the learning strategies, communication strategies and social strategies (cited in Pezhman, 2012, p.164).

Similarly, Oxford (1990) divided language learning strategies into two main categories, namely the direct and indirect strategies. However, Oxford's strategies are subdivided into six classes which are the direct strategies that have been subdivided into memory, cognitive and compensation strategies, while indirect strategies that have been subdivided into metacognitive strategies, affective and social strategies. Meanwhile, Stern (1992) classified language learning strategies into five groups, which known as the management and planning strategies, cognitive strategies, communicative-experiential strategies, interpersonal strategies and affective strategies (cited in Pezhman, 2012, p.165).

Research findings in the field of language learning strategies have proven the crucial role that learners play the process of language learning (Pezhman, 2014 & Chamot, 2004). The research in language learning strategies has gone through a great shift from

teacher centered that mainly focus on the teaching method to learner centered which mainly focus on the learning techniques whereby the learners received more attention and play a prominent role in second language learning. These studies on learners and learning techniques focused on the strategies and techniques learners employed in order to learn a language and overcome the problems in language learning. As the field of second language acquisition widely studied in the 1970's, educators and scholars agreed that there is no single method employed in language teaching and learning (Pezhman, 2012). Some significant studies have shown that strategies lead to achievement in learning (Pezhman, 2012; Gerami & Baighlou, 2011, Chamot, 2004; Oxford 1990; O' Malley & Chamot 1990). The next part explains language learning strategies and the contribution of learning achievement.

2.6 Language Learning Strategies and Language Learning Achievement

The previous findings in the field of language learning strategies have shown that the use of language learning strategies led to improvement in proficiency and achievement in mastering the target language (Lee, 2003; O'Malley and Chamot, 1990; Rahimi et al., 2008; Griffiths, 2003; Hong, 2006; Oxford 1993) (cited in Pezhman, 2012, p.167). O' Malley et al., (1985) stressed on the importance of learning strategies and defined those strategies as sets of operation or steps that are used by a learner that will facilitate the acquisition, storage, retrieval or use of information (cited in Pezhman, 2012, p.167). In a study, O'Malley et al. (1985) discovered that successful language learners have utilized more and various types of learning strategies than less successful learners (cited in Pezhman, 2012, p.167). Besides, another study by Green and Oxford (1995) in which many kinds of language learning strategies were used more often by proficient students (cited in Pezhman, 2012, p.167). In a different study, Griffiths (2003) stated that a strong positive correlation has been discovered between learning strategies used and language proficiency (cited in Pezhman, 2012, p.167). There are many types of

language learning strategies. This study focuses on metacognitive learning strategies because metacognitive strategies are able to enhance critical thinking. Good critical thinkers engaged more in metacognitive activities such as high-level planning, monitoring and evaluating strategies. Metacognitive strategies are core component of various form of higher order thinking skill. A proper understanding and approach to utilizing metacognitive strategies help students to perform better in argumentative writing. The next section will look into metacognitive strategies.

2.6.1 Metacognitive Strategies

One of the central goals of higher institutes requires students to think and write critically. It is crucial for one to discover and obtain certain cognitive processes that enhance students' critical thinking ability. Learners are able to use their cognitive skills and strategies that maximise the probability of desired product and critical thinking takes place (Black 2005; Halpern 1998; Kuhn & Dean 2004; Nickerson 1994; Schoens 2005) (cited in Magno, 2010, p 137). It is said through metacognition student's critical thinking can be developed. Schoen (1983) asserted that there is link between both metacognition and critical thinking (cited in Magno, 2010, p. 138). Metacognition is the competence to use knowledge in order to lead and enhance thinking skills by monitoring one's thinking process, checking on the process being made towards achieving goals, ensuring accuracy and making decisions on the use of time and effort. Metacognitive strategies are also defined as the techniques for learners to understand, remember, use information unintentionally and control consciously. According to Brown (2004), without the existence of metacognition, critical thinking is difficult to achieve. Students need some kind of input to trigger their critical thinking ability. Therefore, metacognitive strategy can direct students to think critically (cited in Magno, 2010, p.138).

According to O'Malley and Chamot (1990) metacognitive strategies, direct and regulate the learning process. These strategies include thinking, planning, monitoring and evaluating the learning process. Studies on learning strategies have demonstrated the significance of metacognitive strategy instructional setting and how it plays a vital role in students' successful learning. Studies have shown that students use various strategies to overcome their learning problem. As metacognitive strategies are part of language learning strategies that enable one's in monitoring their progress in accomplishing a task and setting their own learning. Students should be inspired to analyse their own learning process in order to upgrade their use of metacognitive strategies that are linked to critical thinking.

2.7 Related Past Studies on Metacognitive Strategies in Writing

A study by Zhang (2013) on metacognitive strategy use and academic reading have shown that in reading, metacognitive strategies are self-monitoring and self-regulating activities that focus on both process and product of reading. Zhang's study focused on readers' reading awareness which involves whether or not they can comprehend what they have read, their abilities to make judgments on the cognitive demands of the reading task required and their knowledge on when and how to employ specific reading strategies. The findings reveal that metacognitive strategy use affect the learners' knowledge of awareness and control performance of task and evaluation of task completion.

A study was done by Panahandeh & Asl (2014), focused on the effect of metacognitive strategies involving planning and monitoring on Iranian EFL learners' argumentative writing accuracy. This research involved 60 university EFL learners with an intermediate level of proficiency who were at their third year, the fifth semester of their studies. Their proficiency was determined by the Michigan Test of English

Language Proficiency (MTELP). This study used an experimental design and the participants were randomly assigned to a control group (CG) and an experimental group (EG). The experimental group (EG) of students received metacognitive based- writing instruction, and the control group (CG) only received the routine product approach instruction. A pre-test of writing performance was given both groups of participants in the study. A topic was given to their writing task and they needed to write about 150 words in an essay. After eight weeks of instruction, both groups were post-tested and data were submitted to T-test analysis. The findings of this study revealed the mean score for the experimental group (EG) was $M=10.90$ and the standard deviation $SD=3.673$ whereas the mean score for the control group (CG) was $M=10.70$ and the $SD=3.053$. The results of this study show that the mean scores and the standard deviation did not show any significant difference at the beginning of the study. Meanwhile, both groups took part in a post-test after completing the metacognitive strategy training in which only the experimental group received. The results of the writing between the two groups were compared. The mean score of the experimental group was $M=12.400$ which was significantly different from the mean score of the control group was $M=10.266$ only. This clearly shows that the explicit instruction on metacognitive strategies has greatly impacted the experimental group's writing ability in the post-test and had no effect on the control group's writing ability before or after instruction on the use of metacognitive strategies. As a result, the metacognitive strategies instruction, involving the planning and monitoring stage had improved students' argumentative writing skill compared to the product approach instruction with the control group of students. The experiment group that received metacognitive strategies instruction showed great a effect on their writing performance because the learners were aware of the metacognitive learning strategies and utilised them

consciously. Panahandeh & Asl (2014) the study has stated that metacognitive strategy use gives a positive effect on writing task.

Furthermore, there is another study done by Kodituwakku (2013), who looked into the effect of metacognitive writing strategy use on the native language of Sri Lankan school students although the language focused is not English and the targeted group were high school students. In his study, the results showed that children did not spend time on the planning stage. According to the study, the children immediately started writing as they were given the topic. They did not plan or draft an outline before they started writing. However, in his study, it was also found that the children used only some metacognitive strategies in their planning stage. The metacognitive strategies employed by the students are; they used their prior knowledge and tend to relate to the writing task, seek information, memorize relevant facts, and read to collect information. The present study shows that adult learners are more aware of their learning as compared to children. Students at tertiary level in this study were aware of what they supposed to do, unlike the children who did not conduct a proper planning before writing. They also used their prior knowledge in order to plan their writing. Therefore, from both studies, it can be seen that generally, students do engage their background knowledge and information that they already have and relate them to their writing.

Both groups of learners in Panahandeh & Asl (2014) and Kodituwakku's studies have a common strategy in use which was the use of prior knowledge. Students activated their background knowledge that was related to the question. They might have read some reading materials or relate to their own life experience which may be related to their writing topic, Therefore, students tend to relate to their personal experiences or use the information that they already have and know in order to answer the essay question. However, these two groups of students also displayed differences in their use

of planning strategy. Adult learners were more aware and they took charge of their own learning. Adult learners were able to do some planning and drafting before began writing. The results of the present study indicated that respondents did not start writing immediately. They took at least five to ten minutes to think about their points and ideas to write and planned their structure of writing.

2.8 Related Past Studies on Argumentative Features

There are limited studies were done on argumentative features using Toulmin's way. However, a study was done by Rafik-Galea et al., (2008) that looked at subjects' overall use of Toulmin's elements in writing. Data were collected during a pre-test and post-test. In that study, the first essays were collected from the subjects during the pre-test. Subsequently, the subjects were introduced to six elements of Toulmin. After a series of a training session on the structure of arguments, the subjects were given a post test. The second essays were collected during the post-test after the subjects were adequately exposed to and trained with Toulmin's way of writing an argument. Both pre-test essays and post-test were analysed. The results showed a lot of difference between the mean scores obtained by the students. The subjects wrote better arguments during the post-test after the training.

Another study was done by Greenwald (2007), who looked at the effectiveness teaching students about argument using Toulmin's method of argument. The data were collected from two classes of 48 first-year students who were taking composition course. After five weeks of explanations and exercises teaching argument using simplified Toulmin method. The samples were tested on their ability to identify parts of arguments within an argument and to write an argument based on a case study. Written arguments were evaluated in terms whether the samples were able to write a clear claim, reason, supporting, evidence, warrant and counterargument. Students' performance on

the diagnostics suggests that improvement from the beginning to the end of the unit was minimal. However, students performed better at writing than identifying parts of argument both at the beginning and end of the lesson. Students' reflections which reveal a surprisingly high level of students' confidence that they had made a significant improvement in their ability to identify of an argument. The diagnostics reveal that when asked to write an argument and identify parts of an argument, students handled the concept of a claim much better than reasons and evidence. Comments in the students' reflections affirm that claims are the easiest of the argument components for students to understand.

2.9 Chapter Summary

From the literature review presented, it can be concluded that language learning strategies play a significant role in language learning. The literature review also proves that there are only a few studies that have looked into metacognitive strategies and writing. Therefore, this study aims to investigate the metacognitive strategies used by tertiary students for writing and further look into the argumentative features in students' argumentative essay in the context of high scorers and low scorers.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter provides an in-depth explanation of the methodological procedures used in conducting this study. The topics discussed in this chapter are the research design, sampling and the criteria for the selection of respondents, instruments used; the validity and reliability of the instruments, pilot test, data collection and data analysis procedures as well as the ethical consideration.

3.2 Research Design

This present study adopted a mixed method study which employed both quantitative and qualitative method research instruments. The data collected from the metacognitive strategies questionnaire were analyzed by using a quantitative method while the argumentative writing and interview were analyzed through the qualitative method. Both methods were given equal priority in this study. Results from both quantitative and qualitative methods were combined and interpreted together. The overview of the research design used is presented in Figure 3.1

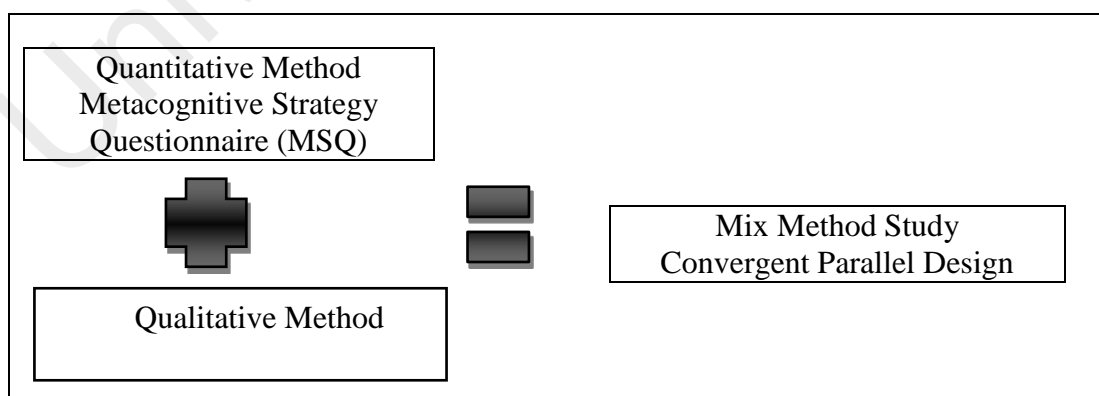


Figure 3.1: Mix Method Study

The mixed method enables the researcher to build on the strengths of both qualitative and quantitative data (Creswell, 2012, p565). The data in the study is gathered using the

convergent parallel design which is part of the mixed method design. According to Creswell (2012) the convergent mixed method design collects both quantitative and qualitative data concurrently, combining the data together and using the results to understand the problem in a research. Creswell (2012) highlighted that the basic rationale for this design being the process of collecting data provides strengths to compensate the weakness of the other method and there will be a better understanding of the results of a research problem from the data collection of both quantitative and qualitative data. The Table 3.1 presents an outline of how the research questions are answered in this study.

Table 3.1: Types of Data to be Analysed to Answer Research Questions

No.	Research Questions	Related Data	Data Analysis
RQ 1	What are the metacognitive strategies employed by tertiary students in writing essays?	Quantitative data gathered from the Metacognitive Strategy questionnaire (MSQ) adapted from Chamot and O'Malley's (1990).	Metacognitive strategies questionnaire is analysed via SPSS 21.
RQ 2	What are the argumentative features found in tertiary students argumentative essays writing?	Qualitative data are coded using Toulmin's Model of Argument (1958) for argumentative essay writing and interview data gathered to further support the qualitative data	Coded argumentative features and data from an interview.
RQ 3	How does the use of metacognitive strategies and argumentative features found in argumentative essays differ between tertiary students with high scores and low scores? (Refer to Chapter 4)	Both quantitative data from Metacognitive Strategies questionnaire and qualitative data from Toulmin Model of argument data gathered to analyse.	The metacognitive strategies and the pattern of the argumentative features found in each group is examined

3.3 The Respondents

The respondents for this study consisted of 50 students of foundation studies from a private college, in Petaling Jaya. These students are age from 19 to 22 years old and they major in fields like accounts, business and law besides English. Most of them were

SPM leavers and a few were older, that is their age is more than 22 years. The majority of them speak their native languages or dialect like Malay, Mandarin, or Tamil, with English as their second language. The respondents' English proficiency is deemed to be at an intermediate level and comprised of a mixed ability group base on English class they enrolled at the institute. The respondents' proficiency level was determined based on their scores in their class test. The respondents claimed that they write in English when responding in Facebook, Twitter, e-mail or chat platforms. These respondents were chosen based on convenient sampling because they were accessible to the researcher. The researcher managed to obtain permission from the instructor to allow her students to participate in the study. All the respondents are enrolled in an Academic Writing class. It is a compulsory course and is to be completed by the students by the end of their foundation studies. 50 students volunteered to participate and they completed the questionnaires after the researcher provided an explanation of the purpose of this study. The participants were then classified as high scorers and low scorers based on their essays scores. These two groups of students' data will to be analyzed to answer research questions three.

3.4 Instrumentation

3.4.1 Metacognitive Strategy Questionnaire

In past studies, one of the most popular research instruments used with regards to metacognitive strategies was the questionnaire. In this study, the Metacognitive Strategy Questionnaire (MSQ) is adapted from Chamot and O'Malley (1990). As Nunan (1992) has asserted, the advantage of a questionnaire is the data more quantifiable compared to discursive data such as free-form field notes, observation notes and interview data. The purpose of using the Metacognitive Strategy Questionnaire (MSQ) is to gain a sense of respondents' perception towards metacognitive strategies that they may employ during

different stages of the writing process especially the before, while and after writing stages.

In general, the respondents were given about 40 minutes to complete the 38 questions. The participants filled out the questionnaire in the researcher's presence. The questionnaire is based on a 5 point Likert scale in measuring the responses ranging from 'never true' to 'always true'. The researcher assisted the participants by explaining the items whenever it was necessary while they were completing the questionnaire. The researcher gave a brief explanation on the purpose of the MSQ and the aims of each section of the questionnaire. This instrument was used to answer the first research question. (Refer to Appendix 1).

3.4.2 Argumentative Writing

An argumentative essay task was assigned to all 50 the students. This task was conducted during the academic writing course. The essays were scored based on two criteria namely content and language. Students were given an hour to write their essays. Writing strategies and argumentative features were taught to the participants in the previous two lessons so that they were exposed to several practices of writing before the actual data was collected. This was carried out to ensure the participants are familiar with argumentative essay writing. This instrument was used to answer the second research question. (Refer to Appendix 3).

The essays were assessed and marked independently by two raters (referred to as Rater 1 and Rater 2). One was the course lecturer and the other rater was the researcher. The written essays produced by the subjects were photocopied and given to the lecturer to assess. The raters were given copies of essays with the names removed. The raters then marked the essays in accordance with the argumentative scoring rubric which can be referred to (Appendix 2).

3.4.3 The Toulmin Model of Argument

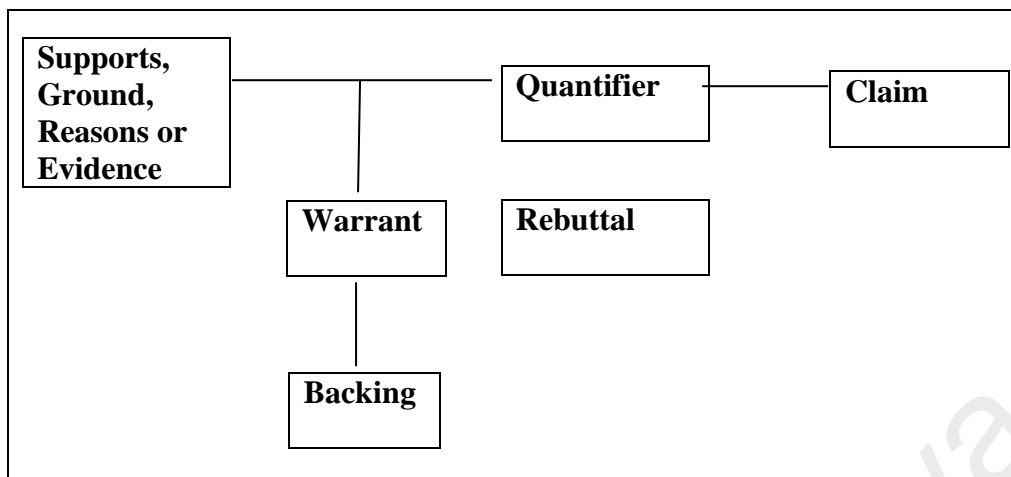


Figure 3.2: Toulmin Model of Argument

Figure 3.2 presents the features of Toulmin Model of Argument. Toulmin indicates three major parts of an argument and another three optional parts of the argument. The three major parts are the claim, the support, and the warrants. The three optional parts are rebuttal, backing and quantifier.

The claim is the main point, the thesis and the controlling idea. The claim is usually directly stated in the introduction paragraph. However, the claim may sometimes be stated in the conclusion paragraph.

Support, ground, reason or evidence is the reasons given in order to support the claim. Support is also known as evidence, proof, data, arguments, or grounds. The support of a claim can come in the form of facts and statistics, expert opinions, examples, explanations, and logical reasoning (Toulmin, 2003).

Warrants are the assumptions or presuppositions underlying the argument. Warrants are generally accepted beliefs and values, common ways our culture or society view things because they are so common place. Warrants are almost always unstated and implied in an argument. The author and audience may either share these beliefs, or the author's warrants may be in conflict with the audience's generally held beliefs and

cultural norms and values. Warrants are important because they are the "common ground" of the author and the audience. Shared warrants between the author and audience invite the audience to participate by unconsciously supplying part of the argument. Warrants are also important because they provide the underlying reasons linking the claim and the support (Toulmin, 2003).

Qualifiers are the words use to qualify or tone down claims with expressions like many, many times, some or rarely, few, possibly because the argument is about probability and possibility, not about certainty, therefore learners should not use superlatives like all, every, absolutely or never, none, no one (Toulmin, 2003).

Rebuttal is the opposition viewpoint. When making an argument, other conflicting viewpoints must be taken into consideration and dealt with fairly. Questions and objections rose in the minds of the audience need to be answered, an argument will be weakened if it is failed to be answered and subject to attack and counter-argument. Sometimes rebuttal will be directed to opposing claims or else the rebuttal will be directed at alternative interpretations of evidence or new evidence (Toulmin, 2003).

Backing is the evidence given to support a warrant. Sometimes the warrant itself needs evidence to support it in order to make it more believable, to further "back up" the argument (Toulmin, 2003).

3.4.4 Argumentative Writing Scoring Rubric

The argumentative essay scoring rubric was adapted from several academic writing scoring rubrics (Allen, 2009 & Facione & Facione, 1994). The scoring rubric was moderated by the researcher as well as the lecturer. The researcher adopted a scoring rubric for this study based on several examples. The researcher also referred to a scoring rubric that the lecturer usually uses for her marking. Before finalizing the scoring rubric

the researcher discussed with the lecturer regarding the allocation of the marks and the criteria needed to be assessed in the argumentative essay. (Refer to Appendix 2).

3.4.5 Semi Structured Interview

The researcher conducted a semi-structured interview in this study. Eight students were interviewed where 4 were from the high scorers' group and other 4 were from the low scorers' group. Semi-structured interview promotes a two-way communication between the interviewer and interviewee (Amujo, 2009) (cited in Christine, 2010, p.47). It is non- intrusive and therefore, the interviewee will feel more comfortable to talk about sensitive issues. The feedback from the semi-structured interview provides not only answers to questions but also the reasons behind it. Moreover, the interviewer can pursue in-depth information on the topic discussed. This instrument was used to answer research question three. (Refer Appendix 4).

3.5 Pilot Test

A pilot study was carried out with 30 Intermediate English learners. The 30 undergraduates were from a biomedical course and they were asked to respond to the Metacognitive Strategy Questionnaire (MSQ). The participants voluntarily participated in the pilot test. The participants also were informed that they would not be penalized in any way if they decided not to participate in the pilot test. The participants were given a short briefing regarding the questionnaire. They were given 40 minutes to complete the questionnaire. The participants also provided feedback regarding the questionnaire items which allowed the researcher to conduct some corrections.

During the piloting stage, it was found that the original questions were too lengthy, therefore most of the questions in the questionnaire were reduced in length and reworded to improve comprehension. Besides that, a section on participants' demographic questions was added. The demographic questions consisted of items

related to participants' age, gender, ethnicity, the primary language used, the highest level of education, the language used the most and the amount of much personal writing done in English.

Originally, the questionnaire consisted of 40 questions. Upon completing the pilot stage, it was reduced to 38 questions because two questions were found to be confusing and needed to be removed. Furthermore, in order to allow the respondents to relate to the items, the tense used in the questionnaire was changed from past tense to present tense. For instance, the researcher made changes to the past tense regular word used in the questionnaire. The researcher also re-worded some of the items in the questionnaire (used for the final data collection phase) and the questionnaire was modified. For example, the original questionnaire was focused on reading skill, however for this study most of the items were reworded because this study is focused on writing skill. Finally, a final version was produced and used in the present study.

3.6 Data Collection Procedure

Figure 3.3 presents the layout of the processes involved in data collection and data analysis in this study. The first part of the flow chat describes the procedure involved in order to obtain permission from the course lecturer and the students to conduct this study. Next, the researcher obtained the written permission from the lecturer and students before collecting the data from them. A pilot study involving the Metacognitive Strategies Questionnaire (MSQ) was conducted earlier with 30 biomedical students from the Faculty of Biomedical. The problems encountered during the pilot study of the MSQ were addressed before the questionnaire was administered to the actual participants of this study.

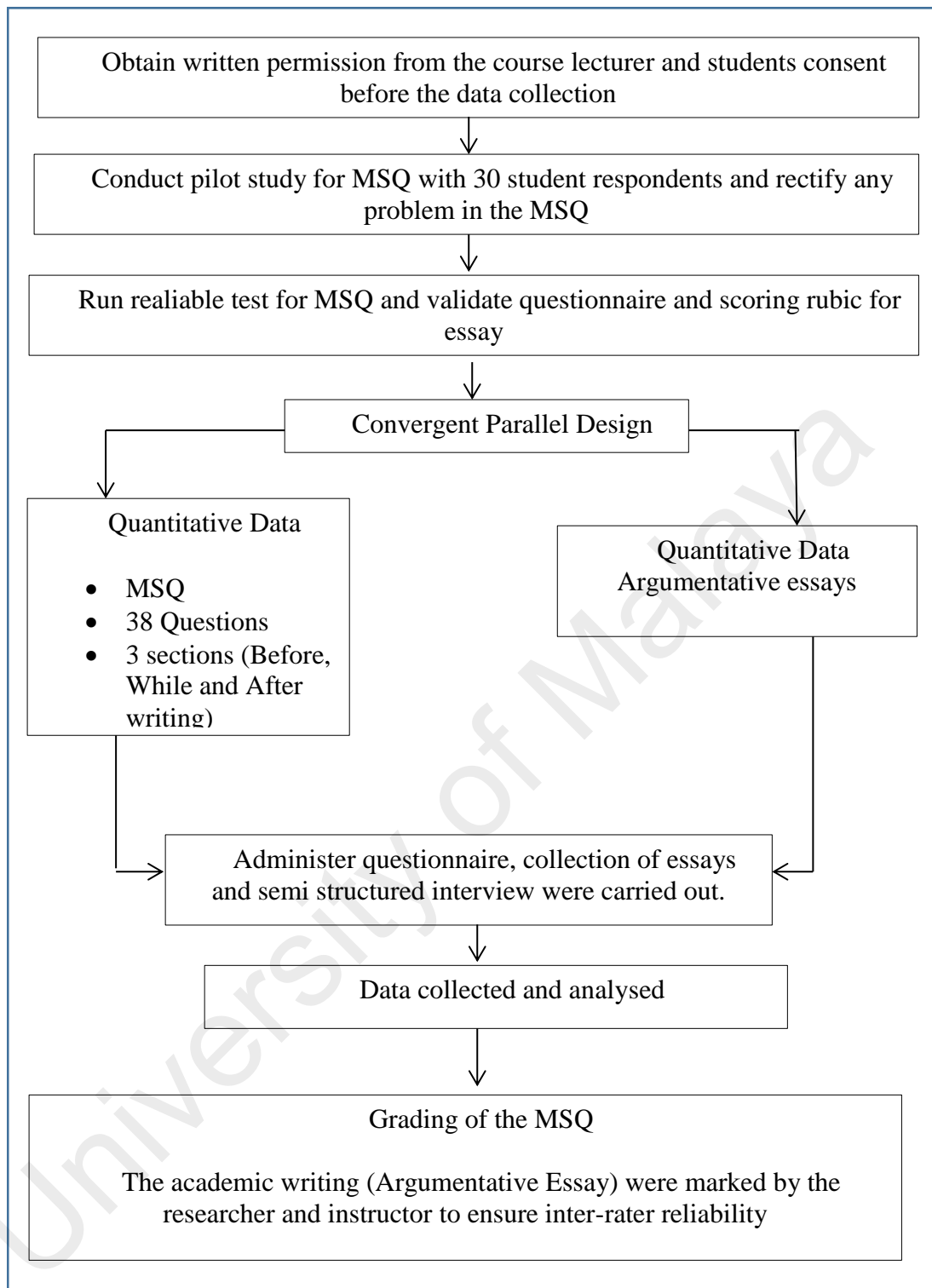


Figure 3.3: Flowchart of Data Collection Phase

This study adopted the mixed method research design. The convergent parallel design is used in this study, with the quantitative data being obtained from the MSQ. The data collection for this study commenced after the pilot study. The quantitative data

was obtained from the MSQ (Appendix 1). An additional time of 10 minutes was allocated to provide the necessary explanation to the participants before administering the questionnaire. Following this, the MSQ was administered to 50 participants from the School of Foundation Studies. The participants were given 40 minutes to complete the questionnaire.

After completing the questionnaire, the participants were required to compose an argumentative essay as the class activity. They were given an essay topic on argumentative writing. The time frame allocated for the participants to complete the essay was one hour. The qualitative data were obtained from the argumentative essay of the participants of this study. 26 scripts of argumentative essays were selected and analysed to identify the argumentative features produced by the participants of this study based on Toulmin model of argument. Semi-structured interview was carried out with 8 respondents from both the high and low scorers groups. Each group consists of 4 respondents. Semi-structured interview was conducted in order to get further information on the strategies used for writing and also the argumentative features produce in the essays from two different groups of students.

3.7 Ethical Issues

The procedures for the data collection in this study began with seeking permission to conduct this study in a private university. The researcher contacted the course lecturer to inquire about the protocol to apply for permission to conduct research in the private university via email. The researcher then contacted the lecturer of the Academic Writing course via email to make arrangements for the data collection. The data collection commenced after obtaining written permission from the lecturer of the private university. All participants were required to fill out the consent forms where they stated their agreement to participate voluntarily in the data collection process conducted by the

researcher. The results obtained from the questionnaires and the argumentative essays in this study remained confidential and are only accessible to the researcher.

The researcher also took necessary steps in seeking permission from the participants to conduct the interview session. Each respondent was required to fill out the consent form and their personal details were collected. They were well informed about the purpose and procedures, risks and benefit of the study and were encouraged to ask any questions at any time about the nature of the study and the method used. The participants' real names were not revealed instead pseudonyms were used in all verbal and written records and reports. Audio taping was carried out upon obtaining permission and the participants were also told that their participation in this research is voluntary and they had the right to withdraw at any point of time during the study.

3.8 Data Analysis

The use of metacognitive strategies by the participants as indicated in the questionnaire will be analysed using a statistical tool, for example, SPSS version 21 software. Qualitative data will be coded base on the Toulmin's model argumentative features (1958) using Nvivo version 9 software. Data for the study were gathered from questionnaires and argumentative essays.

This study employed three different research instruments. First, the Metacognitive Strategies Questionnaire (MSQ) was to investigate the types metacognitive strategies used. Next, the argumentative features in the academic writing of ESL tertiary students. Lastly, the semi-structured interview was to obtain further information to support the analysis. The data analysis commenced after the completion of the data collection process. The data was analysed to answer the three research questions in this study. The following sections present the data analysis of the MSQ and the argumentative essays.

3.8.1 Descriptive Statistical

Responses from the questionnaire were analysed to determine the types of metacognitive strategies used by students when writing. The data obtained was analysed to categorize the types of strategies that students used. In order to answer research question One, SPSS 21 was used to run the descriptive statistics for the questionnaire data. The types of strategies used were analysed in percentage and the mean value according to each stage of writing. The findings also reveal the most and the least frequently used types of metacognitive strategies by the students in three stages of writing, namely the before, while and after writing. To answer research question three the different types of metacognitive strategies used by high scorers and low scorers which contribute to their argumentative writing was examined.

3.8.2 Argumentative Writing Analysis

The essays were analysed to determine the argumentative features used by the students in their essays. The features found in both group of scorers namely the high scorers and low scorers were coded in Nvivo 9. The results of the analysis were used to answer research question two and three. Research question two looks at the overall argumentative features found in the 26 essays and seeks to identify the argumentative features students produce in their writing. Meanwhile, for research question three students were divided into two groups the high scorers and low scores. Here, the researcher would identify the difference between these two groups of students in producing argumentative features in their writing.

The essay scores of the participants were ordered from the highest to lowest by the researcher after the first marking was done. Total marks given for the essay question was 100% therefore, students who scored above 50 were the high scorers whereas the students who scored less than 50 were low scorers. Those of who were located in the

upper quartile (25%) which equals to the first thirteen highest essay scores were selected by the researcher. Likewise, thirteen of the lowest essay scores representing the lower quartile (25%) were also selected by the researcher. Altogether the researcher had 26 essays out of a total of 50 essays. Marks from the researcher and the course lecturer were averaged to obtain the final scores.

3.8.3 Interview Analysis

This section describes how the responses from the semi-structured interview sessions were analysed. Altogether 8 students were interviewed where 4 were from the high scorers' group and other 4 were from the low scorers' group. Findings from semi-structured interview were used to answer research question three. The purpose of a conducting a semi-structured interview in this study is to obtain a closer and in-depth view of the students on the metacognitive strategies used and on argumentative writing that they have completed for this study. Before starting the interview session, the researcher had initiated small talk with the participants in order to achieve rapport. The participants were told that they can use other languages like Bahasa Melayu and Tamil. However, many spoke in English during the conversation. This could be because they perceived the researcher (interviewer) as an English instructor. Therefore, the participants might have felt it was more appropriate to converse in English. The recorded conversation was coded using Nvivo 9.

3.9 Interater Reliability

The purpose of the pilot study is to refine and establish the reliability and validity of the instrument. The reliability test for the content validity showed that the index reading average achieved 8.43 in Cronbach's coefficient α , which indicates that the instrument is deemed reliable. Creswell, (2012) defined inter-rater to be a procedure that is carried out when making an observation of 'behaviour which involves observation made by two

or more individuals on an individual's or several individuals' behaviour' (p. 161). The observers record their scores of the behaviour and then compare scores to see if their scores similar or different (Creswell, 2012, p.161).

The argumentative essay scripts were photocopied and distributed to the researcher and lecturer. The researcher and lecturer who had experience in teaching academic writing received 26 argumentative essay scripts which were graded according to the argumentative writing marking rubric. The results of the essays graded by the researcher and lecturer were compared at the end of the marking session in order to determine the level of agreement between the researcher and lecturer in awarding the grades for the argumentative essays. The difference in marks given by both the researcher and lecturer is deemed minimal, which ranges between 2 to 3 marks. This shows that the researcher and the lecturer are objective in their marking in order to determine the students' essay scores.

3.9.1 The Instructor

The English lecturer who participated in this study has more than 30 years of experience in teaching the English language. She has been teaching TESOL, IELTS, Business English, General English and Legal English. She has also taught teacher trainees. She has worked as a language trainer in the New Straits Times and she has also given language training in the corporate sector. She works as a lecturer in the Developmental Psychology and Autism Department.

3.10 Triangulation

Triangulation can be carried out in both quantitative and qualitative studies. In the qualitative study, triangulation is conducted to ensure the validity and credibility of the result. The researcher in this study triangulates the data from the questionnaire, argumentative essays and interview. This was done to avoid inconsistency of data and to

obtain an accurate evaluation. The interview sessions provide relevant information that further supports the findings on the use of strategies and the argumentative features produced. Through interview sessions, the researcher was able to inquire in-depth information which otherwise could not have been obtained from the survey and essays.

3.11 Chapter Summary

This chapter described the research design and method used in this study. This study was conducted using the mixed methods approach. The convergent parallel design was adopted in order to answer the research questions. Furthermore, this chapter also presents details of the data collection procedure in order to identify the strategies used and the argumentative features produced by students in this study. The data analysis which involved using statistical software SPSS 21 and the frequency coded for argumentative features using Nvivo 9. The survey and the interview session conducted further have successfully helped the researcher to answer the research questions. More details on results and findings will be discussed in the following chapter.

CHAPTER 4: RESEARCH RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the research findings from the analysis of the data collected involving participants from the School of Foundation Studies at a private college in Petaling Jaya, Selangor. This chapter also discusses the results and interpretation of the Metacognitive Strategies Questionnaire (MSQ), the argumentative essay and also from the interview sessions. As explained in chapter 3, triangulation is used in this research to check the data from multiple data collection sources.

This chapter consists of three sections and it answers the three research questions in this study. The objectives of the study are to investigate the metacognitive strategies employed by students in academic essay writing and to investigate the argumentative features found in their argumentative essays. This study aims to investigate the use of metacognitive strategies and the argumentative features by different groups of students namely, those with a high score and low score essays.

The first research question addresses the types of metacognitive strategies employed by students in writing essays. Meanwhile, the second research question seeks to determine the argumentative features found in students' argumentative essays. Finally, the third research question determines the different types metacognitive strategies used for writing and the argumentative features found in tertiary students' argumentative essays by high scores and low scores.

The Statistical Package for Social Sciences software SPSS 21 is used to analyse data obtained through the Metacognitive Strategies Questionnaire (MSQ). As mentioned in chapter 3, the participants are divided into two groups, the high scorers' and low

scorers' based on the essay marks that they have obtained. The next section will discuss findings of the three research questions.

4.2 Data Analysis: Research Question One

What are the metacognitive strategies employed by students in writing essays?

The first section of this chapter aims to investigate the metacognitive strategies used in writing by the respondents. The data used to answer this research question was collected using the Metacognitive Strategies Questionnaire (MSQ) for writing. The table below shows the overall percentage and mean scores obtained from the MSQ. The overall scores for each strategy were divided with the number of question for each category to arrive at the mean scores. This was done for all different strategy groups. Strategies with the average mean score of 3.5 and above were regarded as preferred metacognitive strategies used by the participants. The results were divided into three sections based on the stages of writing which are before writing stage, while writing stage and after writing stage. The first stage is known as the before writing stage or the planning stage.

4.2.1 Before Writing Stage (*Planning Stage*)

Table 4.1: Overall Percentage and Mean Scores for before writing stage

Items	Content	Total % (N)	Mean Score	Metacognitive Strategies
1	I consider the previous success with similar writing and identify the purpose of the assigned task(s).	36% (18)	3.28	Advance Organizer
2	I recall what I already know to get a general idea about the current task.	79% (41)	4.1	
3	I read through the topic carefully, so I can understand what to do.	94% (47)	4.58	
4	I try to plan the contents of my writing from the title.	70% (35)	3.36	
	Advance Organiser	71%	3.83	
5	I will come up with a list of *writing strategies I will probably to use.	36% (18)	3.24	Organizational Planning
6	I go through the outline first and concentrate on what I will write next.	58% (29)	3.7	
7	I read the question or instruction before writing.	90% (45)	4.62	
	Organizational Planning	61%	3.85	
8	I determine on the main points that I will pay attention to, such as the topic sentence, and the sentence structure.	70% (35)	4	Selective Attention
9	I recall my weak points in writing and try to be aware of them when writing.	42% (21)	3.56	
	Selective Attention	56%	3.78	
10	I plan the main points before writing.	68% (34)	3.88	Self Management
11	I allocate the main points in the specific paragraph of writing because I think it is easier.	58% (29)	3.72	
	Self Management	63%	3.80	

The table 4.1 shows the percentage and mean score obtained for the before writing stage. There were altogether 11 items and four types of metacognitive strategies for the planning stage. There were 4 items for the advance organiser. There were 3 items for organizational planning, 2 items for selective attention and self-management. The types of metacognitive strategies used by the students the most were the advance organiser which obtained 71% of always true with a mean score of 3.83.

For advance organiser strategy, most of the students answered 94% of always true for item No. 3, “I read through the topic carefully, so I can understand what to do.” and the mean score was 4.58. The least used strategy by students was item No. 1, “I consider the previous success with similar writing and identify the purpose of the assigned task(s). 36% students answered always true. The mean score was 3.28. This suggests that not many students were able to relate the success of a previous task with the current task.

This could possibly be because students were not adequately exposed to sufficient writing activities. Due to a lack of writing activities, there are high possibilities for students to be unable to connect to the success of the previous task with the current task.

Followed by the next type of metacognitive strategy used by students were self-management strategies obtained 63% of always true and the mean score was 3.80. The most frequency used strategy for self-management was item No.10, “I plan the main points before writing which obtained 68% always true and the mean score was 3.88. The least frequency strategy used by the students were item No.11, “I allocate the main points in the specific paragraphs of writing because I think it is easier” which obtained 58% of always true with mean score 3.72. This shows that students do plan or brainstorm their main points before they start writing, however the students do not really have the plan to allocate the points according to the paragraphs of writing. This is because students are usually given 5 to 10 minutes to plan their points before they start writing and they are supposed to complete their writing in the stipulated time give so they do not afford to spend more time on planning the points for the essay writing.

Besides that, the organizational planning strategy obtained 61% of always true with a mean score of 3.85. The most frequency used strategy for organizational

planning strategy was obtained by 92% always true for item No. 7, which is “I read the question or instruction before writing.” where the mean score was 4.62.

It appears that most students read the question, instruction and the topic carefully to ensure that they had an idea of what the question required them to do. They also indicated that they made the attempt to understand what the question requires so that they do not digress from the given topic. This may be related to the method in which essays are taught in schools. Since primary school, students were always trained to read and understand the questions or instruction given first before writing. At school, the instruction in the exam question requires students to read the essay question carefully before start writing. Therefore, this has become a norm for students to read carefully and understand the questions in advance before they plan the content.

This is also followed by 36%, who answered always true to item No.5, “I will come up with a list of *writing strategies I will probably to use.” The mean score was 3.24.

This indicates that most of the students seem do not to think of appropriate strategies before writing. This may be because students were more focused and concerned on the content of the essay rather than on the process of writing the essay. Similarly, students tend to pay more attention to what they need to write in the content rather than how to go about the whole writing process.

Meanwhile, as shown in table 4.1, the least frequency of strategy used for before writing stage by students was selective attention strategy which obtained 56% of always true where the mean score was 3.78. For selective attention strategy, the most used strategy was item No. 8 “I determine on the main points that I will pay attention to, such as the topic sentence, and the sentence structure.” which obtained 70% always true and mean score was 4. The least strategy used for selective attention was for item No.9 “I

recall my weak points before writing” which obtained 42% always true with mean score 3.56

4.2.2 While Writing Stage (*Monitoring Stage*)

Table 4.2: Overall Percentage and Mean Scores for while writing stage

Items	Content	Total % (N)	Mean Score	Metacognitive Strategies
12	I write first for the general ideas.	58% (29)	3.68	Comprehension Monitoring
13	I pay selective attention to the information predicted and required in the writing.	58% (29)	3.74	
14	I read through my writing in the earlier paragraph and predict what to write in the next paragraph.	70% (35)	3.94	
15	I can find ways to overcome the problems when I get stuck with difficult words.	38% (19)	3.34	
16	I can concentrate on my writing even when there are many distractions around me.	36% (18)	2.94	
17	I can refocus my concentration on writing although the task I'm writing and doing is difficult.	42% (21)	3.18	
18	I elaborate on selected ideas from the listed ideas generated before writing.	50% (25)	3.56	
19	I avoid writing words or sentences I do not understand.	68% (34)	3.88	
20	I focus on one specific goal at a time. For example, first I focus on general idea of the writing. Next, I write for the supporting ideas of the writing.	72% (36)	3.9	
21	I keep writing even when I face difficulty and I constantly check my writing.	52% (26)	3.64	
22	I monitor my writing speed according to the given time and length of writing.	52% (26)	3.38	
23	I use *writing strategies to produce better writing.	32% (16)	3.12	
	Comprehension Monitoring	52%	3.25	
24	I can write according to the instruction give	62% (31)	3.74	Production Monitoring
25	I think of ways to solve my writing problems even the difficult ones.	42% (21)	3.54	

26	I ensure my writing is clear from the beginning to the end of the writing.	48% (24)	3.52
27	I choose appropriate *writing strategies to overcome my writing problems.	52% (26)	3.6
28	I change the *writing strategies if the strategies cannot fulfill the writing task.	48% (24)	3.58
	Production Monitoring	25%	3.6

Table 4.2 shows the percentage and mean score obtained by two types of metacognitive strategies in while writing stage, namely comprehension monitoring and production monitoring also known as monitoring stage. There were 18 items for while writing stage. There were 12 items for comprehension monitoring and another 6 items for production monitoring.

The results showed that for the while writing stage, the most frequency used strategy was for comprehension monitoring with 52% of always true and the mean score 3.25. For comprehension monitoring strategy, 72% of the students answered always true with the mean score of 3.9 for item No. 20, “I focus on one specific goal at a time. For example, first I focus on general idea of the writing. Next, I write the supporting ideas of the writing.

This seems to suggest that, in while writing stage students paid attention to the choice of words and sentence they make because they want to make sure that the ideas that they presented should be able to make sense to the reader. They also focus on specific goal at a time which means they complete their writing goal. This shows that students tend to organise their writing.

Moreover, 32% answered the least frequency for item No.23, “I use *writing strategies to produce better writing.” and the mean score was 3.12. This shows a number of students are not able to use proper strategies to produce better writing. This could be

because students are not aware of the type of strategies that they can utilise for writing and they are not adequately exposed to the strategies which they can implement in order to produce good writing.

Besides that the results showed that, for while writing stage, the least frequency used strategy was the production monitoring. Production monitoring is the least frequency used strategy with 25% answered always true and the mean score obtained 3.6. This is followed by 62% of students who answered always true for item No.24 “I can write according to the instruction given.” and the mean score was 3.74 whereas the least frequency used strategy by the students is item No 25. “I think of ways to solve writing problems even the difficult ones.” which obtained 42% of always true and the mean score 3.54.

This finding was further supported when students were interviewed, and they asserted that they are not sure of writing strategies. They heard about the term writing strategies, yet they did not have any proper guidance or input given on what are the writing strategies or what are the strategies they should use which will help them in their writing. They also added that they have never experienced their tutors taught the importance of writing strategies or advise them to use writing strategies in order to produce better writing in any of their writing classes.

Based on Koditiwakku, (2008), for the while writing stage, the students were aware that the writing is an ongoing activity. Therefore, while writing, they thought about writing and they made decisions on paragraphing and content organising. They self-monitored their writing as they write and also reflect on their writing task. All these strategies seem to enable them to identify the places where revision was necessary and also enabled them to edit their written work accordingly. Similarly, in this study tertiary students were careful when they paragraph. They made sure they read their earlier

paragraph and made decisions for the next paragraph in order to keep their writing coherent. Students also tend to avoid difficult words and sentences as they write this is because they encounter difficulties in delivering their ideas. They self-monitored their writing to make sure the choice of words and sentences they used help them to deliver their ideas well in their writing. The following table will discuss the last stage of writing, the after writing stage also known as the post writing stage.

4.2.3 After Writing Stage (*Evaluation Stage*)

Table 4.3: Overall Percentage and Mean Scores for after writing stage

Items	Content	Total % (N)	Mean Score	Metacognitive Strategies
29	I realize that my major concern relates to my understanding of accomplishing the writing.	58% (29)	3.4	Self Assessment
30	I monitor my *writing strategies in terms of whether the strategies are helpful for the writing process.	42% (21)	3.78	
31	I discuss with my classmates about the difficult points and ex-changing ideas to improve writing.	54% (27)	3.38	
32	When I evaluate my writing I review my writing plan.	40% (19)	3.66	
	Self Assesement	48%	3.5	
33	I refer to the writing goal to check if I achieve it.	52% (26)	3.28	Self Evaluation
34	I set future writing goal such as more coherent writing (making sure points are clear) based on the success in the current task.	46% (23)	3.42	
35	I use the characteristics of good writing as criteria to evaluate my own writing.	52% (26)	3.6	
	Self Evaluation	50%	3.43	
36	I spend time to motivate myself to improve my writing even I am not good in writing.	50% (25)	3.8	Self Reflection
37	I reflect on my writing performance.	62% (31)	3.62	
38	I recall and review the *writing strategies to see what can I maintain or change to improve my writing in the future.	58% (30)	3.7	
	Self Reflection	64%	3.71	

Based on the table 4.3 above, the table shows the percentage and mean score obtained by three types of metacognitive strategies in after writing stage, namely self-assessment, self-evaluation and self-reflection also known as evaluation stage. There were 10 items for while writing stage. There were 4 items for self-assessment, 3 items for self-evaluation and another 3 items for self-reflection.

The data showed that the highest frequency used strategy is self-reflection by the students which obtained 64% with mean score 3.71. The most strategy used for self-reflection which obtained 62% with the mean score 3.62, students answered always true for item No.37, "I reflect on my writing performance."

It appears that the students do reflect on their writing as they carry out self-monitoring and self-reflecting. The purpose for students to reflect on their writing is to see whether they are progressing in their writing performance. They also make sure the strategies they use do assist them in improving their writing performance.

This can clearly be seen when the interview was conducted. A few students agreed that they will reflect on their writing because consciously they think of their writing and also double check when they write the points or they present their ideas clearly. This is also because students are worried and they are more concerned about the marks that they were about to get after that. Meanwhile, some students said that once they have submitted their writing they forget about everything that they had written on the paper, therefore, there is no room for self-reflection on their writing after they have completed their writing.

As for self-assessment, the percentage obtained for this strategy obtained 48% of always true and the mean score 3.5. 58% of the students answered always true for item No. 29, "I realize that my major concern relates to my understanding of accomplishing the writing" the mean score is 3.4. This suggests that the students frequently monitor

their use of learning strategies in order to have consistent and reliable strategies in writing. The least frequency obtained for item No. 30, "I monitor my *writing strategies in terms of whether the strategies are helpful for the writing process" with 42% of always true and mean score 3.78.

Furthermore, for self-evaluation the percentage obtained 62% always true for item No. 37 "I reflect on my writing performance" with means score 3.63 and followed by 50% of students answered always true for item No. 36 "I spend time to motivate myself to improve my writing even I am not good in writing. The result shows that the students do reflect on their writing performance once they are done with their writing but these students also have issues in keeping them motivated to excel in their writing performance. This is because writing is not an easy task it takes a lot effort and time to master a good writing skill. Students tend to get demotivated as they are not given proper guidance and encouragement. Meanwhile, other issues such as command of language, writing style, writing format, mechanics of writing, grammar and adequate practice play a vital role in keeping students motivated although they are not good in writing.

According to Kodituwakku's (2008) study, the children did not seem to show any metacognitive strategies usage of this stage. They do not know to self-evaluate and organize their writing. As a whole, self-regulation could not be found in his study among the school students. However, in this study, since the respondents are adults, they were able to do self-regulation during their writing performance. This shows that students use self-reflection strategy in their writing in order to improve their writing. Adult students answered that they will reflect on their writing performances and also review the strategies that they have used in order to improve their writing. By self-reflecting on their writing, students are able to self-learning and self-evaluate their own writing process. Adult students were able to take charge and be responsible towards

their writing process and through this, they are able to self-monitor and refrain from making a lot of mistakes in their writing. It seems when the adult learners use self-monitoring strategies.

There is another study done by Razi (2014), which is an investigation into the use of metacognitive strategies by Turkish Cypriot University students. This study focused on the use and awareness of metacognitive strategies in relation to the writing skill. Data collection was done through mean score for quantitative data, whereby students were given questionnaires and for the qualitative data, the researcher interviewed the teacher. The findings of this study revealed that less than half of the participants used and were aware of metacognitive strategies. Although teachers mentioned such strategies during the lesson, less than half of the 250 participants used strategies or had awareness of them.

4.3 Data Analysis Research Question Two

What are the argumentative features found in students argumentative essays?

The second research question aims to investigate the argumentative features found in argumentative essays. The data used to answer this research question was collected from the students' argumentative essay. The 26 essays were analysed with the Nvivo 9 software for this qualitative data.

There are six parts in Toulmin's argumentative model (2003). Toulmin indicates three major, necessary parts of an argument, along with three additional, optional parts. The three major parts are the "claim", the "support", and the "warrants" and other optional parts are "quantifier", "rebuttal" and "backing".

In general, based on respondents' argumentative essay writing, the argumentative features that can be found based on Toulmin model of argumentation

were “claim,” “support” and “warrant.” It seems that most of the respondents were able to make a stand or “claim” to their argument on whether they agree or disagree with the given essay topic. For example, student 012 stated that,

“Today having time saving devices in our homes is not a new thing any longer time saving devices are devices which help people work faster, save time or even replace human strength. Despite the help of time saving devices, people now work harder and longer. I myself think that it would be better for people to work less and have more leisure time.”

Most of the claims also are clearly stated in the first paragraph as a thesis statement of the argumentative essay. For example, student C004 stated,

“In my opinion, I suggest and feel that people are advised to work less and have more leisure time. The reason why I’m stating as such is because people are forced to work till late night.”

There were also respondents who were not able to write claim in their own words and they tend to repeat the essay question as a claim. For example, student C023 stated that,

“Statistic has proven that almost 70% of the current generation are reliable on leisure time compare to working harder. Some had been pampered by their parents due to that they do not know the pros and cons.”

The table 4.4 shows the frequency of argumentative features coded from the students' essay.

Table 4.4: Frequency Coded of Argumentative Features

Argumentative Features	Coded Frequency
Claim	30
Support	68
Warrant	26
Backing	24
Rebuttal	18
Quantifier	43

The table above shows an overview of the coded frequency from 26 argumentative essay scripts that were collected from the students. The finding from the coding shows that students stated 30 occurrences of claims, 68 occurrences of supports, 27 occurrences of warrants, 24 occurrences of backings, 18 occurrences of rebuttals and 43 occurrences of quantifiers.

The students seem to have the basic knowledge of writing argumentative essays. This suggests that a majority of the students were aware that when they state the main point in their argument, their points should always be supported by some “support” or “evidence”. Therefore, most of these students were able to provide elaboration to the points that they had stated. Students were also able to give two to three main points to support their claims. The main points form the “support” to support their claim. This shows that students possess the basic knowledge of writing an argument since they were taught this in school.

The table 4.4 above clearly shows that the “claim” and “support” can be found in their essay and for the optional part “quantifier” can be found in their essays. Meanwhile, the other features like “warrant”, “rebuttal” and “backing” can be found in their essays. Moreover, from analysing the essays it clearly shows that students were

complied with the instructions to write five paragraphs of argumentative essays. However, there are also a few students, especially the ones with low essay scores who could not write five paragraphs of essays because of a poor command of the language. Thus, these students were not able to elaborate further and extend their writing on the given point.

Moreover, weak students tend to write two to three points into one paragraph instead of writing one main point in one paragraph and discuss further regarding that point. This was further supported by the students during the interview session. Students tend to do that because they believe that if they are able to write as many points as they can, that will contribute to their marks. These students also mentioned that they do not know how to differentiate between the main points and supporting points. Therefore, they tend to write many points and write down several points in one paragraph without organising their ideas. They also have problems in explaining and elaborating the point further because the lack of the background knowledge and experience on the topic discussed. Another problem they face in writing is due to their language barrier, poor proficiency and limited lesson for academic writing especially argumentative essays.

Most students were aware of the pattern of writing a proper paragraph whereby they present the main point and give supporting details and elaboration on it, which enables students to write a complete paragraph. As for claims, most of the students were able to state a claim for their essay whether they agree or disagree with the given topic. The students also were able to provide “support”, “warrant”, and “backing” as supporting details to the claim they have stated in their essay. However, in providing a rebuttal as a part of counter-argument, only a few students were able to state rebuttal in their essay. This indicates that, students were not adequately trained or maybe there was a lack of practice in writing an argumentative essay that requires counter-arguments.

Students also were not aware and familiar with the Toulmin way of writing argument although they had been taught about the use of Toulmin model features in argumentative essay writing in their few classes before conducting the study. This is because they did not adequately practice in writing argumentative essays based on Toulmin way in their English lessons. They also have been practising and following the basic way of writing argument as it was taught in their schools for years, therefore they were prone to write according to the way of writing an argument that they were familiar with because in schools they do not really emphasize on Toulmin's way of writing an argument.

In answering research question three, the frequencies coded will be differentiated between two groups of student base on the essay scores. These students were categorized into high essay scores group and low essay score group. The next section will present the results and discussion of research question three.

4.4 Data Analysis Research Question Three

How does the use of metacognitive strategies and the argumentative features found in argumentative essays differ between students with high scores and low scores?

The third research question aims to investigate the difference between two groups of students, namely, the students who obtained higher scores and low scores in their argumentative essays. These students were selected based on their scores in the overall argumentative essays collected. Students' essays were marked and given scores. The students' were selected from two different groups. The first group of students were the high scorers. They were chosen based on the upper quartile (top 25%) of students who obtained higher scores (13 students), whereas the second group of students were those with the lower scores. They were chosen from the lower quartile (lowest 25%)

and comprised 13 students also. In short, each group consisted of 13 students whereby a total of 26 of essay scripts were analysed.

The table 4.5 below shows a comparison of the frequency coded for argumentative features in the essays of two groups of students, namely, the high scorers and low scorers. The table shows that for “claim”, the high scorers coded 25 “claims” where else the low scorers coded 15 “claims”. This shows that there is a difference in the frequency coded for “claims” for both high and low scorers. This is because the high scorers are better in writing their claim and stating their stand firmly and clearly in argumentative essays as compared to low scorers. Low scorer students’ “claims” were not clear and not strong enough to support the topic that they discussed in their essay, therefore it was difficult to identify and locate their claims.

As for “support”, the high scorers coded more support in order to support their claims which were 50 however, low scorers they only coded 18. There was not much evidence was given by the low scorers in their essays to support their claim. Low scorers are unable to provide more evidence because they do not really know the difference between “claim” and “support”. Their “claim” and “evidence” look more or less the same. For example student, C022 stated that

“Nowadays in the 20th century most people are working harder and longer hours in work to gain a living in life. Unfortunately, many people aren’t higher salary despite working longer hours.”

Generally, low scorers provide one to two points and they give examples. Low scorers need to learn the difference between claim and evidence. They tend to get confused between them. For example student, C023 stated that

“Why do people work? People work to ensure they receive sufficient amount of salary to run their life in the current economy. People tend to work more which

causes them a lot of defect to become a brilliant worker. Due to this, people don't have good time to carry out their type of activities. In my opinion, I suggest and feel that people are advised to work less and have more leisure time."

Meanwhile, for "warrant" and "backing", high scorer coded 20 for each and low scorers coded 6 for "warrant" and 4 for "backing", respectively.

Moreover, for "rebuttal", high scorers were able to give some rebuttal in their essay as much as 18 but for low scorers there are none. Last, for "quantifiers" for high scorers they have coded more which is 30 and for low scorers just coded 13.

Table 4.1: Frequency coded for Argumentative Features between High and Low Scores

Argumentative Features	High Score Essays	Low Score Essays
Claim	25	15
Support	50	18
Warrant	20	6
Backing	20	4
Rebuttal	18	0
Quantifier	30	13

Most high score students were able to state their claims clearly in their essays. For example, student, C015 stated that,

"In my personal opinion, I feel that working less and have more leisure is better compared to working harder and longer."

It seems that, students were able to give support to support the claim they have asserted. For instance, student, C004 stated that,

"People who work less and have more leisure time can reduce stress."

This suggests that most of the high score students were able to write “warrant” and “backing” to their argument. Most high score students also were able to use various quantifier words like many, most, all, less, and fewer.

In comparison, not all low score students were able to write a strong “claim” for their argument, For example, student C036 asserted that,

“We supposed not to work hard until we don’t have time for our family, friends, loves ones and also ourselves.”

This looks like, students who were not able to write a “claim” tend to re-state the question or write a vague claim. For instance, student C030 asserted that,

“People are working harder and long, this having less leisure time in their lives. It would be better for people to work less and have more leisure time.”

This student seems to be merely repeating the statement in the question. So, it seems to indicate that, the low score students also were not able to give relevant and strong evidence to support their claims. “warrant”, “backing”, and “rebuttal” were also not clearly stated or differentiated by the low proficiency students. “Quantifiers” used by low proficiency students were almost the same and repetitive such as the term “many”, “more” and “less”. These low scorers’ students seemed to have less knowledge of the way of writing a proper argumentative essay. These students are not familiar with the argumentative features although they were taught in their academic writing lesson. Due to lack of adequate practised these students have problems identifying and differentiating the features.

The next section will discuss the types of metacognitive strategies used by high scorers and low scorers when writing. The table 4.6 below shows the mean scores obtained for each type of metacognitive strategy from both groups of students. The table

also shows there are differences in the mean scores obtained in the use of strategies by both groups of students.

Table 4.6: Metacognitive Strategies Use between High and Low Scorers

Metacognitive Strategies	Mean Score for High Scorers	Mean Scores for Low Scorers	Stages of Writing
Advance Organizer	3.75	3.61	Before Writing (Planning Stage)
Organizational Planning	3.66	3.61	
Selective Attention	3.84	3.61	
Self -Management	3.84	3.76	
Comprehension Monitoring	3.86	3.23	While Writing (Monitoring Stage)
Production Monitoring	3.93	3.15	
Self -Assessment	3.46	3.23	After Writing (Evaluating Stage)
Self -Evaluation	3.48	3.07	
Self -Reflection	3.88	3.30	

In the before writing stage there are four types of strategies. For advance organizer, the mean score obtained by high scorers is 3.75 and for the low scorers, the mean score is 3.61. This shows that the high scores use slightly more strategies such as “consider the previous success with similar writing and identify the purpose of assigned tasks,” “recall what they already know or background knowledge to get idea for the current task,” “read through the topic carefully for better understanding, and also “try to plan their content from the title.” These are the strategies used by the high scorers’ in writing.

While for organizational planning the mean score obtained by high scorers’ is 3.66 and for low scorers is 3.61. This shows that high scores use slightly more strategies such as “come out with a list of strategies that they probably would use,” “go through outline first and concentrate on what they will write next” and “they also read the instruction before writing.”

For selective attention, the mean score obtained by high scorers is 3.84 whereas the low scorers obtained 3.76 as the mean score. Higher scorers' use slightly more strategies such as "determine on the main points and pay attention to topic sentence and sentence structure" and also "recall weak points in writing and try to be aware of them."

Followed by self-management, high scorers' obtained 3.84 and low scorers obtained 3.76. High scorers' use slightly more strategies like "plan the point before writing" and "allocate the main points in the specific paragraphs of writing because it's easier". The overall mean score obtained by both high scorers' and low scorers' differs for each type of metacognitive strategy in the planning stage. Although both high scorers' and low scorers' use strategies in the planning stage, the mean score obtained by is slightly high scorers higher compared to low scorers in the planning stage.

Meanwhile, for the while writing stage, there are two subcategories of metacognitive strategies, comprehension monitoring and production monitoring. For the comprehension monitoring strategies, the high scorers obtained a mean score of 3.86 whereas low scorers obtained a mean score of 3.23. A comparison of mean scores obtained by both groups' shows that high scorers use more comprehension monitoring strategies compared to low scorers. High scorers' "write first for general ideas," and "pay selective attention to the information predicted and required in the writing". High scorers also "read through the writing in earlier paragraph and predict what to write next," and "find ways to overcome problem when get stuck with difficult words" Furthermore, high scorers' "concentrate on writing even there is distraction," and "refocus concentration on writing although the task is difficult".

In addition, high scorers "elaborate ideas from the listed ideas generated" and "avoid writing words and sentences they do not understand", Higher scorers also "focus in one specific goal at a time" and "keep writing even when they face difficulty and

constantly check writing”. Besides that, high scorers “monitor their writing speed according to given time and length”, and “use strategies to produce better writing”. These are the strategies used with greater frequency by high scorers more compared to low scorers. Therefore, this shows that these are the important strategies that low scorers’ should utilize in order to produce better writing. These strategies also can be the reason for high scoring students to have obtained better marks in their argumentative writing.

For while writing stage, another subcategory of strategies is production monitoring. Mean scores obtained by high scores is 3.93 whereas for low scorers the mean score obtained is 3.15. This shows that high scorers use these strategies more compared to low scorers. Strategies that high scorers use more are “write according to instruction given” and “think of ways to solve problems even difficult ones”. High scorers also “ensure their writing is clear from beginning to the end”, “choose appropriate writing strategy to overcome writing problems” and “change the writing strategies if the strategies cannot help them in their writing.” These are the strategies infrequently used by low scorers. The mean scores obtained by the two groups show a lot of difference. The low scorers are not using the related strategies inadequately in while writing stage therefore, they are not able to perform in their writing.

As for the after writing stage, there are three subcategories of strategies that may be used. For self-assessment strategy, high scorers obtained is 3.46 and for low scorers 3.23. This shows that high scorers use the strategies more frequently: they “realize that their major concern relates to their understanding of accomplishing the writing”, “monitor writing strategies that are helpful for writing “,“ discuss with classmates about difficult point and exchange ideas to improve writing” and “ evaluate writing and review writing plan”.

The next sub-categories of strategies that may be used for after writing stage is self-evaluation. The mean score for high scorers is 3.48 and mean scores for low scorers is 3.07. The strategies used by high scores include “refer to writing goal to check whether they have achieved it”, “set future writing goals’ and “use of characteristics of good writing as a criteria to evaluate their own writing”.

Meanwhile, for self-reflection, the high scorers obtained 3.88 whereas for the low scorers the mean score is 3.30. The strategies used by high scorers more with greater frequency are “motivate themselves to improve writing”, “reflect on my writing performance” and “recall and review the writing strategies to see what to maintain and change as in to improve writing in the future” From the findings it clearly shows that there are differences between the means scores in all three stages of writing as well as in all nine sub-strategies.

The findings also show that in the planning strategy there is little difference in mean score obtained by high scorers and low scorers. Whereas for the other two strategies namely the monitoring stage and also the evaluation strategy there is a vast difference in the mean scores obtained by both groups. The findings for metacognitive strategies clearly show that the high scorers use more metacognitive strategies in writing. Moreover, of some strategies are infrequently used by low scorers especially in monitoring and evaluating strategy. This study suggests that if low students use these strategies adequately, this might help them in improving their writing.

4.5 Chapter Summary

This chapter presented and discussed the results and findings from the data analysed in this present study. To briefly summarize, the result of the first research question, *what are the metacognitive strategies employed by students in writing essays?*, as for

the first research question the results were discussed into 3 three stages. From the discussion in the before writing it is clearly shown that all the students use more metacognitive strategies in the planning stage. In the while writing stage, the result revealed that students use least strategies in the monitoring stage whereas for after writing stage use more of self-reflection strategy and least use of self-evaluation and self- assessment strategies.

The result of the second research question, *what are the argumentative features found in students argumentative essays?*, from the discussion for research question two it is clearly can be seen that the students were able to produce all 6 features of argument from the 26 essays analysed. However, the most argumentative features frequently could be found from the argumentative writing were the claim, support as for warrant, rebuttal and backing showed least occurrence in the argumentative writing.

With regards of third research question, *how does the use of metacognitive strategies and the argumentative features found in argumentative essays differ between students with high scores and low scores?*, the discussion for research question three revealed that students utilized more metacognitive strategies in their writing produce better and more argumentative compared to the students use least metacognitive strategies in their writing not as good as those who use more strategies. The high scorers used more metacognitive strategies in the planning and monitoring stage and least in the evaluating stage, therefore, the high scorers were able to produce better argumentative features. Meanwhile, the low scorer used more strategies in the planning stage only and least strategies in the monitoring and evaluation stage, therefore, low scorers were not able to produce argumentative features as much as the high scorer and also their argumentative writing considerably weak. The following chapter presents the conclusion of findings and discusses the implication of research.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of this research is to investigate the metacognitive strategies and the argumentative features in academic writing of ESL tertiary students. This chapter summarizes and discusses the research findings presented in chapter 4. This chapter also further presents the implications, suggestions, recommendations and conclusion for this study. It is organised into the following sections; summary of the major findings, implications of the study in terms of pedagogical implications and recommendations for future research.

5.2 Summary of Findings

The findings of this study reveal the use of metacognitive strategies in each stage of writing as well as the types of metacognitive strategies employed by students. From the findings, it can be observed that students who use metacognitive strategies are better in their argumentative writing pertaining to the types of argumentative features. This suggests that metacognitive strategies play an important role in teaching and learning academic writing. Moreover, from this finding it can be concluded that if appropriate writing strategies are taught in academic writing classes, it can bring a lot of improvement in students' academic writing. The table 5.1 below explains the overall summary of the study. The table 5.1 shows the overall metacognitive strategies employed by the 50 foundation students for writing and also the argumentative features found in the 26 scripts of argumentative essays. The students were divided into high scorers and low scorers based on their writing performances and the grade that they had obtained for their argumentative essays. Each group consists of 13 high scorers' essays

and 13 low scorers' essays. The findings were also further supported by semi structured interviews.

Table 5.1: Review of the Study

Metacognitive Strategies	
High Mean Scores obtained <i>(Planning stage)</i> <ul style="list-style-type: none"> • Advance Organizer • Organizational Planning • Selective Attention • Self- Management 	Low Mean Score obtained <i>(Monitoring stage)</i> <ul style="list-style-type: none"> • Comprehension Monitoring • Production monitoring <i>(Evaluation stage)</i> <ul style="list-style-type: none"> • Self -Assessment • Self -Evaluation • Self- Reflection
Argumentative Features	
Most Frequency coded <ul style="list-style-type: none"> • Claims • Support • Quantifier 	Least Frequency Coded <ul style="list-style-type: none"> • Warrant • Backing • Rebuttal

	High Scorers	Low Scorers
Metacognitive Strategies used the most	<i>(Planning stage)</i> Advance Organizer Organizational Planning Selective Attention Self- Management <i>(Monitoring stage)</i> Comprehension Monitoring Production Monitoring	<i>(Planning stage)</i> Advance Organizer Organizational Planning Selective Attention Self- Management
Metacognitive Strategies used the least	<i>(Evaluation stage)</i> Self- Assessment Self -Evaluation Self -Reflection	<i>(Monitoring stage)</i> Comprehension Monitoring Production Monitoring <i>(Evaluation stage)</i> Self- Assessment Self -Evaluation Self -Reflection
Argumentative Features detected the most	Claims Support Quantifier	Claims Support
Argumentative Features detected the least	Warrant Backing Rebuttal	Warrant Backing Rebuttal Quantifier

The table 5.1 shows the pattern and the mean score obtained for each type of metacognitive strategies for writing. The table shows that the strategies that obtain frequently used are advance organizer, organizational planning, selective attention, and self-management for before writing stage. Meanwhile, the types of metacognitive strategies that infrequently used are comprehension monitoring and production monitoring for while writing stage, together with self-assessment, self-evaluation and self-reflection for after writing stage. This shows that most of the students are inclined to use the metacognitive strategies in the planning strategy. They employ some sort of strategy before writing in order to start their writing. However, they do not employ or give much importance to use of strategies in monitoring and evaluation strategy that occurred later.

This is because of the limited time given to students to complete their essay and they were too focused on the end product rather than the whole process of writing. Therefore, students tend to overlooked at the strategies use related to monitoring and evaluation strategy. In addition, schools teachers also tend to focus on the planning stage primarily when the students are taught how to brainstorm and outline their ideas and points for their essay.

The second portion of table 5.1 shows the frequency of argumentative features coded from the students' essays. From the table, it is clearly shown that, students relatively use more argumentative features in their argumentative essay which were claims, evidence and quantifiers from their argumentative essay whereas there is a low frequency in terms of using the argumentative features found such as rebuttal, warrant and backing. This shows that not many students are well exposed or adequately trained to write warrant, rebuttal and backing when writing argumentative essays. Most of the

students were taught to write a strong claim and gives examples to support their claim. Therefore, students are unfamiliar with producing argumentative features dealing with “rebuttal”, “backing” and “warrant”.

The last part of table 5.1 shows the difference in metacognitive strategies use for writing base on the mean score obtained. Another part of the table also shows the most and the least frequency coded for the argumentative features found from the both groups of high scorers and low scorers from their essays. The difference in metacognitive strategy use between the high scorers and low scorers: are that the high scorers use most of the strategies in the before and while writing stages. The high scorers obtained a high mean score for advance organizer, organizational planning, selective attention and self-management for the before writing stage and also comprehension monitoring and production monitoring in the while writing stage.

However, the low scorers obtained a high mean score for only the planning strategy which are advance organizer, organizational planning, selective attention and self-management. Both high scorers and low scorers employed strategies the most in the planning strategy, but only the high scorers used more strategies for monitoring strategy in while writing stages.

Meanwhile, both the high scorers and low scorers obtained the least use of strategies for evaluation strategy in after writing stage. High scorers did not use as many metacognitive strategies in the after writing stage. They did not use self-assessment, self-evaluation and self-reflection strategies.

Similarly, the low scorers did not utilize use many metacognitive strategies in the after writing stage. They did not utilize self-assessment, self-evaluation and self-reflection strategies, however low scorers also did not utilize strategies in the while writing stage which are the comprehension monitoring and production monitoring

strategies. Since low scorers did not employ strategies during while and after writing stages, their arguments tended to be very brief and vague. They did not contain strong point of views to support their claim. As a result, their argument was weak, but for the high scorers their ending especially the conclusion part was not strong enough as most of the time they provided a brief conclusion instead of giving their opinion or thought.

Besides, table 5.1 also shows the difference in the frequency coded for argumentative features. High scorers' coded higher frequency for the argumentative features found such as claims, evidence and quantifiers whereas for low scorers were only claim and evidence found in their essays.

High scorers coded low frequency for the warrant, backing and rebuttal whereas low scorers were warrant, backing, rebuttal and also quantifiers. Both high scorers and low scorers produce claims and evidence but the most frequency coded for both features were from the high scorers. High scorers tend to write better and stronger claims and evidence.

5.3 Implications of the Studies

This section focusses on the implication of this study. Although there are a number of studies conducted on the use of metacognitive strategies in relation to other skills of language which mainly focussed on listening, speaking and reading skills, there are not many on the writing skill. This study focusses on metacognitive strategy use and the argumentative features in academic writing of ESL tertiary students' especially argumentative genre of writing. The following section presents the implications of this study which includes methodological and pedagogical implications.

5.3.1 Pedagogical Implication

This study could be useful and helpful to prospective language learners especially learners of a second language or foreign language who are not from the English

speaking countries. The knowledge of language learning strategies especially the metacognitive strategies not only adds great value to the second language learning classroom but also helps individual learners who desire to be successful in writing in their target language. When these learners are equipped with the knowledge of metacognitive strategies and use the strategies, the way of writing argumentative essays will be more effective and it will be a successful writing experience for the learners.

In the teaching context, language learners may feel that instructors and tutors are in control of the class whilst they themselves have no flexibility in using the appropriate metacognitive strategies. If the teacher's method is the most suitable for the learners, then they are in the right tract. As a result, the learners will easily understand what is being taught by the instructor in the writing class. A teacher also should know the types of metacognitive strategies which will be helpful for them in teaching argumentative writing. They also should know that not all the strategies are applicable for all their students. Writing is a process approach, it does not just end in the pre planning stage, therefore teachers should encourage students to use suitable strategies throughout their writing in all the before, while and after writing stages.

However, in many cases, students find it difficult to understand because of the teachers are using inappropriate strategies for writing. In this case, the learners have to supplement the learning of writing process with the use of appropriate metacognitive strategies. This finding from this study will help learners to increase their awareness of the types of metacognitive strategies available which can be used for any writing task.

Furthermore, if the metacognitive strategies of high scorers' of argumentative essays can be specified and documented, perhaps then the appropriate metacognitive strategies can be also taught to those with lower scores to improve the effectiveness of their academic writing. Such knowledge could also bring insights to the tasks of preparing

more effective writing materials and the strategies that should be imparted in teaching writing class by the instructors or tutors in second language academic writing class.

From this study, learners may realise that they have the ability to take control of their learning process. ESL learners should realise that by learning writing in a second language they will overcome obstacles that might hinder them from having a successful learning writing experience. Therefore they should identify the obstacles they face in writing and work towards overcoming it.

5.4 Recommendation for Future Research

From some of the limitations identified in this study, several suggestions are outlined for future research. The suggestions are as follows;

1. Future research can focus on other categorisation of metacognitive strategies, as this study looks at Chamot and O'Malley categorisation of metacognitive strategies. Future research can be done with other scholars' categorisation of metacognitive strategies. As for argumentative features, this study adopted at Toulmin Model of Argument. In future studies, research can be done with other models of argument by different scholars.

2. Future research can also be conducted to observe the metacognitive strategies used and the argumentative features produced by different genders and ethnic groups since language and culture are intertwined and the knowledge of L1 also contributes to the learning experience of L2. Therefore, with the inclusion of participants from different ethnic group, more profound results can be obtained and the results can also be represented by the all ethnic groups.

3. It is suggested that, in future research, more samples of participants should be included in order to obtain an accurate outcome. As the quantitative findings in this

study suggest, increasing the number of participants will contribute to more accurate results with more participants. The probability of certain conditions of the results will be valid and more reliable, thus the outcome of the study can be generalised to a larger population.

5.5 Conclusion

This study reveals that it is very important for students to employ certain kinds of strategies which suit them and that help them in writing. There are a lot of studies on strategies and other language skills however closer attention needs to be given to writing as well. It is crucial for ESL students to be aware of and employ effective methods and strategies that help them in learning and mastering academic writing skills. This is due to the fact that in tertiary education they are on their own and they have to be responsible for their own learning. This study also has proved that students use some strategies in the planning strategy especially before writing. Yet after they have started writing they tend to be more focused on the end product and grade rather than the process, therefore forgetting about the strategies during the stages of writing. Employing strategies for writing should be taught as well during academic writing lesson. It should be implemented earlier during the primary and high school level. Writing skills also should be taught in effective and strategic ways where the students learn and enjoy the process of writing and should be able to maximise the knowledge they have. The focus of writing should not be on exams or grades. Besides at tertiary level, students should be able to discover their own strength and weaknesses in writing and they should employ strategies that help them to write better arguments as the writing skill is one of the most important skills that should be mastered by students. Academic writing, argumentative writing or critical writing learnt will enable the students to employ this knowledge when they start working with employers.

This study also analyses the argumentative features in argumentative essays. This study reveals that the high scorers were able to produce more and better argument features as compared to the low scorers. This might be because they employed more strategies in writing especially in planning and monitoring strategy whereas the low scorers do not employ strategies in monitoring and evaluation strategy. This may explain the difference in the marks they obtained. Students also should be taught and trained in terms of writing arguments since secondary school. The findings show that there is not much training and practise being provided to students on argumentative essay writing in schools. In schools, they prefer to write other genres although they are taught to write arguments. If students are adequately trained during their secondary school, they would not struggle in presenting their thoughts when presenting argument once they enter tertiary education. They also will be able to clearly present their claims and stand and give relevant evidence in order to present strong arguments in a convincing manner. Besides, writing good argumentative essays also helps students to think and deliver their arguments in a more critical manner.

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