ESL PUBLIC SPEAKING ANXIETY: AN EXPLORATION OF SELF-REGULATORY STRATEGIES USED BY MALAYSIAN UNDERGRADUATES

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ABSTRACT

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Tee Xue Ting

On 20 September 2020, it was reported that approximately 75,000 new graduates are expected to face difficulties in finding jobs considering that Malaysian graduates are incompetent at proper presentation skills, in addition to their poor command of the English language due to anxiety. This situation has gained immediate attention in researching on self-regulatory strategies to cope with the anxiety. Therefore, this study utilised the Public Speaking Class Anxiety Scale (PSCAS) to measure the anxiety levels faced by undergraduates in the studied university, which correlated the Sijil Pelajaran Malaysia English results with the PSCAS scores and investigated different self-regulatory strategies used through group interviews. Although 39 of the undergraduates experienced low public speaking anxiety (PSA) levels, the Spearman's correlation test proved that fear of negative evaluation, test anxiety and communication apprehension were reasons behind those with a high level of PSA. A number of strategies were also reported and the most prevalent reported strategy was the affective strategy. When they used affective strategies such as listening to music and taking deep breathes to focus on the presentation, it leads to sharpening of presentation skills and resolves one of the major reasons that contribute to unemployment. Further studies at different public and private universities with larger samples are

recommended to deepen the understanding of PSA and uncover the use of self-regulatory strategies amongst the undergraduates across different courses.

Keywords: *Public speaking anxiety, self-regulatory strategies, Malaysian undergraduates*

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SUBMISSION OF DISSERTATION

It is hereby certified that **Tee Xue Ting** (ID No: **19AAM06207**) has completed this dissertation entitled "**ESL PUBLIC SPEAKING ANXIETY: AN EXPLORATION OF SELF-REGULATORY STRATEGIES USED BY MALAYSIAN UNDERGRADUATES**" under the supervision of Dr. Joanna Tan Tjin Ai from the Department of Languages and Linguistics, Faculty of Arts and Social Science, and Puan Wirawahida Binti Kamarul Zaman from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

I understand that the University will upload softcopy of my dissertation in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

(Tee Xue Ting)

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LIST OF ABBREVIATIONS

CA	Communication Apprehension
PSCAS	Public Speaking Class Anxiety Scale
PSA	Public Speaking Anxiety
SPM	Sijil Pelajaran Malaysia

Chapter One

As the second most important language in Malaysia and its status as a universal language, the English language is extensively and widely used by people from different professions, such as engineering, medical, education and business (Diao & Paramasivam, 2013; Dornyei & Csizer, 2002; George & Rajan, 2016; Khairi & Nurul, 2010). Communicating in the English language is even more important in this era of the Fourth Industrial Revolution and it is expected that two billion people in the world are regularly using the English language to communicate (Abdel-Rahman et al., 2016). Therefore, Malaysians should be well-equipped with a solid foundation and trained to be competent English language users as a preparation to face stiff competition from the outside world.

The current education system provides an 11-year compulsory and free education for students. Although most students complete 11 years of formal English language lessons in schools, they remain weak in their command of the English language (David et al., 2015). This was proven when Tengku Azian Shahriman, the Director of Education and SRI (Strategic Reform Initiative) Human Capital Development stated that 20% of the SPM candidates failed the English language subject in 2013 and 22.7% in 2014 (Sani, 2015). In fact, the failing rate was about the same when it was reported that in 2016, 20.6% failed the subject and the failing rate increased by 3.6% in 2018 (Berita Harian, 2018). This issue persists when Malaysian students pursue their tertiary education in colleges and universities. Consequently, they are incapable of using the English language efficiently after they have graduated (Acat & Demiral, 2002). Datuk Shamsuddin Barden, Executive Director of the Malaysia Employers Federation (MEF) described that graduates could neither put their thoughts into correct

sentences nor convey messages clearly in a discussion when being interviewed by potential employers (The Star Online, 2017).

On 20 September 2020, the Higher Education Minister, Datuk Seri Dr. Noraini Ahmad elucidated that approximately 75,000 out of 300,000 new graduates are expected to face some difficulties in finding jobs within six months of graduation (Bernama, 2020). This number is then added to the statistics shown on the Ministry of Higher Education's Graduate Tracer Study (GTS) for 2019, with 41,161 graduates remained unemployed. Rahman et al. (2019) had identified that unemployed Malaysian graduates were not adequately equipped with the proper presentation skills that employers expect, in addition to their poor command of the English language (Rusreena et al., 2018), which was caused by anxiety. Students have to take the initiative to ease their anxiety rather than relying on instructors and their peers. However, self-regulatory strategies that correspond to different anxiety levels are unavailable. How students with different public speaking anxiety levels cope apply different self-regulatory strategies to reduce the anxiety remains unknown. Moreover, self-regulatory strategies applied by students are different when public speaking anxiety can be viewed at different milestones of the event of public speaking. Therefore, the present study aims to identify the relationship between anxiety and language proficiency and explore self-regulatory strategies to alleviate anxiety in public speaking classes.

The problem of public speaking anxiety (PSA) is becoming more prevalent amongst the undergraduates involved in this study. In light of this issue, Siew (2014) concluded that 147 participants experienced moderate levels of speaking anxiety, 80 participants with high levels of speaking anxiety and 10

participants with low levels of speaking anxiety. This phenomenon has constituted challenges and concerns to the extent that there is an urgent need to look into the English language proficiency and PSA levels with an intent to determine self-regulatory strategies to reduce the anxiety. Therefore, English language proficiency, PSA levels and self-regulatory strategies were the variables set in this study.

Viewing the issue from the discipline of language learning and the development of effective communication, reading and listening are the two receptive skills that should be integrated with two other productive skills, such as writing and speaking (Zaremba, 2006). Of all these four macro skills, speaking is deemed as a prerequisite for communication. However, the act of speaking tends to be more complicated when it occurs in different contexts (Abdel-Rahman et al., 2016). From storytelling, oral presentation, public speaking to interviews, the speaking component requires students to use a number of micro-skills before, during and even after delivering their speech. Moreover, these micro-skills include choosing a topic, organising ideas, tailoring the messages and adapting to interlocutor feedbacks (Bahrani & Soltani, 2012; Lucas, 2001). Considering the complexity of the act of speaking, this study investigated self-regulatory strategies that were used to reduce anxiety, particularly in public speaking classes, as they are included in communicative courses offered by all Malaysian universities.

1.1 Problem Statement

In the context of learning a second language, the speaking skill is considered just as important as reading, writing and listening skills. As stated by

Shabani (2013) and Bailey and Savage (1994), the speaking skill is more challenging compared to reading, writing and listening skills. In order to instantly produce the desired messages, speakers have to quickly access the knowledge, infer the interlocutor's meaning and build smaller chunks of the language into a larger one. Unlike other language skills, they do not have enough time to assimilate and accommodate input with knowledge. Additionally, it is misunderstood that learners would have sufficient opportunities to learn how to speak when they have learned how to read, write and listen (Shabani, 2013). Therefore, the speaking skill has been neglected in most of the language classes (Samah, 2016).

For more than 50 years, several researchers have attempted to explore the issue of learners' second language learning anxiety using the Foreign Language Classroom Anxiety Scale (FLCAS) (Alpert & Haber, 1960; Dewaele, 2013; Horwitz et al., 1986). Through the utilisation of FLCAS, numerous studies found that second language learning anxiety is negatively correlated with second language achievement in which the yielded data was reflected in the forms of test scores, course grades and other assessments (Aida, 1994; Hewitt & Stephenson, 2012; Liu & Jackson, 2008). Therefore, to address this issue, a large body of research seeks to understand the causes of second language learning anxiety (Chen & Chang, 2004; Ewald, 2007; Oxford, 2017). However, all these studies emphasised the parts played by teachers to alleviate learners' second language learning anxiety. Little is known about how students can self-regulate their learning anxiety, especially the speaking anxiety (He, 2017).

In recent years, the fear of speaking is recognised as one of the most common issues in speaking classes (Khairi & Nurul, 2010; Mak, 2011; Nur et

al., 2017). Speakers face difficulties in expressing their viewpoints when they experience speaking anxiety (MacIntyre & Gardner, 1994). Therefore, speaking has always been cited as the "most anxiety-producing experience" (Young, 1990, p. 539). The problem extends to undergraduate students, who were also found to have problems in speaking the English language (Guo et al., 2018; He, 2017). Consequently, exploring speaking anxiety and identifying self-regulatory strategies to reduce it is an important area of research.

Apart from the research on second language learning anxiety related to causes and academic achievements, some studies also highlighted the impact of language proficiency on speaking anxiety. Previous research produced conflicting results in investigating the relationship between these two variables. Only one study (Debreli & Demirkan, 2015) revealed that there was a relationship between language proficiency and anxiety. The argument was that the issue of competitiveness between the classmates and classroom teachers' expectations of the higher-level students. However, other literature (Alias & Rashid, 2018; Balemir, 2009; Cagatay, 2015) reported that language proficiency did not have any facilitating or debilitating effects on speaking anxiety.

Besides, there is only one study in Malaysia (Alias & Rashid, 2018) that examined the relationship between language proficiency and anxiety, showing the urgency to contribute to existing literature in the Malaysian context. Moreover, the relationship between different levels of PSA and self-regulatory strategies employed by university students has not been explored. To date, only Guo, Xu and Liu (2018) had conducted a study on students' usage of self-regulatory strategies for language learning anxiety. However, in Malaysia, this perspective has yet to be explored. This study attempts to close the gap (i.e., to

shed light on a list of self-regulatory strategies that can be adopted explicitly by university students with different levels of PSA).

1.2 Research Objectives

Since there are no systematic studies of self-regulatory strategies that could be practised by the Malaysian undergraduates who have different levels of PSA, the present research pursued the following objectives.

RO1: To measure PSA levels amongst university students.

RO2: To identify the relationship between Sijil Pelajaran Malaysia (SPM) English results and Public Speaking Class Anxiety Scale (PSCAS) scores.

RO3: To explore self-regulatory strategies used by students to regulate their PSA.

1.3 Research Questions

Three research questions were formulated from the research objectives.

RQ1: What are the levels of PSA amongst university students?

RQ2: Is there a statistically significant relationship between Sijil Pelajaran Malaysia (SPM) English results and Public Speaking Class Anxiety Scale (PSCAS) scores?

RQ3: What are the self-regulatory strategies used by students to regulate their PSA?

1.4 Hypotheses Development

RO2: To identify the relationship between Sijil Pelajaran Malaysia (SPM) English results and Public Speaking Class Anxiety Scale (PSCAS) scores.

H_o: There is no significant relationship between Sijil Pelajaran Malaysia (SPM) English results and Public Speaking Class Anxiety Scale (PSCAS) scores.

H_A: There is a significant relationship between Sijil Pelajaran Malaysia (SPM) English results and Public Speaking Class Anxiety Scale (PSCAS) scores.

1.5 Significance of the Study

The study's findings could be beneficial for Malaysian undergraduates and future researchers in assisting the Malaysian Higher Learning Institutes (HLIs) resolve the pressure given by the Ministry of Higher Education (MOHE). That is to enhance undergraduates' public speaking skills, one out of seven generic skills that should be possessed by future employees. In the meantime, it helps to reduce the severity of another worrying trend: unemployability of undergraduates (Ministry of Human Resource, 2009).

Based on the findings collected, undergraduates could train themselves to select self-regulatory strategies that are most suitable to raise their autonomy in practising public speaking. However, their autonomy in mitigating the fear of public speaking is "not simply a matter of placing learners in situations where they have to be independent" (Sinclair, 2000, p.8); the lecturers should provide them with proper support. On the other hand, lecturers could also interfere in the process of monitoring the effective use of the self-regulatory strategies chosen by undergraduates to reduce their fear of speaking in front of an audience. Therefore, this study could serve as a guidebook for both lecturers and undergraduates in determining some effective self-regulatory strategies in reducing PSA.

Additionally, this study provides an exciting opportunity to create assonance between expectations set by MOHE and the efforts done by HLIs. As stated in MOHE's National Graduate Employability Blueprint 2012–2017, universities should help equip undergraduates with seven generic skills, namely: (1) critical thinking and problem-solving skills, (2) lifelong learning and information management, (3) entrepreneurship skills, (4) leadership skills, (5) teamwork skills, (6) integrity and professional ethics and most importantly, (7) communication skills. Expectantly, this study could be a guidance for all HLIs to realise the implementation of their curricula and prepare undergraduates to be employable.

Furthermore, considering the lack of qualitative studies on PSA in the Malaysian context, this study contributed to the extant literature. The findings of this study could open the door for more academics, researchers and policymakers to incorporate public speaking courses into the high school and university curricula. This will support future students by equipping them with the necessary strategies to speak confidently and excel in their academic, professional and personal lives.

1.6 Scope and Limitations of the Study

In this study, the researcher only focused on the aspect of practicality by having a list of five types of different self-regulatory strategies to alleviate different levels of PSA suffered by undergraduates. Due to the practical constraints, this study could not provide a comprehensive review of its effectiveness. Many uncertainties about whether there is a correlation between practicality and effectiveness are still unresolved. There could be a situation,

whereby undergraduates could practise a self-regulatory strategy, but it is ineffective in reducing PSA. In other words, it is unknown whether self-regulatory strategies have accomplished the desired effects by showing a reduction in the PSA level.

Besides, the researcher only examined the undergraduates' different usage of self-regulatory strategies with different levels of PSA. Self-regulatory strategies that are suitable for highly anxious speakers might not be used by speakers who only have low or intermediate anxiety levels. Subsequently, how a speaker chooses a self-regulatory strategy might differ from others who have the same PSA level. It suggests a possibility that personality traits might contribute to the effort of determining the strategies to alleviate PSA. Connor-Smith and Flachsbart (2007) further asserted that the role of personality might inhibit or facilitate the coping process. This, in turn, resulted in one of the limitations of the current research.

1.7 Operational Definitions of the Main Terms Used

Public Speaking. Public speaking is operationally defined as a face-to-face communication context, whereby students are required to deliver their speech in front of a relatively large audience (Devito, 1986). This notion is extended and applicable to any oral presentations encountered by undergraduates in communication courses. Moreover, in discussing its social role, Ehninger et al. (1986) defined public speaking as an act in which presenters have a goal of presenting rather long and more complex messages orally to the audience.

Public Speaking Anxiety (PSA). Public speaking anxiety (PSA) refers to a person's fear of delivery to an audience (or preparation for delivery). PSA is sometimes referred to as an apprehension of stage fright or communication (Hayaramae, 2017).

Self-Regulatory Strategies. Self-regulatory strategies are operationally defined as the strategies employed by speakers to monitor their speaking and minimise their anxiety to speak in front of an audience (Samah, 2016) with no intervention by professionals (Auerbach, 1981). Different types of strategies to alleviate the fear of public speaking that could be applied are (1) avoidance, (2) cognitive, (3) management, (4) affective and (5) social (Tee et al., 2020).

Avoidance strategy. A type of strategy in which a speaker avoids speaking in front of an audience, if he is afraid before and/or after encountering the circumstances (Guo et al., 2018).

Cognitive strategy. A speaker who uses this strategy regulates his perceptions of others, of his public speaking performance and of himself (Guo et al., 2018).

Management strategy. This strategy encourages a speaker to actually monitor the process of public speaking, such as planning their speech, properly managing speech time and reviewing their speaking performance (Guo et al., 2018).

Affective strategy. When a speaker is overwhelmed by the arousal of this negative emotion – PSA, he directly confronts it (Guo et al., 2018). This includes listening to music, doing meditation, or drinking water.

***Social strategy*.** This strategy illustrates a speaker who gets support from others by sharing the fear of speaking with their peers and tutors (Guo et al., 2018) and cooperating with others to learn how to reduce their PSA.

1.8 Summary

This chapter introduced the rationale of the present study by addressing current issues found in the education system and workforce. The chapter subsequently introduced the study's problem statements. Consequently, the research objectives and research questions would be proposed. The worthiness of conducting this research was also discussed although the study has fewer limitations that are yet to be explored. The chapter concluded with operationally defining the main terms before reviewing previous studies by other researchers.

Chapter Two

2.0 Introduction

This chapter will first discuss anxiety in general, and then narrow down to more specific issues such as trait and state anxiety and how anxiety affects one, emotionally and physically. Much research has been conducted on foreign or second language speaking anxiety relating to therapies, programs, and instructors' teaching strategies. However, a proper framework of self-regulatory strategies that can be utilized by undergraduates with different anxiety levels in reducing public speaking anxiety is yet to be explored. The present research intends to address this gap.

Hence, to further understand this issue, the milestones of public speaking should first be comprehended, and later, using theories of habituation and sensitization, and attentional control to discover how each individual possesses different anxiety levels and its effects on one's cognitive system. A conceptual framework is then drawn to show the flow of the study.

2.1 Anxiety

People from all walks of life, in general, feel uneasy prior to, before, and/or after anticipating something threatening (Andrew, 2011) and that feeling of uneasiness can come from different sources (Razlina, 2010). As such, each individual goes through different types of anxiety. The anxiousness can transpire regardless of time and location and therefore, there may be occasions where others could easily notice if a speaker's anxiety-producing reaction is physical. Gaudry and Spielberger (1971) illustrate that "tremor in the limbs, sweating of the hands and forehead and flushing of the neck and face" (p.7) are some of the

noticeable reactions due to anxiety. Subsequently, Laukka and other researchers (2008) define anxiety as "a state of arousal occurring when a person experiences a situation as personally threatening, either physically or psychologically, which triggers a physiological response" (p. 197).

Yet, Liebert and Morris (1967) categorize anxiety-producing reactions into two groups: emotionality and worry responses as shown in Figure 2.1. The former suggests the involvement of behavioural reactions such as fidgeting and stammering (Razlina, 2010), having shaky voice, sweating profusely, and having cold clammy hands (Elminfi & Gaibani, 2014) as well as physiological reactions which include an increased heart rate (Razlina, 2010), and having breathing discomfort (Elminfi & Gaibani, 2014). On the other hand, the worry response often associates with cognitivism such as task-irrelevant thoughts and self-deprecating thoughts These negative thoughts are common, and they usually reflect what plays in one's mind when they are worried (Razlina, 2010). Consequently, it heightens their anxiety level.

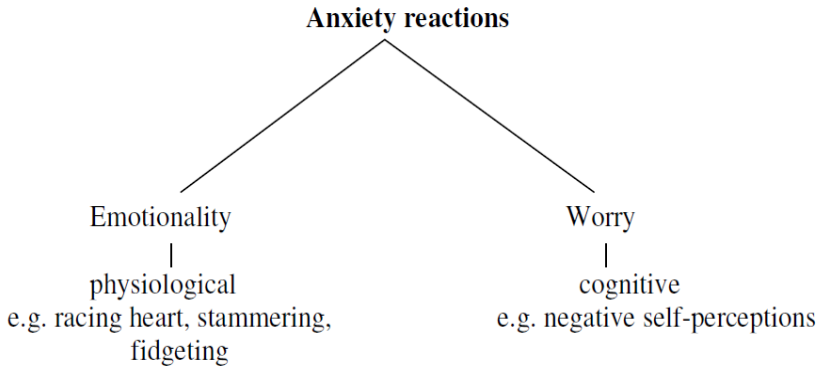

Figure 2.1: Types of Anxiety Reactions (Razlina, 2010, p.14)

As opposed to what has been discussed earlier, there are times when anxiety-producing reactions are not noticeable and only those who are experiencing anxiety understands what happens internally in their body. For

example, physiological reactions. Agreeing the above statement, Gaudry and Spielberger (1971) assert that anxiety-producing physiological reactions could be only investigated in a more controlled laboratory situation.

2.1.1 Types of Anxiety

As Pappamihiel (2002) says, “anxiety is a complex concept, dependent upon not only one’s feelings of self-efficacy but also appraisals concerning the potential and perceived threats inherent in certain situations” (p. 330). Anxious people are always found to have low self-confidence and low self-esteem levels. Hence, psychologists (Cattell & Schier, 1963) differentiate different kinds of anxiety into trait, state, and situation-specific anxieties. The classification is illustrated in Figure 2.2.

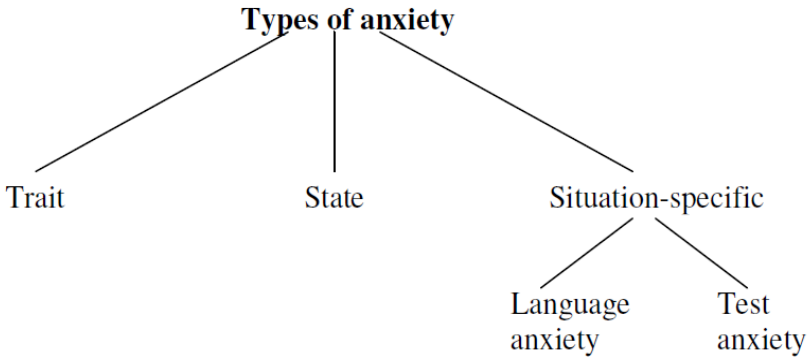

Figure 2.2: Types of Anxiety (Razlina, 2010, p.14)

Since the focus of the current study is on public speaking anxiety, situation-specific anxiety will not be further discussed. Only trait and state anxieties will be explained further in this subsection as public speaking anxiety is very much a grey area between these two anxieties. According to Spielberger (1966), state anxiety increases autonomic nervous system activity and reflects a direct transition in emotional status which could be very subjective among

individuals. The intensity of apprehension and tension that they perceive may vary and fluctuate over time. Hence, it could be deduced that state anxiety is time-specific and unstable before, during, and after speech delivery (Behnke & Sawyer, 1998, 1999; Sawyer & Behnke, 1999). In contrast, trait anxiety is relatively stable over time, and it denotes a permanent trait of personality (Spielberger, 1966). In other words, it tells how people are generally apprehensive in most situations and time periods and how they are predisposed to anxiety (Andrew, 2011). People who have higher trait anxiety perceive more threats in many situations than those who have low trait anxiety.

Public speaking anxiety may be experienced as state-based or trait-like anxiety (Tee et al., 2020). A worsening of anxiety faced by students during a point in the process of public speaking are said to have state-based anxiety and those who anticipate anxiety earlier during public speaking preparation are considered to experience trait-like anxiety (Bodie, 2010). It is, however, noted that both anxieties can occur concurrently or independently without one another.

2.2 Public Speaking Anxiety

Asserted by Horwitz, E., Horwitz, J., and Cope (1986), a learner who possesses good reading and writing skills does not assure himself to have been orally good. On the other hand, if he is orally good, there will be a promise of good reading and writing skills (George & Rajan, 2016). Hence, Suchdeva (2007) stated in his book that language learning is not only about understanding, but also being able to speak in that target language.

Yet, humans are not born public speakers; it requires training in order to become one (Raja, 2017). In Cohen and Norst's quote (1989), they vividly told:

> My heart starts pumping really fast, and the adrenaline runs. Then I feel myself start to go red . . . and by the end of the ordeal - for it is - I am totally red, my hands shake and my heart pounds ... If anyone laughs at my mistake, I feel really embarrassed and foolish, and the physics of my body don't return to normal for ten minutes or so ... It's pure trauma for me. (p. 68)

When a speaker delivers his speech, he subsequently has to put himself under the spotlight. After a while, he starts feeling anxious, experiencing nausea, trembling, and having excessive sweating in his palms (Kushner, 2010; North & Rives, 2001). To date, according to an article posted on PSYCOM, there are 238 million people, approximately 75% of the population are afraid of speaking in front of others (Black, 2019). The relevance to explore public speaking anxiety is even emphasized when in a study done by Spijck (2011), he found that 40% of the respondents hold a belief that this fear is more dreadful than death and is ranked as one of the top three fears.

Extending from communication apprehension (CA), public speaking anxiety arises when one attempts to avoid anxiety-producing situations (Andrew, 2011; Bodie, 2010), and it varies across individuals and changes over the time (George & Rajan, 2016). Speakers who exhibit high anxiety level also often anticipate anxiety in advance before the presentation by imagining it (Harris et al., 2002). Therefore, it can be deduced that public speaking anxiety might be recognized as an irrational effort made by speakers and they make no attempts, without help, to correct their responses (Andrew, 2011).

Since 1930, there has been a great deal of research in public speaking (Rossi & Seiler, 1989). Hence, the question of PSA relating to its causes has been answered by a great number of researchers (Casado & Dereshiwshy, 2004; Cho et al., 2004; MacIntyre &. Gardner, 1989; Pappamihiel, 2002). To mention,

factors of public speaking anxiety can be divided into three main components: fear of negative evaluation, communication apprehension, and test anxiety. Others include weak command of the topics, lack of speaking practice, and a negative self-image (Goberman et al., 2011; Hofmann & DiBartolo, 2000). These factors can be hurdles in affecting people and their professional development; therefore, they need to overcome the fear of speaking in front and be more confident (George & Rajan, 2016).

2.3 Anxiety Responses at All 4 Milestones of Public Speaking

Unlike other speech acts, public speaking, a rule-governed speech act, may arouse fear among speakers more easily (Daly & Buss, 1984). As such, an understanding of speech anxiety throughout the event of public speaking should be acknowledged before treating it. To date, no research has investigated speech anxiety psychologically. Carlile, Behnke, and Kitchens (1977) stand to the reasons that, (1) it is unethical to repeat psychological measurements on the same individual within a short time, and (2) it is hard to administer psychological measurements throughout the speech event as it might disrupt individuals who are presenting.

Instead, researchers (Behnke & Carlile, 1971; Behnke et al., 1978; Clements & Turpin, 1996) use the changes in physiological patterns such as palmar sweating and heart rate as the indicators to explain speech anxiety across all four public speaking milestones namely (1) anticipation (the first minute prior to delivering the speech), (2) confrontation (the first minute after starting the speech), (3) adaptation (the last minute before ending the speech), and (4) release (the minute right after the end of the speech). In a recent study conducted by

Witt and other researchers (2006), they correlated gastrointestinal sensations with anxiety reactions in an attempt to describe public speaking experiences after Addison, Hunter, Ayala, Behnke, and Sawyer (2004) proved that these two variables are highly and positively correlated.

As speakers progressed across all four public speaking milestones, the degree of anxiousness is reflected by different levels of gastrointestinal discomfort found in speakers with high and low trait anxiety (Witt et al., 2006). Starting from the anticipation stage until the first minute after starting the speech, high- and low-trait-anxious speakers show opposite directions in their gastrointestinal discomfort. As seen in Figure 2.3, high anxious speakers feel more discomfort in their gastrointestinal whereas their low-trait-anxious counterparts do not show a significant change in their gastrointestinal responses. This suggests that anxiety level is high during this anticipation-confrontation stage for high anxious speakers.

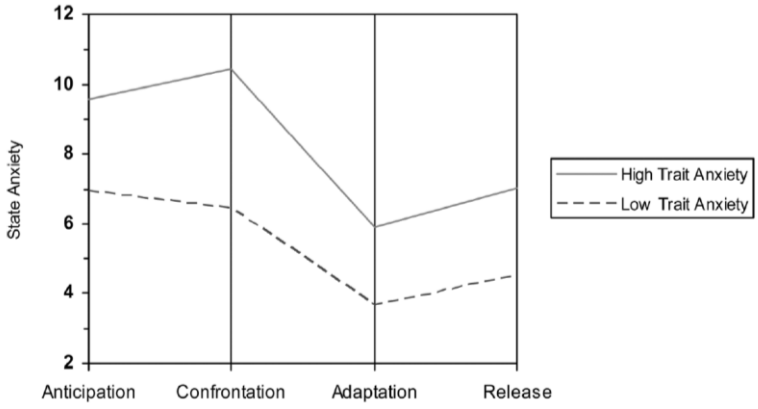

Figure 2.3: Public Speaking Anxiety Level at Different Milestones: Adaptation, Confrontation, Adaptation, Release (Witt et al., 2006, p.94)

As they continue to speak, both groups begin to relax through the reflection of a progressive reduction in their gastrointestinal discomfort level. Anxiety level between confrontation-adaptation milestones is reported to be the

lowest among them. Yet, they start to be anxious, again, at the minute right after they end their speech. It is proved to be true as Figure 2.3 illustrates gastrointestinal discomfort in both groups dramatically increased at the fourth milestone. Although it is presumed that they would reduce their tension after delivering the speech, the aforementioned situation could be triggered by the existence of instructors and peers (MacIntyre & Gardner, 1989) which is found to be one of the factors of public speaking anxiety.

2.4 Public Speaking Anxiety in the Perspective of Communication Apprehension

In 1996, Spielberger discovered public speaking anxiety as having two types: (1) state – the anxiety experienced is time and situation specific, and (2) trait – the anxiety experience occurs across times and settings and that negative emotion arousal will never faded. McCroskey then (1970) extended the work done made by Spielberger (1966). From this point onward, public speaking anxiety has no longer only been viewed as anxiety but also as an act of communication avoidance. The fact that people behave differently in any other life-threatening situation suggests that communication apprehension or speaking anxiety should be viewed on a continuum. Four distinct types of CA are presented along this continuum: trait-like CA, generalized-context CA, person-group CA, and situational (state-based) CA. As trait-like CA and situational CA are deemed to be the same as what has been discussed in the previous sub-section, this section will only review generalized-context CA and person-group CA.

One step further from trait-like CA, generalized-context CA suggests one has a stable personality trait in a communication context (McCroskey, 1970).

To conceptualize, people who are afraid of speaking in front of a crowd might appear to be less apprehensive when they are having group discussions. The oldest illustrative of this type of CA would be PSA. Moving one vantage point forward, person-group CA suggests that the responses made by individuals might vary across different audiences (McCroskey, 1970). Some individuals might appear to be less apprehensive of them while others might cause adverse reactions. For example, individuals are more relaxed to speak in front of their peers than their teachers and unfamiliar people. McCroskey (1970) further elucidates that this type of CA is deemed to be more situation-based, which is triggered by an individual or groups.

Based on the above review, it is interesting to note that every person will experience each type of CA with different degrees of anxiousness in all threatening situations (McCroskey, 1970). With that, people who have high trait-like public speaking anxiety will even find themselves comfortable in some situations such as talking to close friends.

2.5 Public Speaking Anxiety and its Severity

In 1996, Stein, Walker, and Forde opined that around 10% of people who suffer from public speaking anxiety faced major challenges in 3 spheres: education, workforce, and social relationships. Eysenck (1979) remarked that public speaking anxiety can threaten individuals' learning performance. Highly anxious ones often fail to concentrate; therefore, their attention level is low. This is true as existing studies proved that speech anxiety is negatively correlated with academic achievement (Aida, 1994; MacIntyre &. Gardner, 1989; Phillips, 1992). It thus gives uncomfortable experiences to individuals who suffer from

public speaking anxiety, leading them to communicate less in classes (Hashimoto, 2002).

As individuals graduate and excel in their career, they are more likely to give speeches during meetings, seminars, and conferences, and even express their opinions in teams. However, this is not the case for those who suffer from public speaking anxiety. They become restless and later suffer from sleeping disorders which in turn, influence their job performances and upward mobility (Pertaub et al., 2002; Raja, 2017; Strahan, 2003). Pertaub and other researchers (2002) further added that individuals with a high public speaking anxiety level were also hardly promoted, which leads to dissatisfaction, personal agony, and gloominess.

As individuals who are socially anxious are unable to demonstrate their social skills in different situations, they always refrain from being in the social circle. This is due to the reason that they are afraid of being humiliated and forming a negative image under the scrutiny of others (Pertaub et al., 2002). Slowly, they lose their self-confidence and motivation, resulting in a lack of life quality and are unable to play their social roles in society (Furmark, 2002). Unlike normal individuals, people who are socially anxious find it difficult to maintain relationships with others as they are afraid of being exposed to unfamiliar people. Ultimately, it causes them to be avoidants.

The recognition of how severely public speaking anxiety could impair one’s life thus raises the interest of researchers to fulfill the need of having strategies, programs, and/or therapies to mitigate its arousal. Whatever

methodology is going to be implemented to reduce this issue, it should be a part of the educational curriculum (Raja, 2017).

2.6 Two Aspects of Self-Regulatory Strategies: Practicality and Effectiveness

Although many therapies are adapted from the most popular techniques namely systematic desensitization (McCroskey, 1972), cognitive modification (Allen et al., 1989), skills training (Whitworth & Cochran, 1996), which was designed to address and train speakers to cope with public speaking anxiety, this issue is still wide-spreading. As stated by Bodie (2010), although public speaking anxiety can be reduced, the effectiveness of therapies/ treatments largely relies on where they take place. Hence, the researcher can argue its reliability, at least in the Malaysian context.

In addition, all these therapies for reducing public speaking anxiety have centred upon what a teacher/an instructor can do to alleviate the problem. The learning environment of the 21st century seems to place much responsibility on learners to take control of their own learning, which is why learner autonomy has been one of the main foci in this learning approach. Benson (1997), Murase (2015), and Oxford (2003) showed some degree of agreement by elucidating that learner autonomy can be assessed through different aspects such as behavioural, affective, cognitive and social. In this study, self-regulatory strategies were grouped into 5 types: avoidance, cognitive, management, affective, and social (Guo et al., 2018). Thus, speakers self-regulate and monitor their anxiousness to speak in front of audiences instead of waiting for therapies and treatments before their anxiety level increases. As for instructors, it is crucial

to create a low anxiety-producing atmosphere for learners to practice their public speaking (Yasuda & Nabei, 2018).

In the discussion of self-regulatory strategies for public speaking anxiety, Yasuda and Nabei (2018) proposed two different viewpoints: practicality and effectiveness. The former suggests that recommended self-regulatory strategies should be ones which speakers can use in actual situations. As public speaking anxiety can be state-like anxiety, speakers should employ a self-regulatory strategy that is specific to that particular situation. This is explainable when the sources and magnitude of fear slightly differ between an EFL and ESL speaker. For instance, an EFL speaker who is placed under an ESL public speaking setting would feel a greater fear of receiving negative evaluation from peers than from authority figures, whereas an ESL speaker would be afraid of being negatively evaluated from authority figures than from peers. Hence, speakers should have a clear need for strategies that they can instantly employ in each unique situation.

Besides, in Yasuda and Nabei's viewpoints (2018), the latter suggests the effectiveness of using self-regulatory strategies to alleviate public speaking anxiety. They claimed that speakers should be encouraged to constantly use self-regulatory strategies that they have chosen if they are effective. So far, however, there has been less discussion (Kondo & Yang, 2004; Lucas, 1984; Pappamihiel, 2002; Young, 1992) on self-regulatory strategies that speakers can make use of in actual situations. There is, unfortunately, very little empirical evidence for the true effects of self-regulatory strategies (Yasuda & Nabei, 2018). This study thus offers a broader view of self-regulatory strategies by having a list of them based

on the aspect of practicality as it is the preliminary case before examining their effectiveness.

2.7 Strategies for Reducing Public Speaking Anxiety

A considerable amount of literature (Alrabai, 2014; Cepon, 2016; He, 2017; Shabani, 2012) has been published on strategies for reducing speaking anxiety. These studies have been conducted in foreign or second language classrooms. The existing studies are first presented in the EFL context and then in the ESL context. Despite the success of these research, students' anxiety levels and different types of self-regulatory strategies used by them to overcome speaking anxiety, particularly in the context of public speaking classes, remains unclear and are largely unexplored.

One of the early studies conducted in the EFL context belongs to Lucas (1984). In her study concerning anxiety-reducing strategies that could be applied by both instructors and learners, she recommended two steps to regulate speaking anxiety in Japan: (1) to provide a conducive atmosphere in making speakers more verbal and (2) to include speakers in 161 suggested classroom activities that help them rehearse the act of speaking. Nonetheless, most of the strategies heavily rely on the role of instructors and the effectiveness of classroom activities are yet to be verified because, in her study, she only suggested the activities after identifying speaking problems that existed among Japanese learners.

Collecting a body of data from 135 Spanish undergraduates and 109 high school students from a self-developed questionnaire, Young (1990) sought to understand what strategies helped alleviate their speaking anxiety. The analysis

showed that the ultimate sources of speaking anxiety were not about the language itself but rather the act of speaking in front of the audience. Moreover, students would perceive that they would be less tense when speaking if their instructor is friendly and positively corrects their speech errors. Young extended her study (1992) by interviewing four specialists (in what? Speech?): Alice Omaggio Hadley, Jennybelle Rardin, Stephen Krashen, and Tracy Errell. Much of the interview data has corroborated with the students' perspectives in the earlier study. As a result, she added another 16 ways of coping with speaking anxiety and these include collaborative learning, readiness to speak, and not having students to do an impromptu speech.

A broader perspective has been adopted by Kondo and Yang (2004). In their study, they gathered 209 EFL undergraduates from two universities in Japan. Using a self-developed questionnaire, they asked the respondents about the strategies they used to deal with language anxiety. The findings inspired them in the sense that tackling this psychological phenomenon, speaking anxiety largely depends on speakers themselves despite tremendous support from different parties. In Kondo and Yang's study (2004), 70 tactics for dealing with such anxiety were later cohered into categories of relaxation, peer thinking, positive thinking, preparation, and resignation. Based on their findings, the resignation strategy nevertheless had no pedagogic value and was regarded as a non-active regulatory strategy.

Speaking anxiety in the EFL setting also received attention in the Chinese context. Liu (2007) conducted a small sample study and came out with ten reasons pertaining to 27 Chinese students' language anxiety. Liu's study adopted a rather different way to investigate the issue by digging in the inner

voice of speakers through reflective journals. Her participants, however "seemed to be at a loss" (p.132) when asked about the strategies used to self-regulate their language anxiety through a survey and reflective journals. She thus suggested that the existence of speaking anxiety should be first acknowledged before coping with it. Only "a couple" (Liu, 2007, p. 129) of them responded that more practice and building self-confidence was needed.

The issue continues to grow in importance in the EFL context in light of recent research conducted by Guo and other researchers (2018) who self-developed a 31-item questionnaire. Unlike Liu's study (2007), their study included a total of 753 EFL undergraduates who pursued studies in seven different universities in central China. The survey data were triangulated with the data from group interviews. Guo and other researchers (2018) successfully discovered that anxiety level affects the participants' strategy use. Low-anxiety-undergraduates preferred Cognitive, Management, Appraisal, and Social strategies in alleviating anxiety while their high-anxiety counterparts used Avoidance and Affective strategies in regulating their language learning anxiety. Yet, the effectiveness of these self-regulatory strategies remains unknown and is lacking in their study.

As the pioneer of developing the Second Language Speaking Anxiety Scale (SLSAS), Woodrow (2006) studied the potential relationship between learners' oral achievement and their anxiety level. She recruited 275 advanced learners from the program of English for Academic Purposes in her study. The data analysis showed that oral performance significantly predicts speaking anxiety, and these two variables were negatively related. Problems at the input stage and processing relevant information results anxiety at the output stage. In

short, oral performance, particularly skill deficits cause anxiety. The findings also identified sources of in- and out-of-class anxiety and indicated compensation, positive thinking, improving the language, and relaxation as anxiety-reducing techniques. However, questions are raised when the above findings are unlikely to speak to the case of learners who possess different language proficiency levels and personalities.

Following the trend of examining second language speaking anxiety, Terui (2012) examined the regulatory strategies used by second language speakers when they communicated with non-native speakers in a multilingual context. Combining three interactive interviews and autoethnography, she interviewed three graduates and three undergraduates from non-English speaking countries. With the relationships Terui established with the interviewees, it changed her status as a researcher to a group participant. The data revealed 11 tactics to reduce speaking anxiety, and these included keeping the conversation open and flowing, facing social pressure as well as protecting one's self-esteem. However, the research nature much relies on the trustworthiness of the data through her acknowledgement of her relationship with the interviewees.

Investigating speaking anxiety from the perspective of immigrants, de Blakeley and other researchers (2015) recruited 190 Latin-America immigrants to share their experiences of speaking English as a second language in Australia. After administering two questionnaires and observing the participants, they were surprised at the results revealing that anxious speakers were less apprehensive when they remained silent or avoided interactions with others. Nonetheless, the status of participants as immigrants tends to interfere with the strategies

employed by them in mitigating anxiety. This best explains why the participants did not embrace their fear and chose to avoid communicating with others when they felt that they were the inferior ones in Australia.

Reviewing effectiveness of the findings of all the studies, the understanding between anxiety levels of students and types of self-regulatory strategies they use to combat speaking anxiety, particularly in the setting of public speaking classes, is still limited. Such an understanding could be viewed using Behnke and Sawyer's Theory of Habituation and Sensitization (2001), as well as Corbetta and Shulman's Attentional Control Theory (2002). That is, when one fosters early habituation and lessens initial sensitization (Behnke & Sawyer, 2001) by applying different types of self-regulatory strategies, he concentrates on his goals rather than external stimuli (Cobetta & Shulman, 2002) to reduce public speaking anxiety.

2.8 Theoretical Background

2.8.1 Behnke and Sawyer's Theory of Habituation and Sensitization (2001)

As elaborated in Section 2.3, patterns of physiological symptoms reveal the peak periods of public speaking anxiety. Referring to the above situation, Behnke and Sawyer (2001) proposed two patterns of speaker anxiety: habituation and sensitization. Habituation occurs when a speaker's expectations of the threat is more than what it is; when that anticipation is not met, his anxiety level decreases. This is vividly shown at confrontation-adaptation phase whereas its counterpart, sensitization happens when a speaker unreasonably feels more anxious even though he anticipated a lower level of threat than the actual one. As shown in Figure 2.3 (see Section 2.3), there are two sensitization patterns

shown at two different phases: anticipation-confrontation and adaptation-release. Nevertheless, habituation and sensitization are two equally important patterns that help explain public speaking anxiety.

For habituators, their response to speaking anxiety also tightly links with the behavioural-inhibition system (BIS). When they confront situations they perceive as negative, undesired and novel, as well as capture anxiety-cues in an environment, they react to that anxiety-provoking circumstance by avoiding it. The behavioural-inhibition system (BIS) is thus triggered (Gray & MacNaughton, 2000). The higher the sensitivity level to these anxiety-provoking cues, the higher the activity of the BIS to avert negative experiences such as frustration, fear, and sadness (Braem et al., 2013). This thus explains why the first anxiety peak occurs during the moments before speaking. Similarly, the BIS happens when sensitizers start to speak in the initial minute. Simply stated, anxiety is provoked by the BIS and it is sensitive to avoidance motivation when individuals experience novel situations.

Behnke and Sawyer (2001) also ascribed habituation and sensitization patterns to individual differences. To put it simply, due to these two patterns, the magnitude of anxiety that speakers experience might differ from one another. This, in turn, results in high- and low-anxious individuals when they speak in front of audiences. Moreover, habituators tend to experience a lower level of anxiety than do their sensitizers counterparts during the first few minutes of giving a speech because they react less towards physical responses such as a racing heart. On the other hand, concerning self-regulatory strategies one uses, sensitizers might show less sensitivity to the threat they encounter – in this case,

it would be the moment right before a presentation – and are less anxious than they do.

Addressing the interference of self-regulatory strategies in the processes of a public speaking event, the aim is to foster early habituation and reduce initial sensitization. This allows speakers to anticipate more before meeting anxiety-cues, and slowly, when they are repeatedly exposed to the cues with the existence of audiences, they tend to regulate their fear of public speaking; habituation is reduced. This, in fact, proposes that self-regulatory strategies help weaken links between public speaking and anxiety. For instance, speakers who know they are highly anxious might get well-prepared before attending public speaking classes. As they expect a higher level of threat than what the actual is, they gradually reduce the fear of attending public speaking classes which is an ineffective response to what they encounter. In contrast, those who adopt an avoidance strategy by trying to avoid participating in speaking activities to not feel apprehensive increases the repercussions of sensitization. As they do not expect a high level of the actual threat, they could not help overcoming, only disengage from it.

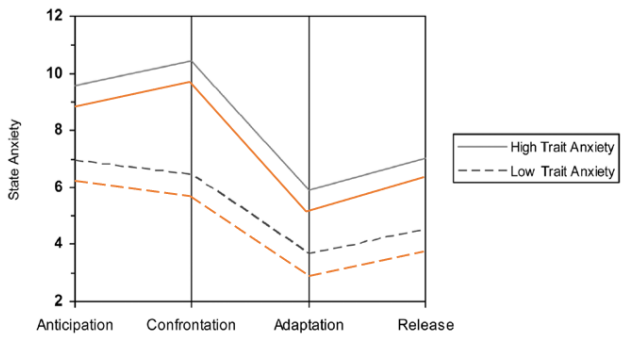

Figure 2.4: PSA Level at Different Phases: Adaptation, Confrontation, Adaptation, Release After Exercising Different Self-Regulatory Strategies

(Adapted from Witt et al., 2006) *Note*. The red line/ dotted line is shown after applying self-coping strategies.

2.8.2 Corbetta and Shulman's Attentional Control Theory (2002)

According to Power and Dalgeish (1997), an anxious speaker allocates more attention to an anxiety-provoking stimulus after he detects the threat/danger. This leads to the notion that anxious individuals deviate from working towards their current task; instead, they give more efforts in confronting the threats. More specifically, anxiety primarily affects attentional control, a salient role of the central executive that processes information and performs self-regulatory functions in the working memory, and then, to a lesser extent, to a phonological loop that temporarily holds spoken or written information. It assumes that more attentional resources are devoted to external and/or internal threat-related stimuli. Consequently, the attentional control theory (ACT) suggests a close link between anxiety and cognitive system.

Based on the work of Miyake et al. (2000), they identified 3 main theme functions of the central executive: (1) inhibition, (2) shifting, and (3) updating. When a speaker is anxious, the central executive triggers its inhibition function by helping him/her resist the disruption from having worrisome thoughts, palmar sweating, and even judging others' evaluation on him/her. At this point, the central executive also works best to shift the speaker's focus, using attentional control, on his/her speech performance. Monitoring and updating speech information uttered by the speaker is also critical in delivering a good speech and that is also of direct relevance to the central executive. It is because working memory system controls attentional resource in cognitive process, which

significantly affects attentional control system. Generally, although ACT proposes that anxiety impairs the first two functions of the central executive whilst the function of updating is not affected by anxiety, the provoked anxiety affects one's cognitive process by having limited attentional resources that makes his attentional systems imbalance.

On one hand, two different attentional systems also contribute to the assumption that anxiety impedes attentional control (Corbetta & Shulman, 2002; Posner & Petersen, 1990). Corbetta and Shulman (2002) differentiated a stimulus-driven attentional system – bottom-up attentional control system – reacting maximally to conspicuous stimuli and a goal-directed attentional system – top-down attentional control system – affected by knowledge, current goals, and expectation. When anxiety hits a speaker, who is presenting in front of audiences, it disrupts the equilibrium between these two systems. The goal-directed attentional system shows a decline in its performance; in contrast, the stimulus-driven attentional system maximises its performance. These two systems are in a bidirectional relationship, leading to a dominance of the latter system. All these effects of the systems are greater when a higher anxiety level is detected. To illustrate, the speaker slowly digresses from the current goal and focuses more on unrelated, obvious stimuli such as audiences' feedback and negative evaluation from peers.

However, by initiating the self-regulatory process, extra efforts made on threat-related stimuli can be compensated. Anxiety level increases when a speaker is worried about his/her presentation. This may be problematic as the goal-directed attentional system is blocked. As proposed in ACT, an anxious speaker can counteract the automatic activation of a bottom-up attentional

control system using his/her self-control. Using self-regulatory strategies, they help moderate anxiety and regulate the equilibrium between two systems. For instance, an apprehensive speaker who continuously reminds himself that public speaking anxiety is common tries to use his self-control to block the threatening stimuli he encounters from lowering down the performance level of the goal-directed attentional system. He attends his focus on the delivery of his speech without fear of negative evaluation from the experts and his peers. By contrast, however, an anxious speaker who is speaking in front of audiences avoids occasions on which he has the choice to skip his turn. Insufficient self-control makes him vulnerable to anxiety-stimuli, causing an increased level of the bottom-up attentional control system. These two attentional systems are getting more apparent in the state of disequilibrium, affecting the speaker to invest unnecessary efforts in mitigating anxiety.

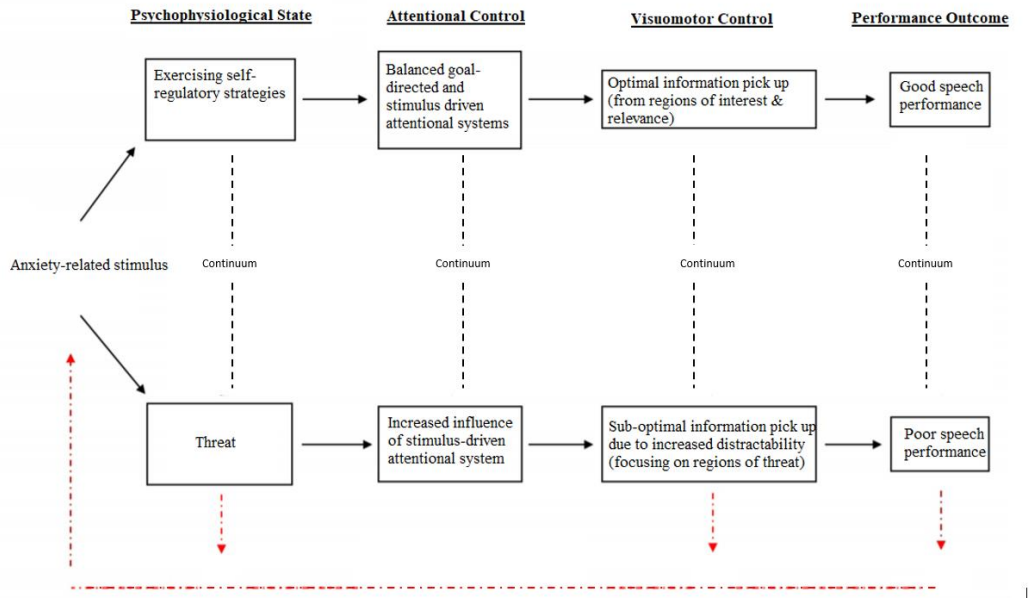

Figure 2.5: The Interplay between Two Attentional Systems and Self-Regulatory Strategies (Adapted from Vine et al., 2016)

2.9 Conceptual Framework of the Study

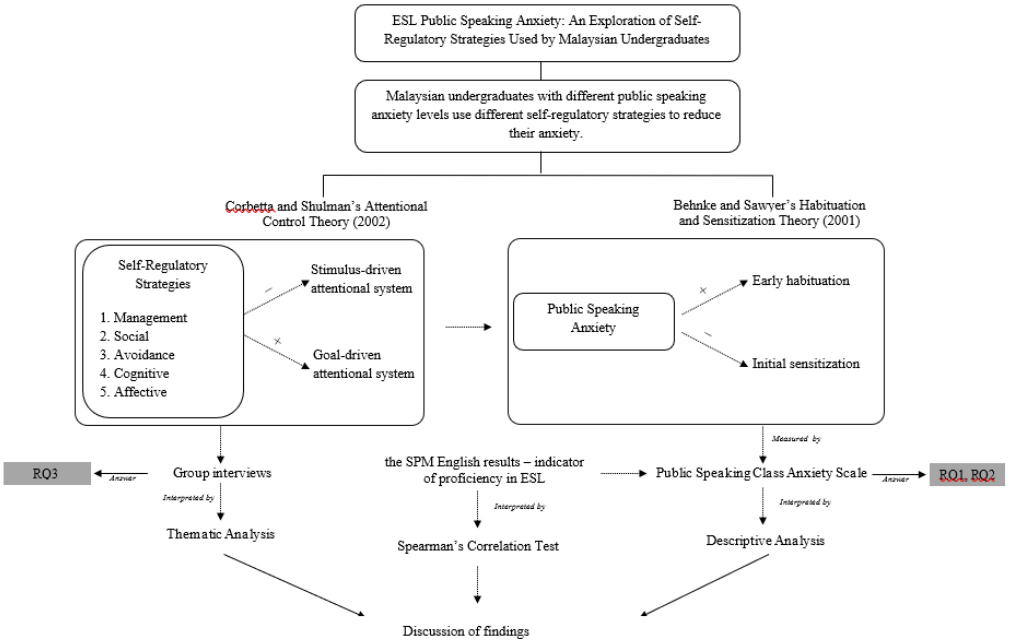

Figure 2.6: The Conceptual Framework of the Study

With the aim of proving that Malaysian undergraduates with different public speaking anxiety levels use different self-regulatory strategies to mitigate their anxiety, this study was rooted in Behnke and Sawyer's Theory of Habituation and Sensitization (2001), as well as Corbetta and Shulman's Attentional Control Theory (2002). To reduce one's public speaking anxiety, one has to foster early habituation and reduce initial sensitization (Behnke & Sawyer, 2001). Also, one should focus on goals and avoid paying attention to incoming stimuli (Cobetta & Shulman, 2002). Given the first research question was to measure public speaking anxiety levels among the university students, the study adopted the Public Speaking Class Anxiety Scale developed by Yaikhong and Usaha (2012). Descriptive statistics in the form of sum scores were used to determine the levels of public speaking anxiety of the participants. Aside from age, year of study, and course of study, students' SPM English

results were also sought through the Demographic Information Questionnaire as reflective of their English Language proficiency levels (Balakrishnan et al., 2020; Salim et al., 2017; Sim et al., 2020) to investigate the relationship between their English SPM results and the PSCAS scores. Then, Spearman's correlation was used to identify the relationship between students' English SPM results (ordinal data) and their PSCAS scores (continuous data). On the other hand, 5 questions were asked during interviews (i.e. the language speaking backgrounds, the strategies they used to alleviate anxiety before, during, and after having a presentation, the reasons for adopting such strategies) – all of which served to answer the third research question. Coding was done using NVivo to create initials codes and themes based on the interview questions and research objectives.

2.10 Summary

This chapter has reviewed the research studies relating to public speaking anxiety and self-regulation strategies. It also briefly reviewed the history of public speaking while telling how the fear of public speaking affects one's life. Besides, it is also deduced that public speaking anxiety is studied as both trait and state anxieties. The 4 milestones of public speaking: anticipation, confrontation, adaptation, and release were also studied. The following subsections then provided a theoretical background behind the issue using the theories of habituation and sensitization, and attentional control. It surmises that the use of self-regulatory strategies helps foster early habituation and reduce initial sensitization. At the same time, it helps maximise the performance system of goal-driven and acts as a barrier to the stimulus-driven system. All the

reviewed studies and theories finally led to the development of a conceptual framework before further discussing the flow of the study in the next chapter.

Chapter Three

3.0 Introduction

With the aim of devising a proper framework of self-regulatory strategies for Malaysian undergraduates with different levels of public speaking anxiety to reduce their anxiety, the study was designed based on the research objectives set. Following that, research location and sampling method were decided before selecting potential research participants. As for the research instruments, which are Sijil Pelajaran Malaysia, the Public Speaking Class Anxiety Scale, and group interview, justifications were made to adopt them in relation to research objectives. These 3 research instruments were validated before conducting the study. Quantitative and qualitative analyses were then performed using SPSS and NVivo software.

3.1 Research Design

The overall purpose of this study was to explore self-regulatory strategies used by the Malaysian undergraduates of different levels of public speaking anxiety in reducing the anxiety. Prior to that, this study was designed to empirically examine the correlation between anxiety and language proficiency, and to address the following research questions:

(1) What levels of public speaking anxiety that the undergraduates have?

(2) Is there any correlation between the undergraduates' SPM English Language result and public speaking anxiety levels?

(3) How do the levels of public speaking anxiety and self-regulatory strategies relate to each other for high-, mid-, and low-proficient students, respectively?

To address these questions, a mixed-methods approach combining both quantitative and qualitative methodologies was used. Several researchers have discussed the need for qualitative investigations of self-regulatory strategies in reducing public speaking anxiety (Kamarulzaman et al., 2013; Liu, 2007; Mak, 2011, Miskam & Saidalvi, 2018), as they provide an opportunity to better understand undergraduates who experience the anxiety at various levels without assuming that there is "one universal truth to be discovered" (Auerbach & Silverstein, 2003, p. 26). Mixed-methods research may be particularly useful for gaining a more complex understanding of public speaking anxiety while simultaneously testing correlations (Creswell & Clark, 2006). Greene and other researchers (1989) earlier suggested that mixed-methods studies can serve several purposes, including triangulation (i.e. seeking convergence of results), complementarity (i.e. examining different faces of public speaking anxiety), initiation (i.e. discovering contradictions found in the findings of past studies), and development (i.e. using quantitative and qualitative methods sequentially).

The present mixed-methods approach was conceptualized from a pragmatic theoretical paradigm and designed the research as a case study, which is indicated by the following procedural notation (Creswell & Clark, 2006): QUANT → qual. That is, quantitative (i.e. survey) and qualitative (i.e. interview) data were collected in a sequential manner, and the primary methodology was quantitative, with a lesser emphasis on the qualitative portion (Creswell & Clark, 2006).

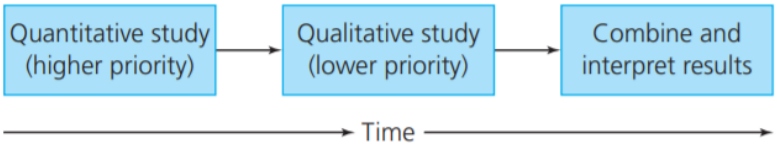

Figure 3.1: Explanatory Sequential Mixed-methods Approach (Adopted from Creswell and Clark, 2006)

Yin (2003) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). She regarded this design as a comprehensive research strategy, which may be a combination of quantitative and qualitative research. This statement conforms to the nature of a mixed-methods approach and therefore, the present study was an intrinsic case study (Stake, 1995). Two justifications were made in using such case study: (1) to document the situation of public speaking anxiety as it exists naturally and (2) to explore how the undergraduates in this research location reduce their public speaking anxiety. In hopes of gaining insight into *why* this is the case, the research participants were interviewed to know what self-regulatory strategies they used in their account. However, case study is acknowledged as a poor basis for generalization (Yin, 2003); instead, it emphasizes on interpretation (see Chapter 3.9).

3.2 Research Location

The university where the study took place was established in 2002 as a not-for-profit private university in Peninsular Malaysia. It consists of two campuses in the North and Central regions of Peninsular Malaysia. Consiting of 15 major buildings on its 1300-acre campus, this university serves more than

20,000 students annually. The university's departments and programs are organized into 9 faculties that offers 71 undergraduate programs. These 71 undergraduate programs are as below.

Table 3.1: Undergraduate Programs Offered by Each Faculty

Faculty	Program
Central region	
Faculty of Engineering and Science	● Bachelor of Actuarial Science ● Bachelor of Applied Mathematics with Computing ● Bachelor of Financial Mathematics ● Bachelor of Software Engineering ● Bachelor of Biomedical Engineering ● Bachelor of Chemical Engineering ● Bachelor of Civil Engineering ● Bachelor of Electrical and Electronic Engineering ● Bachelor of Electronic and Communications Engineering ● Bachelor of Electronics (Computer Networking) ● Bachelor of Materials and Manufacturing Engineering ● Bachelor of Mechanical Engineering ● Bachelor of Mechatronics Engineering ● Bachelor of Architecture ● Bachelor of Quantity Surveying ● Bachelor of Physics
Faculty of Creative Industries	● Bachelor of Communication Broadcasting ● Bachelor of Graphic Design and Multimedia ● Bachelor of Corporate Communication

	• Bachelor of Media and Creative Studies • Bachelor of Game Design • Bachelor of Journalism in Chinese Media • Bachelor of Early Childhood Education • Bachelor of Digital Animation • Bachelor of Game Development
Faculty of Medicine and Health Sciences	• Bachelor of Medicine and Bachelor of Surgery • Bachelor of Chinese Medicine • Bachelor of Nursing • Bachelor of Physiotherapy
Faculty of Accountancy and Management	• Bachelor of Accounting • Bachelor of Global Economics • Bachelor of International Business • Bachelor of Building and Property Management
North region	
Faculty of Arts and Social Science	• Bachelor of Advertising • Bachelor of Journalism • Bachelor of Public Relations • Bachelor of English Language • Bachelor of English Education • Bachelor of Psychology • Bachelor of Guidance and Counselling
Faculty of Business and Finance	• Bachelor of Commerce Accounting • Bachelor of Business Administration • Bachelor of Banking and Finance • Bachelor of Entrepreneurship • Bachelor of Marketing • Bachelor of Financial Economics

	• Bachelor of Finance • Bachelor of Retail Management
Faculty of Engineering and Green Technology	• Bachelor of Construction Management • Bachelor of Electronic Engineering • Bachelor of Environmental Engineering • Bachelor of Industrial Engineering • Bachelor of Petrochemical Engineering • Bachelor of Technology in Electronic Systems • Bachelor of Technology in Industrial Management • Bachelor of Environmental, Occupational Safety and Health
Faculty of Information and Communication Technology	• Bachelor of Computer Science • Bachelor of Business Information Systems • Bachelor of Information Systems Engineering • Bachelor of Computer Engineering • Bachelor of Communications and Networking
Faculty of Science	• Bachelor of Agricultural Science • Bachelor of Food Science • Bachelor of Biotechnology • Bachelor of Microbiology • Bachelor of Biomedical Science • Bachelor of Dietetics • Bachelor of Biochemistry • Bachelor of Chemistry • Bachelor of Logistics and International Shipping

	● Bachelor of Statistical Computing and Operations Research

After analysing 71 program structures, the public speaking course is designed to be an elective course, which is to be registered by undergraduates from different programs in the same semester. Therefore, the recruitment of research participants was conducted in public speaking lecture classes.

3.3 Sample Size

One of the research objectives in the study was to determine the correlation between public speaking anxiety levels and the SPM English Language results. SPM English Language results and public speaking anxiety levels from Balakrishnan and other researchers' study (2020) was said to have a negative correlation coefficient of 0.3. The researcher estimated that the correlation coefficient between public speaking anxiety levels and the SPM English Language results is able to achieve at least 0.6 from the new set of data. Thus, the aim was to get significant result ($p < 0.05$) with sufficient power (80%) to detect at least correlation coefficient of 0.6 when the correlation coefficient in the alternate hypothesis was 0.3. With reference to the sample size table presented in Bujang and Baharum's study (2016) – suggested by Guenther (1977)

for calculating the cumulative correlation coefficient distribution, the minimum required sample size for the study was 56.

While referring to the above table, for a correlation or regression with the number increasing for greater numbers of independent variables (IVs), the general rule of thumb is no less than 50 participants. Green (1991) provided a detailed overview of the methods used to assess regression sample sizes. For a correlation, he proposed N > 50 + 8 m (where m is the number of IVs). While Green's (1991) formula is more precise, there is another rule of thumb that may be used. The earlier formula (Harris, 1985) for 5 or less predictors (this number includes correlations) to yield the absolute minimum number of participants was almost the same as Green's. Harris (1985) proposed that at least 50 (i.e. the total number of participants is equal to the number of predictor variables plus 50) should outweigh the number of predictors. With reference to Harris (1985) and Green's (1991) propositions, the minimum required sample size for the study was 67 (2 IVs are included).

Considering Harris (1985) and Green's (1991) propositions, as well as Bujang and Baharum's (2016) sample size table for correlation tests, an average minimum required sample size of 62 participants shall be involved in the study.

3.4 Sampling Method

A sample in a research study is the group on which information is obtained (Fraenkel et al., 2011). In the study, the larger group – population – to which the researcher hoped to collect the findings was the undergraduates who took public speaking course in June trimester 2020. A total of 105 students in the studied university constituted a population. As stated by Maxwell in 1996,

research participants shall be chosen deliberately to warrant useful and necessary information when exploring the issue.

Because the researcher would like to select participants from the studied population, and at the same time maintaining the nonbiased stand in the selection process, she opted for snowball sampling. Snowball sampling, also known as chain-referral sampling, is used in which the samples have hard-to-find characteristics. This is a strategy for recruiting samples for a study in which current individuals recommend new subjects. Yet, the researcher acknowledged that the word nonbiased shall be used with some caution. How, why and where the snowball rolled, again tightly linked to the purpose of this study. Suggested by Neuman (2009), the initial contact (i.e. the first snowball) shall be clear and use recommendation to work out from there. Therefore, she had a short meeting with the university lecturers via Microsoft Teams before choosing the participants. During the meeting, they were informed about the research in detail, including duration of the study. Having them as key informants, the first group of participants were recruited to be interviewed. The selection process eventually stopped when, no new names were given, indicating a closed network (Neuman, 2009). As a result, 65 out of 104 students constituted a sample in the study.

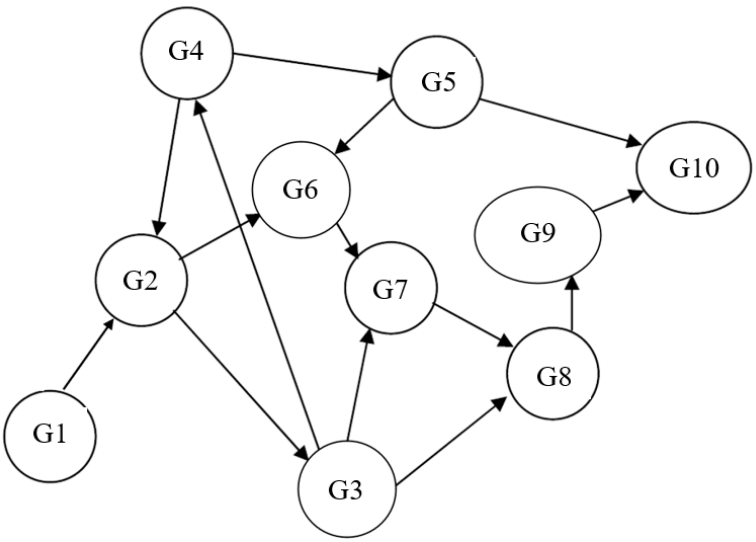

Figure 3.2: Snowball Sampling in the Study

3.5 Research Participants

Participants in the study were 65 undergraduates who took public speaking course in June trimester 2020. These students were enrolled in various degree programs (e.g., education, business, engineering, science, public relations, computer science). The sample was selected purposely and was approached using snowball sampling. Table 3.2 showed 65 participants consisting of 45 female (69.2%) and 20 male (30.8%) undergraduates who voluntarily to be included in the study. With regard to ethnicity, the respondents comprised 55 Chinese (85.4 %), 7 Indians (11.0 %), and 3 Malays (3.6 %). Ages ranged from 20 to 24 years (M = 21.58, SD = 1.37). 56 (86.2%) participants reported to be Year 2 undergraduates while 9 (13.8%) were Year 3 undergraduates. All participants reported to have had learned English as a second language for more than 10 years.

Table 3.2: Demographic Profile of Participants (N = 65)

Demography	**Frequency (f)**	**Percentage (%)**
Gender		

Male	20	30.8
Female	45	69.2
Age (years old)		
20	19	29.2
21	14	21.5
22	15	23.1
23	9	13.8
24	8	12.3
Ethnicity		
Chinese	55	85.4
Indian	7	11.0
Malay	3	3.6
Current Year of Study		
Year 2	56	86.2
Year 3	9	13.8
Language Spoken at Home		
Chinese	45	69.2
English	16	24.6
Malay	4	6.2

Participants in the study were from various cultures and races, although the majority of them were Chinese, thus resulting in the difference in the languages spoken at home. Table 3.2 showed the languages participants primarily use at home. 45 (69.2%) participants reported to use Chinese as the medium of communication at home, 16 (24.6%) used English, and 4 (6.2%) used Malay. Based on the interviews, more than 75% of them (n = 47) admitted to feel comfortable speaking English with classmates rather than family members. Some of them explained that they felt awkward to do so as nobody spoke English at home. Participants who did not speak English Language at home claimed that they would only do so if their mother tongue and/or Malay was not allowed, whilst those who spoke English Language at home would use the language all the time.

Table 3.2 showed participants' results for English Language subject in SPM. 15.4% (n = 10) participants obtained grade A in Malaysian Certificate of Examination or Sijil Pelajaran Malaysia (SPM), while 12.3% (n = 8) participants

obtained grade A-. Majority were average in their English language proficiency with 47 (72.3%) participants passed with credits. Based on the table, it was concluded that their English Language mastery level ranged from super distinction to upper credit.

Table 3.3: The SPM Results for English Language Subject (N = 65)

Result	Frequency (f)	Percentage (%)
A+	0	0
A	10	15.4
A-	8	12.3
B+	25	38.5
B	19	29.2
C+	3	4.6
C	0	0
D	0	0
E	0	0
G	0	0

3.6 Research Instruments

The data in the study was collected via the following methods: the 17-item Public Speaking Class Anxiety Scale (Yaikhong & Usaha, 2012), and group interview as elaborated below. In addition, the Demographic Information Questionnaire (DIQ) was also used to collect the participants' age, gender, ethnicity, major, and current year of study.

3.6.1 Public Speaking Class Anxiety Scale

Given the first research objective was to measure public speaking anxiety levels that the undergraduates had experienced, the Public Speaking Class Anxiety Scale (PSCAS) was adopted in the study. 17 items in the PSCAS were adopted and adapted from previous scales based on their critical appraisals: Foreign Language Classroom Anxiety Scale (FLCAS) by Personal Report of Communication Apprehension (PRCA-24) and Personal Report of Public

Speaking Anxiety (PRPSA-34) by McCroskey (1970), Horwitz, Horwitz, and Cope (1986), and Speaker Anxiety Scale (SA) by Clevenger, Halvorson, and Bledsoe (1992).

In addition, a series of statements using a five-point scale ranged from 1 "Strongly Disagree", 2 "Disagree", 3 "Mildly Agree", 4 "Agree" to 5 "Strongly Agree". The statements assessed components of public speaking anxiety as proposed by Yaikhong and Usaha (2012) (i.e. fear of negative evaluation, comfort in speaking English, test anxiety, and communication apprehension). There were 6 items covered under the component of fear of negative evaluation, which stated one's fear of making mistakes and being negatively evaluated in public speaking classes (e.g., I am afraid that other students will laugh at me while I am speaking English). Comfort in speaking English included 4 items suggestive of the speaking component in a public speaking class (e.g., I feel relaxed while speaking English). Another component of assessing public speaking anxiety – test anxiety – included 3 items indicative of the fear of inadequate performance in speaking English (e.g., Even if I am very well prepared, I feel anxious about speaking English). Communication apprehension included 4 items reflective of anticipated anxious behaviours in speaking English (e.g., I dislike using my voice and body expressively while I am speaking English). Table 3.4 listed the components of and the number of items belonging to each component of the PSCAS.

Table 3.4: Components of the PSCAS

Component of the PSCAS	Item No.
Fear of negative evaluation	6, 9, 11, 13, 14, 16
Comfort in speaking English	4, 8, 10, 12
Test anxiety	1, 7, 17

Communication apprehension	2, 3, 5, 15

As the participants' anxiety levels could not be analysed immediately, it is not easy to measure its complexity. Having the PSCAS not only served as a relevant instrument to be used to determine the level of public speaking anxiety (Yaikhong & Usaha, 2012), but also the researchers were able to elicit information without influencing the participants in any way (Liu, 2007). 13 items (i.e Items 1, 2, 3, 5, 6, 7, 9, 11, 3, 14, 15, 16, 17) were negatively worded and 4 items (i.e. Items 4, 8, 10, 12) were positively worded. The possible range of score is 17-105; a higher score indicated a higher level of public speaking anxiety in the participants. Based on the broadly acceptable reliability coefficient of .70 (Fraenkel & Wallen, 1993), Cronbach's Alpha Coefficient of .84 suggested that the items had high internal consistency (Yaikhong & Usaha, 2012).

3.6.2 Group Interview

Group interviews were conducted to explore participants' use of self-regulatory strategies in reducing public speaking anxiety so as to add to the credibility and quality of quantitative findings (Dornyei, 2010). It was a more efficient use of resources and was a means of offering valuable insights to the interpretation of a social or behavioural event. Given the third research objective was to relate the levels of public speaking anxiety and self-regulatory strategies to each other for high-, mid-, and low-proficient undergraduates, adopting semi-structured group interview to explore self-regulatory strategies practised by them was justified: (1) The anxiety that subsided with this interview was the lowest, (2) It was time-saving when the researcher recollected 8-10

undergraduates' memories simultaneously after the presentation, and (3) Self-regulatory strategies utilized by the participants varied from one to another.

In group interviews, the emphasis was on the interaction between the researcher and each individual in the group; the researcher also occasionally checked the level of consensus in the group (see Figure 3.3). In the study, all the group interviews were heterogeneous (from different English proficiency levels/public speaking anxiety levels). The interviews were mainly centred upon 3 components: the participants' exposure to the English language, strategies they usually used to self-regulate public speaking anxiety before, during, and after the presentation, and reasons behind the adoption of such self-regulatory strategies. The guideline questions used in the interviews are provided in Appendix D. The first two questions were adopted from Salim, Subramaniam, and Termizi's study (2017) while the other 3 questions about self-regulatory strategies were adopted from Rafada and Madini's study (2017) and were adapted based on Behnke and Sawyer's Theory of Habituation and Sensitization (2001).

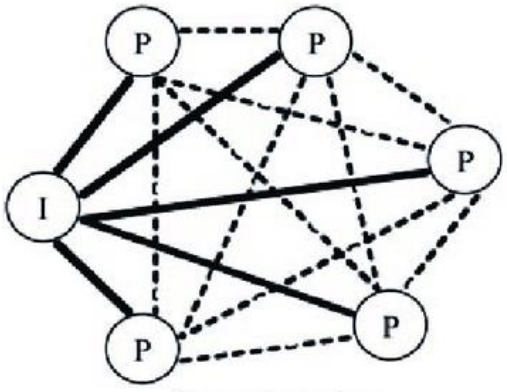

Figure 3.3: Researcher-participant Interaction in a Group Interview (Adopted from Brown & Edmunds, 2011) *Note*. This figure shows interaction

between a researcher (I) and participants (P) during a group interview. Dotted lines represent weak interaction (i.e. each of the participants primarily answers questions, listens to the group, and has less interactions with other participants); bold lines represent strong interaction (i.e. the conversation is primarily between the researcher and each of the participants).

3.6.3 The Malaysian Certificate of Examination / Sijil Pelajaran Malaysia (SPM)

Given the second research objective was to run a correlational test between participants' SPM English results and PSCAS scores. The SPM English results were reflective of their English Language proficiency levels (Balakrishnan, et al., 2020; Salim, et al., 2017; Sim, et al., 2020). The Malaysian Certificate of Examination or Sijil Pelajaran Malaysia (SPM) was a national examination that all the participants were required to sit in the fifth-year of secondary schools before entering the studied university. The exam was set and examined by Malaysian Examinations Syndicate (Salim, et al., 2017) based on the national Kurikulum Standard Sekolah Menengah (Secondary School Standard Curriculum) used in all public Malaysian schools. The internal validity was regularly checked as the minimum standard for a Pass-With-Credit in the English subject of the examination for the SPM continued to be similar to the standards of Credit Grade in the corresponding subject in the former GCE at Ordinary level, and at Grace C of the present GCE in the United Kingdom.

The exam syllabus emphasises on students' abilities to express ideas/opinions in a clear, accurate, and effective manner, create replies and connect ideas utilising a variety of sentence linkers, correctly and efficiently

employ a variety of grammatical structures and terminologies, demonstrate control of intonation and speech patterns, and participate in a discussion and make an effective contribution to help progress the conversation progress. Those skills facilitate one when interacting with group members and presenting in front that determine how one uses a language.

The results were assigned to a letter and/or a symbol to each range, with Grade A+ ("A" the letter grade and "+" being the grade symbol) being the highest and Grade G being the lowest. Grades were classified into 10 levels as shown in Table 3.5. Based on this classification, the participants' grades could be range from super distinction to fail.

Table 3.5: SPM Grading Scale

Grade	Interpretation
A+	Super distinction
A	High distinction
A-	Distinction
B+	Super credit
B	High credit
C+	Upper credit
C	Credit
D	Upper pass
E	Pass
G	Fail

3.7 Pilot Test

Prior to the empirical study, the Public Speaking Class Anxiety Scale was pilot tested with a sample of 30 undergraduates from different degree programs in public speaking classes. These respondents were excluded from the empirical study to avoid contamination (Creswell & Clark, 2006). Wallen and Fraenkel (2001) proposed that a reliable instrument should produce consistent

results at different times under different conditions. This led to a reliability test using Cronbach's Alpha, which measured internal consistency of the PSCAS. As a result, the PSCAS demonstrated a reasonably good inter-item correlation within each component in which the Cronbach's Alpha values coefficient of the 4 components ranged from .775 to .847, as shown in Table 3.6. On average, internal consistency of the PSCAS indicated a good internal consistency of .81 (Fraenkel & Wallen, 1993) – required no changes in adopting the items into the actual study. In fact, the PSCAS could be inferred as a well-constructed and reliable instrument.

Table 3.6: Cronbach's Alpha Coefficient for Each Component in the PSCAS

Component in the PSCAS	Cronbach's Alpha (α) Coefficient
Fear of negative evaluation	.847
Comfort in speaking English	.796
Test anxiety	.775
Communication apprehension	.813

With the purpose of discovering potential pitfalls of group interviews, as well as undergraduates' understanding of the interview questions, 6 respondents of the pilot group were voluntarily involved in piloting the interview questions. Due to the COVID-19 pandemic and a sudden change in the teaching and learning mode, the group interview had to be conducted online via Microsoft Teams. After conducting the group interview, 3 pitfalls of conducting it online were found: (1) Three interviewees disconnected themselves frequently due to poor internet connection, (2) Background noise was heard loudly during the interview, and (3) Two of them distracted others by changing virtual backgrounds frequently. To overcome these pitfalls, a set of rules was made and

attached to the chatroom in Microsoft Teams for the interviewees' reference before interview.

The pilot study was also conducted in the same manner as the interview for the research, including getting informed assent from the interviewees to provide face validity for the interview questions. The researcher asked them if they understood the questions, if any questions should be added or deleted. After having the pilot interview, in terms of the interview questions, the phrase of "reduce your nervousness" had been rephrased to "relax". As the interviewees suggested, these two words – "nervousness" and "relax" – were the same. Such a change was made to cater for the level of their understanding. In addition, the interviewees' difficulty in articulating voiced bilabial or nasal sounds also led the researcher to conform with the suggestion. Besides, the pilot interview of around 40 minutes was sufficient as suggested by Brown and Edmunds (2011), to be analysed using thematic analysis.

3.8 Data Collection Procedure

Ethical approval for the research was sought from the Chairman of Scientific and Ethical Review Committee of the researcher's respective university in January. Due to the COVID-19 pandemic, the change in mode of collecting data was discussed with the supervisors and the discussion reached a decision that the data collection was conducted online with regular contacts with the lecturers/tutors of public speaking courses. Therefore, permission was obtained from the Head of Program in allowing the researcher to liaise with relevant academic staff in May. After getting his approval and knowing the lecturers who were in-charge of public speaking courses in that semester, two

emails were sent each to the Deans of Faculty of Arts and Social Science and of Faculty of Creative Industries and approvals were obtained on 16 May.

With help from the lecturers/tutors and faculty staff, the researcher identified the population group. Two weeks were allocated for the lecturers/tutors to build rapport with the students before promoting the research. At the end of June, the researcher conducted a pilot test with 30 undergraduates of the identified population. After ensuring all the instruments valid and reliable, 10 group interviews with a group size of 6 to 8 interviewees, were conducted throughout July and August. The groups were formed based on the presentation schedules set by their lecturers. Therefore, to ensure the group members were of between 6 and 8, the researcher also brought up this matter when liaising with the lecturers/tutors.

The participants were first asked to complete the Demographic Information Questionnaire and Public Speaking Class Anxiety Scale questionnaire. All the respondents, prior to answering the survey questions, were informed about the research and were asked to complete an assent form. The assent form detailed the purpose of this study and the respondents were given the rights to not complete the questionnaire if they felt that they were at risk. Later, they were briefed about the research objectives, again. Their confidentiality was reassured, and their identities were not revealed in the aggregated findings. Since the group interviews were conducted online, they were asked to confirm their understanding by reacting with a “thumbs up” emoji. Each of them took turns to answer 5 questions posed by the researcher. During the interview, the researcher maintained the wording and the sequence of the interview questions.

The group interviews were video-taped, and each interview was lasted for about 40 minutes. The rationale of using video was to pick up non-verbal behaviours/body language that could reflect the self-regulatory strategies mentioned by the interviewees in reducing the anxiety. It was acknowledged that video-taping an interview could inhibit open-ness among interviewees. Therefore, a contact telephone number was given to interviewees by the end of the session as there might be something that they wanted to add; at the same time, it facilitated member checking. In order to avoid any confusion during data transcription, the tape was labelled clearly after the interview. The whole data collection was conducted over a semester.

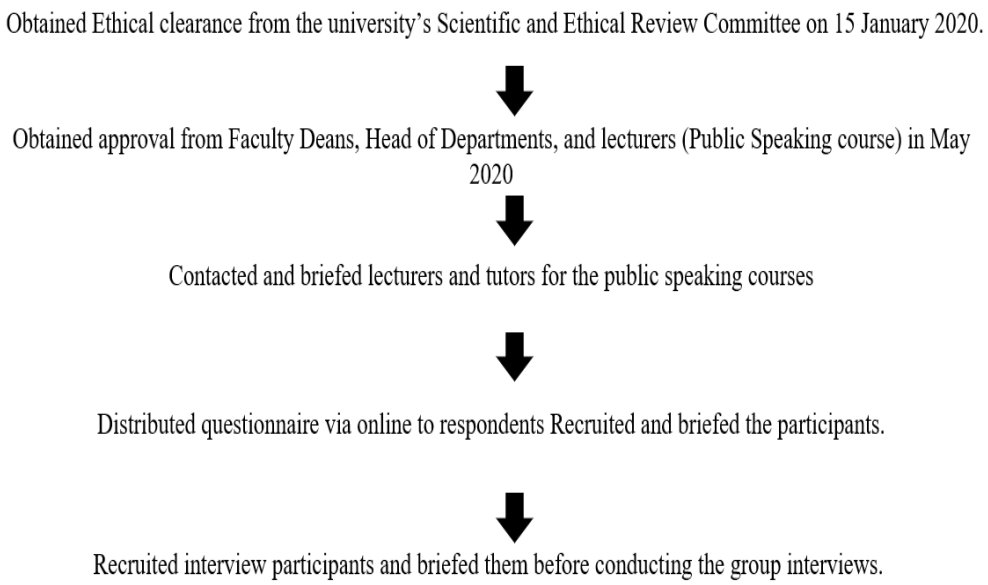

Figure 3.4: Flowchart of Data Collection

3.9 Data Analysis

The data collected from the responses in the questionnaires was coded and analysed using Statistical Package for the Social Sciences (SPSS) version 20.0. The coding system of a 5-point Likert Scale was used, and the codes were

arranged in a numerical order of 1 to 5 (1 = Strongly Disagree, 2 = Slightly Disagree, 3 = Mildly Agree, 4 = Slightly Agree, 5 = Strongly Agree). Descriptive statistics in the form of sum scores were used to determine the levels of public speaking anxiety of the participants, as proposed by Yaikhong and Usaha (2012); scores higher than 68 were categorised as high anxiety, between 68-51 as medium anxiety, and lower than 51 as low anxiety. As 4 items (i.e. Items 4, 8, 10, 12) of the PSCAS were positively worded, values had assigned to their alternatives reversed, so that the response "Strongly disagree" received a score of 5 instead of 1 and vice versa. The mean, standard deviation, maximum, and minimum were also calculated to report the extent to which the participants experience anxiety in public speaking classes.

Spearman's correlation was used for ordinal variable (i.e. SPM English results) that had failed the assumptions necessary for conducting the Pearson's product-moment correlation (Agresti, 2007). While inferential statistics using Spearman's correlation explained the relationship between their SPM English results and PSCAS scores, the data shall "pass" 3 assumptions that were required for Spearman's correlation to yield a valid result (Agresti, 2007): (1) Two variables should be measured on an ordinal, interval or ratio scale (i.e. SPM English results was measured on an ordinal scale, and PSCAS scores were measured on a ratio scale), (2) The variables represent paired observations (i.e. SPM English results of participant A and the PSCAS scores he obtained), and (3) There is a monotonic relationship between 2 variables (i.e. SPM English results and PSCAS scores were not linearly correlated). After checking the assumptions of Spearman's correlation, the Spearman correlation coefficient was calculated by applying the formula

$$\rho = 1 - \frac{6\sum d_i^2}{n(n^2-1)}$$

Where:

d_i is the difference between a pair of ranks

n is the number of observations

The correlation coefficient varies between +1.000 and -1.000, where +1.000 indicates a perfect positive relationship (agreement), whereas -1.000 implies a perfect negative relationship (disagreement). In other words, the closer the correlation coefficient to zero means the weaker the association between the ranks. In order to test on the hypothesis, the criterion for the alternate hypothesis to be accepted will be determined by the significance the p value < 0.5 level of probability (Lawson, 2003). At $p < 0.5$, represent that there is 95% confidence on the acceptance of the alternate hypothesis.

Besides, NVivo, a Qualitative Data Analysis (QDA) computer software package produced by QSR International, was used to analyse the interview data. As Mclafferty and Farley (2006) reasoned, NVivo operates well with most analytical techniques and research designs, implying the software brings little or no effects on how a research should be designed. Because the interview data was text-based, the coding process was the cornerstone of analysing these data. According to Miles and Huberman (1994), codes were "tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study" (p.56). They often adhered to words, clauses, phrases, sentences, or paragraphs within a discourse analysis. Given the advancements in software technology, it allowed the researcher to "[work] more methodically, more

thoroughly, more attentively" (Bazeley, 2007, p.6) in order to obtain rigour when analysing the data professionally.

As such, thematic analysis was used to classify and present patterns related to the third research objective and the interview data. Thematic analysis offered a detailed illustration of the data and dealt with different participants (Boyatzis, 1998) by exploring self-regulatory strategies they used. Furthermore, it helped the researcher connect the frequency analysis of each main theme – cognitive, affective, social, metacognitive, and avoidance – with one of the whole contents. This would ensure precision and sophistication and strengthen the whole sense of the analysis; an impetus for a deeper view of any potential issues the research brought (Marks & Yardley 2004).

Manifest analysis was first performed to stay close to the text and discover the surface meaning of what the interviewees said before discovering the hidden meaning of the text. Four main stages were involved in this analysis: the decontextualization, the recontextualization, the categorization, and the compilation (Bengtsson, 2016). The researcher familiarized herself with the text before the text was broken down into codes (decontextualization), re-read the original text alongside the codes, and considered whether the "dross" should be included (recontextualization), categorized the codes into themes and sub-categories (categorization), and deductively discussed the findings (compilation). In this study, the researcher familiarised herself with the interview transcripts. Later, she identified the nodes that were frequently appeared in the transcripts and used the search engine to group the similar nodes. The nodes were classified as parent nodes – themes, and any nodes that were under the parent nodes were child nodes – subthemes.

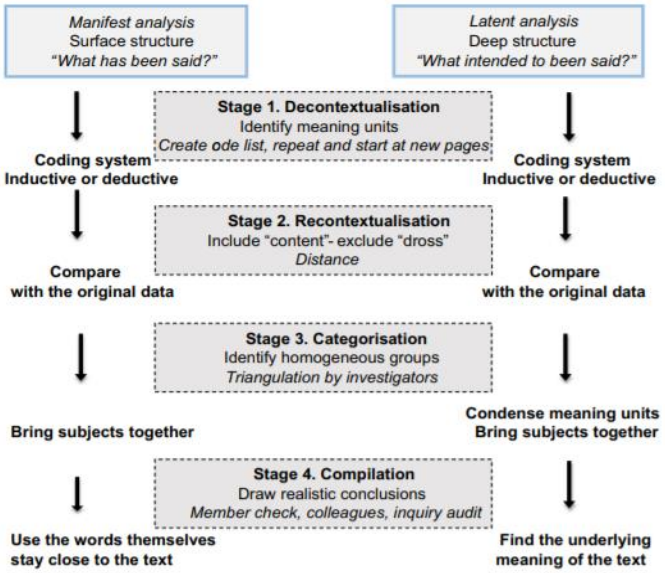

Figure 3.5: The Process of Manifest and Latent Content Analyses (Adopted from Bengtsson, 2016)

3.10 Research Criteria

Adopting a mixed-methods approach in the study, 3 parameters (i.e. abduction, intersubjectivity and transferability) were used to determine and evaluate the research quality. As mentioned in Chapter 3.1, the desire of connecting positivist with constructivism in the study led to the use of a pragmatic theoretical paradigm. Pragmatism places its emphasis on joint actions and shared meanings (Morgan, 2007), and believes that "theories can be both contextual and generalizable by analyzing them for transferability to another situation" (Creswell, 2009, p. 4). More specifically, Morgan (2007) had illustrated how pragmatism connected induction with deduction, subjectivity and objectivity, context and generality and developed new terms of abduction, intersubjectivity and transferability.

	Qualitative Approach	Quantitative Approach	Pragmatic Approach
Connection of theory and data	Induction	Deduction	Abduction
Relationship to research process	Subjectivity	Objectivity	Intersubjectivity
Inference from data	Context	Generality	Transferability

Figure 3.6: A Pragmatic Approach to Validating the Study (Adopted from Morgan, 2007)

Transferability is always claimed to validate qualitative research (Lincoln & Guba, 1985). With pragmatism, the transferability of the study was strengthened by both the breadth and the depth of the data provided by quantitative and qualitative approaches (i.e. survey and group interview). According to Morgan (2007), pragmatic approach is "to rely on a version of abductive reasoning that move back and forth between induction and deduction" (p. 71) to link theory and data. Therefore, the study explored the problem using theories and then assessed those theories through a combination of survey and group interview. This abductive process was employed where the third research objective was based on the deductive results from the first and second research objectives, and these 2 types of data complemented each other (Morgan, 2007). Pragmatism also granted the potential and possibility to work back and forth between survey data and interview data, and allowed the researcher search for useful points of connection between these two types of data.

Continuing from the previous point, Morgan (2007) added that intersubjectivity did not allow room for complete objectivity or complete subjectivity in a mixed-methods approach. Choices of formulating research questions and adopting certain methodologies "inevitably [tightly linked to the] aspects of personal history, social background, and cultural assumptions" (p. 69). In the study, a sufficient degree of mutual understanding with not only the

research participants, but also with people who read and review the findings of the study shall be achieved. Therefore, validating the Public Speaking Class Anxiety Scale and interview questions after testing its reliability in the actual research had been done. This focus on "processes of communication and shared meaning" (Morgan, 2007, p. 72) subsequently made the findings of the study more concrete.

Table 3.7: Abduction, Intersubjectivity and Transferability in the Context of the Study

Criterion	Description
Abduction	Explain SPM English Language results, the PSCAS scores, and interview data using the Theory of Habituation and Sensitization and Attentional Control Theory.
Transferability	Use survey and group interview
Intersubjectivity	Validate and test the instruments on 30 undergraduates in the studied university.

3.11 Summary

To summarize, this study explored how undergraduates with different levels of public speaking anxiety differ in using self-regulatory strategies. Exploring the issue led the researcher to adopt a case study research design to understand the phenomenon as it existed naturally. The study was conducted in both campuses of the studied university. Utilizing snowball sampling method, 65 participants were voluntarily involved in the study, resulting 10 group interviews to be conducted over a semester. Three research instruments: Sijil Pelajaran Malaysia, the Public Speaking Class Anxiety Scale and interview questions were validated before carrying out the study. Spearman's correlation and thematic analysis were performed before interpreting the findings.

Chapter Four

4.0 Introduction

This chapter presented the results of this study, which were extracted from descriptive and thematic analyses as well as Spearman's correlation test. To recapitulate, this study sought answers to 3 questions, and these were:

RQ1: What are the levels of public speaking anxiety among university students?

RQ2: Is there a statistically significant relationship between Sijil Pelajaran Malaysia (SPM) English results and Public Speaking Class Anxiety Scale (PSCAS) scores?

RQ3: What are the self-regulatory strategies used by students to regulate their public speaking anxiety?

The findings of this study were organized in the following order. Three separate sections presented the findings in line with the research questions of this study, which sought to measure public speaking anxiety levels faced by the participants, correlate with the PSCAS scores and SPM English results finally present different self-regulatory strategies in coping with the anxiety before, during, and after the presentation. Apart from that, research ethics was taken into consideration in a way that the researcher used pseudonyms when quoting the interview data in the following subsections. This maintains the integrity and confidentiality of the participants' personal information.

4.1 Response Rate

To achieve the research objectives set in this study, the researcher, with the help of lecturers/tutors, had reached out to 105 students from Public Speaking classes and promoted her research. Out of 105 students, 80 students

were gathered, and the return rate of their questionnaires filled out by these 80 students were 76%. 15 questionnaires were retracted because the respondents had chosen the same option in the questionnaire. Therefore, only 65 questionnaires were used for data analyses. The average response rate was 76%, and according to Polit and Beck (2004), a response rate of 65 % or more is usually sufficient for most research purposes.

4.2 What are the levels of public speaking anxiety among university students?

Achieving a satisfactory preliminary internal consistency coefficient at 0.84 after pilot testing on 30 undergraduates, the Public Speaking Class Anxiety Scale, which included 17 five-point Likert scale items, was adopted to measure the extent to which respondents felt anxious when presenting in front of the class. Table 4.1 displays their responses to the questions found in the PSCAS, which were introduced in the left column of Table 4.1, reflecting their perceptions/ feelings towards doing English presentations in front of the class. The percentages indicated the proportion of respondents who selected each response option for each item. Looking at the first column on the right, the mean of each item was also calculated first to provide a general idea of the extent to which respondents disagreed or agreed with the statement before discussing in detail.

Table 4.1: Response Percentages and Means of the Items of PSCAS (N = 65)

Statements	**SD**[a] (%[b])	**D** (%)	**N** (%)	**A** (%)	**SA** (%)	**Mean**[c]
1. I never feel quite sure of myself while I am speaking English.	0.0	27.7	38.5	29.2	4.6	3.12

2. I start to panic when I have to speak English without preparation in advance.	13.8	15.4	20.0	32.3	18.5	3.26
3. In a presentation class, I can get so nervous I forget things I know.	10.8	16.9	23.1	44.6	4.6	3.15
4. I feel confident while I am speaking English.	7.7	20.0	49.2	16.9	6.2	2.94
5. I get nervous when I am speaking English.	7.7	26.2	33.8	29.2	3.1	2.94
6. I am afraid that other students will laugh at me while I am speaking English.	21.5	27.7	24.6	16.9	9.2	2.65
7. I get nervous when the lecturer/tutor asks me to speak English which I have prepared in advance.	20.0	33.8	26.2	18.5	1.5	2.48
8. I have no fear of speaking English.	12.3	24.6	20.0	24.6	18.5	3.12
9. I feel relaxed while I am speaking English.	4.6	29.2	15.4	29.2	21.5	3.34
10. I can feel my heart pounding when I am going to be called on.	23.1	35.4	29.2	12.3	0.0	2.31
11. It embarrasses me to volunteer to present first.	4.6	12.3	30.8	32.3	20.0	3.51
12. I face the prospect of speaking English with confidence.	7.7	20.0	60.0	12.3	0.0	2.77

13. Certain parts of my body feel very tense and rigid while I am speaking English.	4.6	35.4	43.1	6.2	10.8	2.83
14. I feel anxious while I am waiting to present and speak English.	9.2	20.0	33.8	20.0	16.9	3.15
15. I dislike using my voice and body expressively while I am speaking English.	12.3	36.9	18.5	12.3	20.0	2.91
16. I have trouble coordinating my movements while I am speaking English.	16.9	40.0	12.3	10.8	20.0	2.77
17. Even if I am very well prepared, I feel anxious about speaking English.	9.2	24.6	29.2	20.0	16.9	3.11

Notes: a. SD: strongly disagree; D: disagree; N: neither disagree nor agree; A: agree; SA: strongly agree.
b. The percentages have been rounded to one digit after the decimal point.
c. The means have been rounded to two digits after the decimal point.

Obtaining the mean scores of 17 statements, between 2.31 to 3.51 supported the fact that the respondents, overall reacted either negatively or neutrally towards the statements. However, this table is revealing in several ways. As shown in Table 4.1, between 32% and 44% of the respondents agreed with the items 2, 3 and 10, informing that they anticipated anxious behaviours in speaking English. The response percentages were further evidenced by having one-third of the respondents feel embarrassed to volunteer to present in class (Item 11). Conversely, between 33% and 36% of the respondents disagreed with some of the anticipated anxious behaviours, as stated in Items 7 and 15. Nearly

28% of the respondents also disagreed that they felt being less competent than others (Item 6) and 40% of them did not have trouble coordinating their movements in speaking English (Item 16).

Interestingly, there was an informative indicator attached to the bodily reactions towards speaking English, with 43% of the respondents being hesitant towards the situation where parts of their body felt tense and rigid while speaking English. Between one-third and half of the respondents were also hesitant about having a fear of inadequate performance or the comfort in speaking English, which was reflective of Items 1, 4, 5, 12, 14 and 17. Nonetheless, as seen in items 8 and 9, two different pools of respondents with the same response percentage expressed opposing views of comfort in speaking English.

Overall, from the data in Table 4.1, it is apparent that only 2 significant elements were influencing the public speaking, of which communication apprehension in a public speaking class was the main theme component while having another sub-element. Communication apprehension in a public speaking class reflected (a) a fear of negative appraisal as evidenced by anxiety about being called and (b) some bodily reactions towards speaking English. Meanwhile, another sub-element indicated that some of the respondents anticipated certain anxious behaviours in speaking English. As a result, Table 4.2 yields the level of respondents' public speaking anxiety in a public speaking class. The mean score ($M = 50.34$, $SD = 11.57$) for the Public Speaking Class Anxiety Scale indicated that majority of the respondents had a comparatively low level of public speaking anxiety.

Table 4.2: The Level of Public Speaking Anxiety

The level of public speaking anxiety	Number of respondents	M	SD
Low	65	50.34	11.57

In addition to this, when the cut-off points and mean scores were taken into account for the Public Speaking Class Anxiety Scale, low level of public speaking anxiety can be defined as a score less than 54; moderate level between 52-67, and high level 68 and over. As revealed in Table 4.3, respondents experienced public speaking anxiety during public speaking classes at varying degrees. When the scores of the respondents were handled on the basis of aforementioned classification, 38 undergraduates had scores less than 51 (M = 42.68, SD = 6.91), 13 undergraduates had scores between 52 and 67 (M = 53.54, SD = 0.78) and 14 undergraduates had scores 68 and over (M = 68.14, SD = 0.36). The descriptive results demonstrated that nearly 60% of ESL undergraduates experienced a low level of public speaking anxiety. In comparison, 20% and 23% of ESL undergraduates experienced public speaking anxiety at moderate and high levels, respectively.

Table 4.3: Participants' Level of Public Speaking Anxiety (N = 65)

Level of public speaking anxiety	Number of respondents	Min-Max	M	SD
Low	38	17-51	42.68	6.91
Moderate	13	52-67	53.54	0.78
High	14	68-85	68.14	0.36

4.3 Is there a statistically significant relationship between Sijil Pelajaran Malaysia (SPM) English results and Public Speaking Class Anxiety Scale (PSCAS) scores?

The English results obtained in the SPM examination were then correlated with each dimension (i.e. fear of negative evaluation, comfort in speaking English, test anxiety, communication apprehension) in the PSCAS. There is a significant, moderate, and negative correlation between English SPM results and fear of negative evaluation (r_s = -.522, p = .000). This indicates that the lower their English language proficiency, the more the fear of being negatively evaluated by others. Also, there is a significant, moderate, and negative correlation between English SPM results and test anxiety (r_s = -.536, p = .000), stating that as the lower their English language proficiency, test anxiety level increases. Likewise, there is a significant, moderate, and negative correlation between their English SPM results and communication apprehension (r_s = -.495, p = .000), indicating that the lower their English language proficiency, the more apprehensive they are. However, English SPM results are found to have a significant, moderate, and positive correlation with comfort in speaking English (r_s = .548, p = .000), showing that the higher their English proficiency level, the more comfortable they speak English.

Table 4.4: Spearman's Correlation Test for SPM English Results and Each Component in the PSCAS

Variable	1	2	3	4
1. SPM English Results				
2. Fear of Negative Evaluation	-.522**			
3. Comfort in Speaking English	.548	-.263*		
4. Test Anxiety	-.536**	.731**	-.285*	
5. Communication Apprehension	-.495**	.707**	-.336**	.816**

** p < .01 (2-tailed); * p < .05; N=65

4.4 What are the self-regulatory strategies used by students to regulate their public speaking anxiety?

Other than the correlational test, 237 codes were identified after conducting thematic analysis and they were grouped into 5 main themes based on the self-regulatory strategies – affective, social, management, avoidance, and cognitive strategies. Generally, affective strategy recorded 93 codes (e.g., "take deep breaths", "listen to music") – was of the popular use – followed by management (e.g., "practice more", "go over the main points"), cognitive (e.g., "visualize me to remain calm", "brainwash myself to do well"), social (e.g., "practice speech with friends", "look at friends or classmates [during presentation]"), and avoidance strategies (e.g., "ignored what was in front", "not look at audience") which reported 55, 42, 27, and 20 codes, respectively.

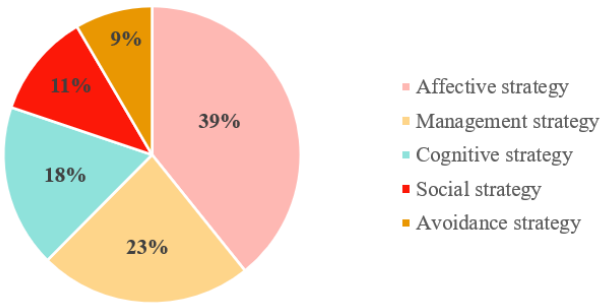

Figure 4.1: Percentage of Codes Received by Each Strategy

Thematic analysis further revealed all the interviewees were self-regulating their public speaking anxiety, even if they were doing so at different stages of public speaking, and to different extents. As reported by 65 undergraduates, there were 32 subthemes related to self-regulatory strategies used to cope with public speaking anxiety. Such strategies were grouped into 5 main themes, namely cognitive, affective, management, social, and avoidance.

Table 4.5: Frequency Counts for the Subthemes that Emerged in Group Interviews

Main themes	Subthemes	Example of quotes	Frequency (n)
Cognitive	Positive self-talk	"persuade myself that the presentation would go smooth"	21
	Visualization	"visualize me to remain calm"	14
	Memorization	"memorize the palm notes that I've made"	3
	Change one's mindset	"My presentation is not as bad as what I thought"	4
Affective	Take deep breaths	"take a deep breath for 3 times"	44
	Listen to music	"listen to Korean pop, Chinese, and English songs"	18
	Drink water	"drink water right before on stage"	5
	Meditation	"put on my earphones and do meditation"	2
	Sing songs	"sing softly in the class"	2
	Watch videos	"watch Youtube/ Facebook videos"	6
	Move one's body	"walking around while presenting"	6

	Get in the mood for the presentation	"try to be super duper excited for the presentation"	1
	Hold an object/ hands	"hold my hands during the presentation"	6
	Play games	"play mini games online but not Honor of Kings"	2
	Read jokes	"read memes/ 9GAG on social media"	1
Management	Rehearse a speech	"practice more"	15
	Review a speech	"go over the main points"	4
	Plan a speech	"write down the important points on my palm notes"	5
	Monitor one's speech pace	"present slowly … while manage the pace with my heartbeats"	8
	Follow a slideshow/palm notes	"look at the slideshow as a guidance for me to follow the points"	8
	Research more on the presentation topic	"familiarize with the topic"	2
	Know own strengths	"recognize my own strengths and make full use of them in the presentation"	2
	Reflect on own mistakes	"reflect on what went wrong during the presentation"	11
Social	Talk to peers	"chit-chat with my friends"	5
	Rehearse speech with peers	"practice speech with friends"	1
	Eye contact	"look at friends or classmates [during presentation]"	14
	Verbal contact	"keep questioning my classmates what I've said earlier"	1

	Lecturer/peer feedback	"ask my friends … for some opinions on my performance"	6
Avoidance	Leave the presentation venue	"go to toilet and stay outside when waiting for the presentation turn"	5
	Ignore the stressful situation	"ignored what was in front"	1
	Avoid eye contact	"not look at audience"	11
	Stop thinking about the presentation	"immediately forget what happened right after I finished my presentation"	3

4.4.1 Cognitive Strategy

Table 4.6 illustrates the frequency counts for 4 subthemes that emerged in 10 Group interviews. These 4 subthemes, namely positive self-talk, visualization, changing one's mindset, regulating perceptions of one's performance and memorization accounted for the interviewees who used cognitive strategy to cope with their public speaking anxiety. Among these, the subthemes of positive self-talk and visualization were mentioned by some interviewees as their methods of reducing public speaking anxiety before, during, and after the presentation.

Table 4.6: Frequency Counts for the Subthemes that Emerged in Group Interviews

Main theme	Subthemes emerged	Frequency (n)
Cognitive	***Before the presentation***	
	Positive self-talk	8
	Visualization	2

During the presentation	
Visualization	11
Positive self-talk	6
After the presentation	
Positive self-talk	7
Memorization	3
Change one's mindset	4
Visualization	1

Before the presentation

Emerging from the data, the interviewees discussed 2 themes - positive self-talk and visualization - which were reflective of cognitive strategy to cope with their public speaking anxiety before the presentation. As displayed in Table 4.6, 8 interviewees did positive self-talk while the other 2 interviewees visualized their performance before standing on the stage. Some of the scenes in Group sessions were narrated along with the codes.

While waiting for his turn of presentation, Josh (Group 2) would "persuade [himself] that the presentation would go smooth". Chong, who was from the same group later agreed with him by "encouraging [himself] that the presentation would receive compliments from [his] lecturer". Chew (Group 4), Goh and Andrew (Group 9), and Liaw (Group 6) were later found to have similar responses as Josh's. In addition to this, Tan (Group 3) and Siva (Group 10) revealed that they would "brainwash [themselves] to do well" in the presentation later because they "[had] rehearsed the presentation for many times". Extending

from having positive self-talk to visualizing their performance before the presentation, Tharshini (Group 5) would think of herself "as a hero of the show". At the same time, Kok, who was in the same discussion session, added that "imagining [herself] present successfully in front of the students calm the butterflies in [her] stomach".

During the presentation

While presenting in front of the audience, techniques such as doing positive self-talk and visualization helped the interviewees reduce the degree of public speaking anxiety, with 10 of them adopted the former and 6 of them chose the latter. Notably, these 17 responses were coded from 16 interviewees, implying that Mark (Group 9) gave another answer which was of cognitive strategy while discussing the question.

Chu (Group 1) and Yow (Group 8) would "visualize [themselves] to remain calm" when they were presenting in front of audiences because they believed doing this would help them avoid stutter. Besides, Sabrina (Group 2) and Mark (Group 9), during their presentation calculated their marks in their mind and thought none was in the class when they "were too nervous" by having many pairs of eyes looking at them. This statement was supported by Ooi (Group 5) and Wong (Group 8) when Wong added that he would "imagine none was listening to [his] speech". Visualization technique is also used as a way of imagining their audiences as "cute animals" (Kok, Group 5), "stones" (Lee, Group 7; Mark, Group 9) and "friends" (Lee, Group 8; Pok, Group 9) to remain calm during the presentation.

Being in the same group, Goh and Chew (Group 4) shared with others that they would tell themselves to be “brave” and “confident” when presenting

in front of audiences. This action indeed helps them to reduce “tension” so that they “would not [be] too nervous” during the presentation. Joanne (Group 9) would instead “calm down [herself] by encouraging [herself]” in her mind during the presentation whereas Khoo (Group 5) continued “remind[ing herself] that it was just a presentation”. To “avoid stutter or pause for moments” in a presentation, Liaw (Group 6) would “recollect [herself] in [her] mind” by “telling [herself] to remain calm and present her speech as to what [she] had outlined”.

After the presentation

As seen in Table 4.6, 2 additional subthemes were found to be under cognitive strategy when asking the interviewees about the question of what they did after the presentation. Techniques such as positive self-talk, visualization, changing in one's mindset, and memorization helped the interviewees relax their mind to ensure their next presentation runs smoothly. Notably, from 14 interviewees, 15 responses were coded - Ling (Group 4) gave an additional answer while discussing the question - with 7 out of 14 interviewees who adopted cognitive strategy reported to adopt the technique of positive self-talk.

Yow (Group 1) and Tang (Group 8) shared the technique of “changing [their] mindset” after they ended their presentation. Although they did not reveal how and why they changed their mindset, Yow (Group 1) explained that it “helped [her] to focus on the next speech”. Instead of changing their mindset, Hang and Khoo (Group 7) who were in the same group shared how they “observed others’ presentation” to perform better in the next presentation. Observing “lecturers give a lecture in front of 300 students”, Khoo learned how

they “remained calm” while being on stage as a reference for him to be more relaxed in the next presentation.

Besides, Ling (Group 4), Natasha (Group 5) and Kher (Group 6) believed that memorization worked best for their next presentation. As Ling (Group 4) explained, memorizing the speech helped her "gain more confidence" in the following presentation to not "feel overwhelmed". She further stated that she would also "visualize a relaxing situation" when she "feel[s] overwhelmed in the next presentation" while having the script in her mind. Chew (Group 4) who was of the same group shared a different opinion by responding that she would "tell [herself] to calm down" next time if she is too nervous during the presentation. On the other hand, Hang (Group 1) and Tan (Group 8) would "motivate [themselves]" to do better in the next presentation so that they would not be "too nervous".

Furthermore, Goh (Group 4) and Ooi (Group 5) would “tell [themselves] that [they were] doing well” and “[they] could do it” in the next presentation as well. They both did to “gain more confidence” to avoid being too nervous in the following presentation. Their responses then were supported with the statement of “hav[ing] a positive mindset”, as reported by Chong (Group 2), and Andrew (Group 9) could make presenters less nervous in the next presentation.

4.4.2 Affective Strategy

Table 4.7 presents frequency counts for 11 subthemes that emerged from the analysis. Of these 11 subthemes, the technique of taking deep breaths ranked the top. It was of the highest use among the interviewees who used affective strategy to cope with their public speaking anxiety before, during and after the presentation. Some techniques which were of low use included singing,

watching videos, playing games, moving one's body, getting in the mood for the presentation and reading jokes because they were only recorded 1-2 responses from the interviewees across 3 questions asked.

Table 4.7: Frequency Counts for the Subthemes that Emerged in Group Interviews

Main theme	Subthemes emerged	Frequency (n)
Affective	***Before the presentation***	
	Take deep breaths	20
	Listen to music	16
	Drink water	5
	Meditation	2
	Sing songs	2
	Watch videos	2
	Move one's body	1
	Get in the mood for the presentation	1
	During the presentation	
	Take deep breaths	18
	Hold an object/hands	6
	Move one's body	5
	After the presentation	
	Take deep breaths	6
	Watch videos	4
	Play games	2
	Listen to music	2
	Read jokes	1

Before the presentation

As depicted in Table 4.7, the technique of listening to music was the second-highest use after taking deep breaths among those who applied affective strategy before the presentation. Other techniques which were of low use included drinking water, meditation, singing, watching videos, moving one's body, and getting in the mood for the presentation were important, nonetheless. All the techniques mentioned above yielded 49 responses from 40 interviewees across 10 Group sessions, indicating that 9 interviewees shared 2 techniques of affective strategy while discussing the question.

Before the presentation, 20 interviewees were reported to take deep breaths (Yow and Tee, Group 1; Josh, Group 2; Pang, Group 3; Goh and Chan, Group 4; Ooi, Kok and Khoo, Group 5; Choo, Lim, Liaw and Tan, Group 6; Lee, Tang, Heng and Fiona, Group 8; Goh, Group 9; Kok, Group 10). Lee (Group 8) even further expressed that she would "[take] a deep breath for 3 times" because it "calm[ed her] down and [ensured she] was in the best condition to do the presentation". Some interviewees of the same groups would opt for listening to music when they "[were] too nervous". Yow (Group 1), Ling (Group 4) and Tang (Group 8) mentioned that they opted for "listen[ing] to soft music" while Lai (Group 8) listened to "Korean pop, English and Chinese songs".

Hang and John (Group 1), Heah and Koh (Group 3), Goh (Group 4), Natasha (Group 5), Tan (Group 6), Lai and Hang (Group 7), Tan and John (Group 8), Lau and See (Group 10), however, either did not discuss or chose not to share with others about the music genre they would listen to remain calm before presenting in front of audiences. Hang (Group 1) and Tan (Group 8) not only listened to music but also "[sang] softly in the class" because it helped them

"divert [their] attention". Other than this, Chu (Group 3) and Chow (Group 10) would meditate in the class when waiting for their presentation turn whereas Heah (Group 3) and Lau (Group 10) watched videos in the class as a technique to "feel relaxed before the presentation".

Interestingly, drinking water was of great use after taking deep breaths and listening to music/songs (Lee, Group 2; Ooi, Group 5; Tee, Group 7; Wong, Group 8; Looi, Group 9). These 5 interviewees explained that drinking water would help them "refresh [their] mind from being too nervous" and "not to feel thirsty" before they were being called to present. Out of 65 interviewees, only Choo (Group 6) would "walk around in the class" as he believed "moving [his] body calmed [himself] down". Being in the same group with Choo, only Kher responded to "get [herself] excited as a preparation to be ready for the presentation".

During the presentation

As shown in Table 4.7, taking deep breaths was still of great use and twice the number of other techniques among the interviewees who applied affective strategy during the presentation. However, other techniques such as holding an object/hands and moving one's body had also been adopted by 10 interviewees. These 29 responses were obtained from 24 interviewees of different Groups when discussing the question.

Standing in front of audiences and presenting the topic that has been prepared for weeks, Hang and Fong (Group 1), Lim and Jie (Group 2), Pang and Ng (Group 3), Chan (Group 4), Tarshini and Joanna (Group 5), Tee, Pok, Hang and Khoo (Group 7), Tan (Group 8), Pok, Susan and Lisa (Group 9), Kok and Leong (Group 10) stated that they would take deep breaths if they were too

nervous during the presentation. “Feel[ing] more relaxed”, “feel[ing] better”, “stay[ing] calm” and “focus[ing] back on the presentation” were the reasons behind taking deep breaths.

Moreover, Ng (Group 3) and Leong (Group 10) added that they would “hold [their] own hand[s]” to be “not too nervous” while presenting in front of audiences. Unlike Ng, Kher (Group 6) would rather “clench [her] fist” to “make [her] feel secure and calm”. On the other hand, Natasha (Group 5) responded that she would “hold a pen” during the presentation as a way to “get rid of the nervousness”. Meanwhile, Chan (Group 4) did not reveal the object he had held as “hold something” was his only utterance. Nevertheless, he told his group members that he “fel[t] more secure and calmer by doing this”.

John (Group 1), Lai (Group 7), Tan and John (Group 8) reported moving their body while presenting in front of audiences. They believed that “walking around while presenting” helped them to “[be] more relaxed” and “shake away [their] nervousness”. Interestingly, Khoo (Group 7) would “rub [his] hands at the back when [audiences] were listening to [his] speech.” Khoo’s action would rather be not observable by others as compared with others.

After the presentation

As seen in Table 4.7, only 15 responses from 13 interviewees were coded under affective strategy. Of these 15 responses, taking deep breaths ranked the top, followed by entertainment-related techniques as watching videos, playing games, listening to music and reading jokes respectively. Notably, frequency counts for taking deep breaths had decreased by one-third.

Tee and Leong (Group 1), Goh and Chew (Group 4), Fiona and Tan (Group 8) would take deep breaths “to avoid unnecessary thoughts that will

make [them] overwhelmed" if they do a presentation next time. Remarkably, Tee, Leong and Fiona mentioned the phrase "breathe it out" when they were doing a discussion with other interviewees of the same group. Heah and Ng (Group 2), Lau and Leong (Group 10) would watch videos to make them "feel more relaxed" when they present in front of audiences next time. Interestingly, Heah (Group 2) and Lau (Group 10) shared that they would play games to "reduce the tension".

From Table 4.7, frequency counts for listening to music had decreased sharply. Only two interviewees (Hang, Group 1; Tan, Group 8) would opt for this to "relax [their] mind" if they are too nervous about doing a presentation next time. However, they both did not mention the music genre that they would listen to. Last but not least, only Timothy (Group 6) indicated that she would "read jokes" as "funny stuff [would] calm down [herself]".

4.4.3 Management Strategy

Table 4.8 displays frequency counts for 8 different subthemes that emerged from the analysis. Of these 8 subthemes, the technique of planning and rehearsing a speech appeared twice in the table - before and after the presentation. A total of 55 responses were collected from the interviewees who used management strategy before, during, and/or after the presentation. Generally, preparing a speech before the presentation, monitoring their speech during the speech, and self-reflecting their performance after the presentation were the central ideas of those interviewees to cope with public speaking anxiety.

Table 4.8: Frequency Counts for the Subthemes that Emerged in Group Interviews

Main theme	Themes emerged	Frequency (n)

Management	***Before the presentation***	
	Rehearse a speech	13
	Review a speech	4
	Plan a speech	3
	During the presentation	
	Monitor one's speech pace	8
	Follow a slideshow/palm notes	8
	After the presentation	
	Reflect on their own mistakes	7
	Research more on the presentation topic	2
	Knowing own strengths	2
	Plan a speech	2
	Rehearse a speech	2

Before the presentation

As presented in Table 4.8, the data analysis yielded 3 subthemes under the main theme - management strategy, namely rehearsing a speech, reviewing a speech, and planning a speech. Of these 3 subthemes, the theme of rehearsing a speech received 13 responses; this technique was of popular use among the interviewees who adopted management strategy to cope with their public speaking anxiety before the presentation. Other techniques such as reviewing and planning a speech were of fair use as they recorded 4 and 3 responses respectively. All the subthemes mentioned above yielded 20 responses from 18 interviewees, meaning that 2 interviewees shared 2 techniques of management strategy while discussing the question.

Tee (Group 1), Lim (Group 2), Pang and Ng (Group 3), Joanne (Group 5), Anjeli and Timothy (Group 6), Pok (Group 7), Lee and Heng (Group 8), Susan (Group 9) and Kok and Leong (Group 10) would "go to the toilet and rehearse in front of a mirror" or "practice more" while waiting for their turn to present. By doing this, it would "reassure [themselves] what they [were] going to present" (Lim, Group 2; Susan, Group 9), and they "fe[lt] more confident" (Pang, Group 3; Anjeli, Group 6; Pok, Group7; Kok, Group 10). Also, they would "feel more relaxed" and "not too nervous" (Tee, Group 1; Timothy, Group 6) if they rehearsed their speech before the presentation.

Instead of rehearsing a speech, some of them would "go over the main points" (Lim, Group 2; Susan, Group 9), "look at [their] presentation script" (Lee, Group 2) or "recap [their] script" (Chan, Group 4) before the presentation. While it would stop them "from over-worrying the speech", Chan further explained that recapping her script "would make [her] feel secured and regulate [her] heartbeats". Besides, neither Ng (Group 3), Lim (Group 6) and Leong (Group 10) mentioned they recapped and rehearsed the speech. Nonetheless, "preparing [their] speech" was mentioned. "[It was] easy to present" and "[avoid] mess[ing] up the presentation" were the reasons behind the speech preparation; also, it made them "less nervous" before the presentation.

During the presentation

When asked about the ways to cope with public speaking during the presentation, 16 responses were put under the main theme - management. These 16 responses were equally distributed into 2 subthemes: monitoring one's speech pace and following slideshow/palm notes.

Lim (Group 2) mentioned that he would “slow down [his] speech so [he could] speak calmly”. Jie, from the same group, agreed with his utterance and further elaborated that “presenting slowly let [him] not to be too nervous while managing my pace with [his] heartbeats”. However, Lim “sometimes tend[ed] to speed up when [he] was running out of time.” In the other group, Anjeli and Timothy (Group 6) shared another reason for presenting slowly - “to clear [their] mind and pronounce the words clearer although [their] heart beat faster than usual that time”. Undeniably, Tan (Group 3) also shared the same reason as Anjeli and Timothy when she “was too nervous during the presentation”. Susan and Lisa (Group 9) and Siva (Group 10) also managed their speech pace but “sometimes tri[ed] to run through the points when [they] lost focus on their presentation”.

Other than monitoring one’s speech pace, John (Group 1) would “look at the slideshow as guidance for [him] to follow the points”. Doing this would make him, at least, “less nervous” while standing in front of audiences. Tee, from the same group, then added another reason as “to focus back on what “they” wanted to say” when they “were too nervous during the presentation”. Liaw (Group 6), however, would “skip some not-so-important points when [she] was too nervous during the presentation”. Meanwhile, Lee (Group 8) would “reconstruct the points and summarize them when necessary so as [he] could finish the presentation as early as possible”. The interviewees not only referred to a slideshow (James & Heng, Group 8) but also “palm notes to follow the points that [they] had prepared earlier when [their] mind went blank” (Chong, Group 2; Andrew, Group 9).

After the presentation

Based on Table 4.8, 4 additional subthemes - reflecting own mistakes, researching more on the presentation topic and knowing own strengths - and 2 subthemes that had been mentioned in the second-previous subsection were found in data analysis. The subtheme of reflecting on their own mistakes ranked the first ; also, the number of responses it received was thrice of the remaining 4 themes. A total of 19 responses were collected from 18 interviewees across 10 Group sessions.

After the presentation, Tan (Group 3), Kok and Khoo (Group 5), Choo and Lim (Group 6), Lee (Group 8), and Siva (Group 10) would "reflect on what went wrong during the presentation" and "correct the mistakes" to "avoid from making the same mistakes". Because "[they were] too nervous", they "sometimes [were] blind to [their] own mistakes or flaws". Instead of "treat[ing] the mistakes as an embarrassment", they perceived it as "a learning process and get more experiences from the previous presentation". Lee (Group 8) added that he would "record his presentation and do a post-mortem for [himself]" so that he could "detect his mistakes clearly".

Moreover, Lim (Group 2) would "get feedback from peers/lecturers on the performance" to find out whether she "was too nervous during the presentation". A similar explanation was given by Tee and Lee (Group 7) as they both discussed that they "would jot down the lecturers' comments" so that they would "not be too nervous in the next presentation after improving [their] performance". Susan (Group 9) further added that she would "know which parts [she] should focus on, for example, too much of gestures and loud voice because of being too nervous".

Besides, Hee (Group 4) uttered that “if [he] familiarised with the topic, [he] would not be too nervous and spontaneously presented in front of audiences without holding palm notes”. Therefore, “researching more on topic and getting familiarise with the topic” should be done in the next presentation. Similarly, Wong (Group 8) stated that “finding more information about the topic and understanding it are important” as it would “make [him] less nervous”. In addition, Tang from the same group and Yow (Group 1) added another technique of management strategy; that is, “recognizing [their] own strengths” after each presentation and “using the strengths as a tool to get rid of [their] nervousness in the coming presentation”.

Interestingly, planning or rehearsing a speech was important to Timothy and Liaw (Group 6), Khoo (Group 7), and Susan (Group 9) even after finishing their current presentation and in preparation of the next presentation. Khoo believed that "planning the flow of the next presentation allow[ed him] to familiarise with the content as a way of not feeling too nervous". Instead of this, Timothy would "read through all the points" before the next presentation "to prioritize the points if [she is] running out of time as a result of making too much [pause fillers] in the presentation". This statement was then supported by Susan when she mentioned that "one thing [she] would do before the next presentation is to time [herself] before the presentation". She elaborated that she "would be able to speak clearly and concisely within time limits and without rambling even [when] being so nervous standing in front of audiences". Liaw agreed, saying she would also "improve [her] speech fluency when doing rehearsal as it can reduce [her] anxiety in the next presentation".

4.4.4 Social Strategy

Table 4.9 presents frequency counts for 5 different subthemes that emerged from the analysis. Of these 5 subthemes, 14 responses were coded under the theme of eye contact. These responses were solicited from 28 interviewees who used social strategy to cope with public speaking anxiety before, during, or after the presentation. Other subthemes namely talking to and rehearsing speech with peers before the presentation, making verbal contact with the audience during the presentation, and getting peer feedback after the presentation received 5, 1, 1 and 6 responses respectively.

Table 4.9: Frequency Counts for the Subthemes that Emerged in Group Interviews

Main theme	Subthemes emerged	Frequency (n)
Social	***Before the presentation***	
	Talk to peers	5
	Rehearse speech with peers	1
	During the presentation	
	Eye contact	14
	Verbal contact	1
	After the presentation	
	Lecturer/peer feedback	6

Before the presentation

Table 4.9 shows 2 subthemes that emerged from the data, talking to and rehearsing speech with peers under the main theme - social strategy. Out of 6 responses, the subtheme of talking to peers received 5 responses whereas only 1 response was recorded under the subtheme of rehearsing speech with peers.

Correspondingly, 6 interviewees used social strategy to cope with their public speaking anxiety before the presentation.

Jie (Group 2), Ling and Jay (Group 4), Khoo (Group 5), and Lisa (Group 9) would "chit-chat with [their] friends" to "make [them] forget about the anxiety". Jie felt that she would "[be] more relaxed when [she] shared her feeling of being too nervous with peers who were sitting next to [her]". Khoo added that "[she] would be able to control the over-excited heartbeat and distract [herself] from the nervous thoughts". Lisa, however, mentioned that "[she] could learn some useful presentation techniques when talking to [her] classmates". Ling and Jay who were in the same group concluded that "peers encouraged and supported [them] before the presentation by having faith in [them] that [they] would make a good presentation".

On the contrary, only Khoo (Group 7) would “practice [her] speech with friends”. Presenting [her] speech in front of her friends allowed her friends to “comment and make suggestions on how [her] speech could be made better”. “Rehearsing my speech in front of friends reduced my nervousness and mentally prepared me from trembling with nervousness in front of hundred students”.

During the presentation

As displayed in Table 4.9, 2 subthemes related to social strategy during the presentation were eye and verbal contact. In other words, the interviewees established links with their audience during the presentation. Of 15 responses, the subtheme of eye contact recorded 14 responses while only 1 response was recorded under verbal contact. Correspondingly, 15 interviewees made contact with the audience to cope with their public speaking anxiety during the presentation.

Although 14 interviewees reported themselves to make eye contact with their audience, the group of people whom they looked at were different. Lim (Group 2), Chu (Group 3), Natasha, Ooi, and Kok (Group 5), Pok (Group 9) and Chow (Group 10) mentioned that they “would only look at friends or classmates whom [they were] close to in the audience”. Lim further elaborated that “looking at friends encouraged her to present better and calmed down [herself] from being too nervous standing in front”. Similarly, Ooi, Kok, and Natasha described their friends as “[their] pillars of strength during the presentation”. They also concluded that “talking to a group of friends [was] easier than presenting in front of strangers”. “It was a way to hide my anxiety better”, said Pok when he shared his thoughts with other interviewees in the group.

Unlike Lim and other interviewees from different groups, Tan and Heah (Group 3), Ling (Group 4), Khoo and Choo (Group 5), Siva and Lau (Group 10) not only made eye contact with their classmates but also with lecturers. Ling explained that "when the lecturers nodded their head or smiled at [her], it affirmed [her] and reduced the fear of standing in front of the audience". By checking on the lecturers' reactions, Khoo and Choo (Group 5) discussed that "it would not be too nervous if the lecturers sometimes drifted away from paying attention to the slideshow." Also, when the lecturers doubted specific points during their presentation, they quickly ran through the points and moved on to the next slide (Tan and Heah, Group 3). On the contrary, Siva and Lau (Group 10) would "ensure lecturers understand what [they] had presented to reduce the fear of being evaluated negatively." This instead calmed themselves down to ensure they were on the right track in presenting the topic given.

Interestingly, only Jay (Group 4) reported that he "would keep questioning the audience" when he was too nervous during the presentation. He provided two reasons for having such an action. First, he used the questioning technique as a form of interaction with the audience instead of looking at them all the time during the presentation. Another reason for questioning the audience was that he was "finding encouragement or affirmation as feedback to reduce the nervousness during the presentation".

After the presentation

As illustrated in Table 4.9, only the subtheme of peer feedback was solicited from the responses given by the interviewees who used social strategy to cope with public speaking anxiety by being too nervous in the next presentation. In brief, a total of 6 responses across 10 Group sessions were coded and belonged to the subtheme mentioned above.

After the presentation, Fong (Group 1), Joanne (Group 5), Choo, Lai and Kher (Group 6), and Pok (Group 9) would "ask [their] friends or classmates whom they [were] close to for some opinions on [their] performance". Joanne (Group 5) uttered that "instead of clapping [for her] or receiving some [insipid] responses such as "Well done!", [she] prompted [her] classmates to give feedback on the content, gestures, and voice". Pok (Group 9) shared his experience of being told that "[his] voice was too loud and [he] spoke like a bullet train during the presentation". This evidence signalled him from being too nervous when presenting his topic in front of the audience.

Receiving peer feedback did not make them be more nervous; indeed, they took the feedback positively. This statement was proven when Choo, Lai and Kher (Group 6) discussed that "sometimes [they] were blind to their

mistakes or flaws when getting too nervous presenting in front of the audience". Peer feedback would make them review their mistakes and performance; subsequently, "identifying the reasons why [they were] so nervous during the presentation" (Fong, Group 1).

4.4.5 Avoidance Strategy

Emerging from the data, Table 4.10 displays frequency counts for 4 different subthemes. These 4 subthemes recorded a total of 20 responses, with the subtheme of avoiding eye contact received 11 responses. These responses were solicited from 20 interviewees who used avoidance strategy to cope with public speaking anxiety before, during or after the presentation. Other subthemes included leaving the presentation venue and ignoring the stressful situation before the presentation, stop thinking about the presentation and leaving the presentation venue after the presentation received 2, 1, 3 and 3 responses respectively. Notably, the theme of leaving the presentation venue appeared twice in the table.

Table 4.10: Frequency Counts for the Subthemes that Emerged in Group Interviews

Main theme	Subthemes emerged	Frequency (n)
Avoidance	***Before the presentation***	
	Leave the presentation venue	2
	Ignore the stressful situation	1
	During the presentation	
	Avoid eye contact	11
	After the presentation	
	Stop thinking about the presentation	3
	Leave the presentation venue	3

Before the presentation

As presented in Table 4.10, only 3 responses from the interviewees were found to be associated with the main theme - avoidance strategy. These 3 responses were then coded into 2 subthemes, namely leaving the presentation venue and ignoring the stressful situation. Looking at the number of responses yielded when the interviewees discussed their ways of coping with public speaking anxiety before the presentation, avoidance strategy was of the least popular among all the other 4 strategies - cognitive, affective, management, and social.

Only Jay (Group 4) and Lai (Group 7) mentioned that they would "[visit] the toilet frequently" while waiting for the presentation turn. According to Jay (Group 4), he added that he would "not immediately go back to the presentation venue but stayed outside for a while to calm down [himself]". Lai (Group 7), on the other hand, would "buy some light foods or snacks from the nearby cafeteria and have them before returning to the presentation room". "Eating would temporarily allow me to forget the stressful situation and I would make sure myself to go back to the presentation room 10 minutes earlier before my presentation turn", he added.

Unlike Jay (Group 4) and Lai (Group 7), Tarshini (Group 5) “never went to the toilet before the presentation”. While waiting for her turn of presentation, she “ignored what was in front of [her]”. Being prompted by Joanne and Ooi from the same group, she later revealed that “[she] had the tendency to care about others’ performances in the room. This made [her] to be even more nervous when she thought that [her] performance was not on par with others”.

She would rather have “thought [of herself] as the hero of the show” - a statement that had been mentioned in Section 4.2.1.

During the presentation

Table 4.10 displays 11 responses that were solicited from the interviewees who used avoidance strategy to cope with public speaking anxiety during the presentation. These 11 responses were coded into the theme of avoiding eye contact with the audience. However, the interviewees described different ways of avoiding eye contact when they were too nervous while presenting in front.

“[Being] forced to do the presentation”, Koh, Goh, Chew, and Hee (Group 3) discussed that they would “not look at the audience to reduce having much eye contact with them”. Chew illustrated that she would “look at the audience’s shirt or nose instead”. This statement was, again found in Lee’s utterance (Group 7). She further elaborated that “looking into their eyes would make [her] more nervous; however, [she] cared much about the presentation marks. [She] had no choice but to brave [herself] to look at their shirt or at least, forehead”. See (Group 10) felt that “[he] was less nervous when [he] chose not to see the audience directly”. Notably, he would “avoid doing presentation if the lecturers only required a representative from the group to do a presentation”.

Other than looking at the audience’s shirt, Josh (Group 2) would “look at the corner of the hall”. He shared his experience with other interviewees in the group. There was a time when he “lost some marks for the presentation just because he made eye contact with the audience. This action led [him] to make pauses during the presentation. Subsequently, [his] mind went blank and lost focus during the presentation. [He] could not recall the points and read all the

points from the slideshow. [He] later ended the presentation earlier than the expected time". Goh (Group 9) went through a similar experience. Instead of referring to the slideshow, he would "heavily rely on [his] palm notes and [deduced that] having eye contact with the audience [was] his weakness all the time whenever he [had] to present in front of a huge crowd".

Besides, Lee (Group 2) and Looi (Group 9) shared their way of "looking at one point and making [themselves] focus on that point during the presentation". Looi (Group 9) stated that looking at a certain point - "whether it was a chair, paper, someone's bag or floor, it gave [her] more confident and delivered [her] speech as fast as possible before feeling extremely nervous". Lee (Group 2), however, chose not to reveal the reasons behind her action but demonstratde another action during the Group session. During the interview session, she turned her body slightly from facing the screen, and this posture lasted until the interview had ended.

Interestingly, Lee (Group 3) would "look around" and find a comfortable spot during the presentation. She labelled this comfortable spot as her "comfort zone and normally, it was at either side of the stage - nearby the entrance or exit door" where she received "not much eye contact from the audience". She also shared her way of avoiding interaction with the audience as it would "make [her] more nervous". That was, "directing the audience's attention to the slideshow". "When the audience paid attention to the slideshow, [she] could at least feel better and later, wrapped up the presentation as fast as possible".

After the presentation

As shown in Table 4.10, 2 subthemes were found under the avoidance strategy when the interviewees discussed the ways to cope with public speaking

anxiety after the presentation. These subthemes were to stop thinking about the presentation and leaving the presentation venue. Each of the subthemes received 3 responses, respectively. These 6 responses were retrieved from the discussion made by 6 interviewees from 4 different groups.

Reported by Sabrina (Group 2), she would "immediately forget what had happened right after [she] finished presenting [her] topic". From her utterance, it was evident that she would "not remember the feedback given by the lecturers as [she perceived] it certainly would not benefit [her] next presentation". "After all, I only had one presentation for each course. The content of the presentation differed from courses to courses. I did not see there was a need for me to absorb all the lecturers' comments," added Sabrina when Tan, from the same group, mentioned that she would learn the mistakes she had made during the presentation and avoided from making the same mistakes in the next presentation.

James (Group 8) and Mark (Group 9) also mentioned that they "neither cared about their performance nor calculated the marks they would probably get from the lecturers after the presentation". Mark (Group 9) said, "things would not get better if I kept on thinking about how bad my performance was. So, what I did was that I immediately erased all the embarrassing moments from my memory and did not even bother to recollect them even in the discussion now". James further shared one of his moments after the presentation to other interviewees that he "was bombarded with many questions after the presentation. The lecturer questioned every part of [his] presentation and commented that [he] did not fully prepare for the presentation". "Some of my friends stared at me when the lecturer scolded me badly at that time. So, I guess, the best way to

reduce the nervousness after the presentation and before the next presentation is to avoid thinking about the past and focus on now", he added.

Lisa and Looi (Group 9) and Chow (Group 10) would “leave the room right after the presentation”. Chow (Group 10) mentioned that she would “not bring anything other than [required documents such as] evaluation forms to the class and leave the room after the presentation”. She explained that “it was too stressful for [her] to stay in the room and [she] would feel relieved after stepping out of the room”. Lisa and Looi (Group 9), on the other hand, discussed that they did so because they “felt their performance was too lousy and found themselves too embarrassed to keep staying in the room”. In short, three of them expressed some symptoms of being relieved after “escaping from the presentation venue” through their utterances such as “I could finally breathe”, “I stopped sweating”, and “the stone in my heart was finally gone”.

4.5 Summary

To summarize, this chapter tabulated the findings of this study, which had been analysed using descriptive and thematic analyses as well as Spearman’s correlation test. While presenting the findings of this study, it answered 3 research questions formulated earlier in Chapter One. The chapter measured public speaking anxiety levels faced by the participants, correlated the SPM English results with PSCAS scores and finally tabulated different self-regulatory strategies in coping with the anxiety before, during, and after the presentation. Pseudonyms were used when quoting interview data to maintain research ethics.

Chapter Five

5.0 Introduction

This chapter, in brief, discussed the findings of this research to illustrate in how SPM English results were correlated with each component in the PSCAS and as to how each participant chose their self-regulatory strategies to cope with public speaking anxiety. Subsequently, discussion of the data showed the ways the research would impact the Malaysian education system and employability among future graduates. It also suggested some pedagogical implications for university lecturers and undergraduates. Lastly, the researcher acknowledged the questions that are not addressed by this research (in other words, limitations), and laid a foundation for further studies.

5.1 Discussion

5.1.1 The correlation between SPM English results and PSCAS scores

A total of 65 respondents participated in the survey. 38 experienced low levels of public speaking anxiety, 13 had moderate levels of public speaking anxiety, and 14 had high levels of public speaking anxiety. Results obtained from the Spearman's correlation test indicated that fear of negative evaluation, test anxiety, and communication apprehension are reasons behind university students with a high level of public speaking anxiety (M = 68.14). The interview data obtained from the university students with a high level of public speaking anxiety further revealed that they would only speak the English Language if other languages were not allowed. This then also pointed to the factor of 'comfort' in speaking English, where students with a high level of public

speaking anxiety would “take deep breaths”, “listen to music” or “meditate” to “reduce [their] tension” to self-regulate this situation.

Other than that, 3 negative moderate correlations had been found for the English proficiency levels with negative evaluation, test anxiety, and communication apprehension. Although the findings were in line with Alias & Rashid (2018), whose research participants were anxious of being humiliated or underestimated by peers and instructors when presenting. Such contradictory findings could be explained through the nature of public speaking anxiety. As discussed in Section 2.1.1, individuals who experience trait-like public speaking anxiety are apprehensive whenever they are on stage; therefore, negative evaluation and communication apprehension showed no correlation with their language proficiency level. As test anxiety is situation-specific, both studies successfully proved that a positive correlation with the English proficiency level, further confirming Bodie’s (2010) notion of public speaking anxiety.

The new findings – that distinguishes this study from previous studies – showed that English proficiency level is found to have a significant, moderate, and positive correlation with comfort in speaking English. As most of the participants spoke Chinese at home and claimed that they would only use the English language when necessary, the English language proficiency level was reflected on their SPM results. Their discomfort in speaking the language also presented in the level of public speaking anxiety that they had experienced. Almost half of the participants experienced at least moderate anxiety level when they claimed that they had to be “confident”, “gain more confidence” in the next presentation, and “present slowly … while managing the pace with [their] heartbeats”.

5.1.2 The undergraduates' use of self-regulatory strategies for public speaking anxiety

Other than the correlational test, thematic analysis showed that affective strategy recorded 93 codes – was of the popular use – followed by management, cognitive, social, and avoidance strategies that reported 55, 42, 27, and 20 codes, respectively. Such a finding pertained to the importance of affective strategies in reducing public speaking anxiety, echoing Galti's claim (2016) that affective filters should be well managed before setting oneself to a speaking task. At the same time, it supports Behnke and Sawyer's Theory of Habituation and Sensitization (2001), which encouraged speakers to anticipate more before meeting anxiety-cues. By doing so, the students acknowledge the existence of speaking anxiety before reducing it (Liu, 2007).

As for management strategy, some of the interviewees planned their speech, controlled their speech pace, and reflected their own mistakes because "[they were] too nervous", they "sometimes [were] blind to [their] own mistakes or flaws". This lent support to the claim made by Guo, Xu, and Liu (2018) that students actively engage in monitoring their learning (i.e. reduce their public speaking anxiety). It also substantiated the idea of a goal-directed attentional system (Corbetta & Shulman, 2002). Cognitive strategies such as positive self-talk, visualization, regulating one's perception of performance make the participants feel "calmed" and "motivate [themselves]" to present better. These strategies of positive thinking support Kondo and Yang's study (2004) that these strategies are intended to divert attention from the stressful situation to positive and pleasant cues and bring relief to the anxious students.

Social strategy, which makes use of support from their peers, was used least frequently by the participants apart from Avoidance Strategy. Such a finding echoed the findings of Guo, Xu, and Liu (2018). Not only many anxious participants were not bold enough to practice this strategy (Kamaruddin & Abdullah, 2015), but also, they exhibited little initiative to share with their peers and seldom did collaborative learning with other students (Guo et al.,2018) to reduce anxiety. In the present study, only 6 participants would rehearse the speech with their peers, make eye and verbal contacts to get social support from others, and receive peer feedback after the presentation, indicating that in highly competitive educational societies, students may have developed a keen sense of competitiveness rather than collaboration, causing them to hide their weaknesses rather than openly share them with others to seek help or feedbacks.

Avoidance strategies such as leaving the presentation venue before and after the presentation, and avoiding eye contact with the audience, were the least-use strategies. This situation suggested that they tended to take the initiative to confront anxiety rather than ignoring anxiety-provoking situations, further signifying that they are active agents managing and reducing their public speaking anxiety. However, looking from a different perspective, although the findings echoed much of the previous literature (Guo et al.,2018; Hidayoza et al.,2019; Kondo & Yang, 2004), the aforementioned avoidance strategies found to be different from the statements in surveys (i.e. FLCAS, PRPSA) adopted by the researchers. This is because the participants in the present study could not avoid from the presentation, which is one of the statements used to assess language learning anxiety, they instead avoided meeting with anxiety cues such as not entering the presentation room before the presentation, built a comfort

zone in immediate time such as “[standing] at the side of the stage - nearby the entrance or exit door”.

A further analysis highlights that generally, university students who had low and moderate levels of public speaking anxiety adopted affective strategy (e.g., taking deep breaths, holding an object) before and during the presentation, and adopted management strategy (e.g., reflecting their own mistakes) after the presentation. Even though the use of the affective strategies was less evident among students with low anxiety levels (Guo et al.,2018), it may be speculated that participants with a low level of public speaking anxiety gave more emphasis to their emotions and affection that had influenced their performance when they did not face difficulties in speaking English. Adding to the previous statement, when Spearman’s correctional revealed that as their English proficiency level increases, their anxiety level decreases, signifying that anxiety cues were the only barriers faced by them when the participants had a better command of English compared to participants who faced a high level of public speaking anxiety. Since most of the participants were good English users, they were better at monitoring their speaking process. They were able to reflect on their own mistakes and recognize their strengths after the presentation.

On the other hand, participants with a high level of public speaking anxiety adopted affective strategy before, during, and after their presentation. Their fear of negative evaluation, test anxiety, and communication apprehension were more intense compared to those of low and moderate anxiety levels. They not only were more sensitive towards anxiety-cues – the stimulus-driven attentional system was activated – (Corbetta & Shulman, 2002) but also were

easier to be affected by incoming stimuli – an increase in initial sensitization (Behnke & Sawyer, 2001). They had no choice but to directly confront the negative emotional arousal that might disrupt their presentation. As such, affective strategy was well used by students who were having high anxiety levels (Guo et al.,2018). Since they put more focus on lowering down their affective filters before and during the presentation, they took deep breaths or read jokes after the presentation to get rid of "unnecessary thoughts that made [them] overwhelmed".

5.1.3 Discussion of findings to the Malaysian education system and employability

Malaysia has gained independence for more than 5 decades, and with its multicultural society, it aims to attain the status of a fully industrialized nation by 2020 through better education; this can be seen by an annual increase in budget allocation. Education in Malaysia is relatively excellent to many other Asian countries, but there is potential for growth. The current education system is exam-oriented, where it produces graduates who are regurgitators of theories taught in a passive learning environment. According to the MoHE National Graduate Employability Plan 2012-2017, which outlines significant pedagogical shortcomings in HLIs with consideration to equip graduates with adequate employability skills, it also urgently addresses that HLIs are responsible to produce the "products" to meet the expectations and demands of the "customers" (the employment market)" (p.12).

Although main reasons for unemployability are tightly linked to the lack of soft skills, the current focus is the extent of these skills that could be implemented and inculcated among undergraduates. When the HLIs have more

freedom to implement these skills in the way they see fit in the learning context, there are no standardized and centralized ways to enforce the soft skills in place. When the lack of communication skill is said to be a major reason for unemployment (Singh et al., 2014), it raises the question of whether the implementation has been effective or otherwise. There are also dilemmas in teaching and practicing soft skills even after being infused into the education system.

Mainly, the Malaysian education system is still practicing methods where students are seen as passive learners. In such settings, there are not enough formal platforms for students to verbally share their thoughts. They are suppressed in sharpening their communication skill in the sense that presentations are viewed as a part of coursework rather than the ability to communicate "knowledge". Therefore, the Malaysian education system still adopts a behaviourist view of teaching and learning that students follow as what teachers say in which the view disregards student individuality.

A constructivist view of teaching and learning pedagogy should be infused into the Malaysian education system, where students take charge of their own learning regardless of hard and soft skills. Such an initiative is seen as worthwhile and advantageous in that it creates independent students. It is vital to have a shared and mutually accepted definition of teaching and learning before it is embedded in any educational institutions. Putting this notion into the context of mitigating public speaking anxiety, students would also be able to be independent in self-regulating public speaking anxiety. This study thus suggests using the Self-Regulation Model of Illness (SRMI) by Leventhal and his colleagues in 1980 to provide a framework for understanding how individuals

experience public speaking anxiety; the model is more comprehensive and highlights personal experiences which are relevant to the findings in this research relating to self-regulatory strategies and eventually, employability. Having group interviews with 65 undergraduates in this study revealed not only what self-regulatory strategies they used, but also the fact that the choices of strategies changed at different milestones of public speaking.

The results from Spearman's correlation test confirms that English Language proficiency has a significant relationship with 4 dimensions of public speaking anxiety: fear of negative evaluation, comfort in speaking English, test anxiety, communication apprehension. Self-regulatory strategies function to lower down one's level of public speaking anxiety. When the anxiety level is lowered down, it increases the likelihood of one's being employed because one is not afraid of being negatively evaluated, is comfortable in speaking English, has less test anxiety and speaks confidently during employment interviews and interpersonal communications.

In short, employability should be viewed in a more holistic way, which means that it includes not only the individual's expertise but also considers the ability to self-regulate the anxiety faced in the first situation - interview and later, other interpersonal communications. This probes into questions whether the HLIs are providing education which realizes these two aspects of employability: teaching hard skills needed in employment and offering courses which meet the soft skills expected by the future employers in the world outside of university.

5.2 Conclusion

This study identified the relationship between PSCAS scores and English SPM results; at the same time, it also investigated self-regulatory strategies used

by university students with different anxiety levels in a private university to alleviate public speaking anxiety. The study accepts the alternative hypothesis which hypothesized that there is a significant relationship between PSCAS scores and English SPM results. Fear of negative evaluation, test anxiety, and communication apprehension have significant, moderate, and negative relationships with English language proficiency whereas comfort in speaking English has significant, moderate, and negative relationships with English language proficiency. As discussed earlier, participants with low and moderate levels of public speaking anxiety used affective strategy before and during the presentation, and management strategy after the presentation to reduce their anxiety. Apart from that, those with high levels of public speaking anxiety used affective strategy before, during, and after their presentation.

5.3 Implications of the Study

To overcome the issue of using appropriate self-regulatory strategies that correspond to each anxiety level, university lecturers should first distribute the PSCAS questionnaire to find out students' anxiety levels. Utilizing the PSCAS questionnaire warrants them the overall anxiety level experienced by the students in the class. On one hand, for students of low and moderate anxiety levels, social and management strategies should be indirectly delivered in classes through group discussions and lectures of planning and outlining their speech when planning, rehearsing, and reviewing a speech are mentioned by some interviewees in the study (Tee, Group 1; Lim, Group 2; Pang, Group 3; Ng, Group 3; Joanne, Group 5; Anjeli, Group 6; Timothy, Group 6). Planning "the flow of presentation allows [one] to familiarise with the content as a way of not feeling too nervous" (Khoo, Group 7).

On the other hand, less attention has been paid to teaching affective strategy to those university students who face high anxiety levels. University lecturers should then introduce meditation into the class. It is supported by Chu (Group 3) and Chow (Group 10) that would meditate in the class when waiting for their presentation turn to "feel relaxed before the presentation". Practising meditation before having the lectures or speaking tasks might help university students of different public speaking anxiety levels to adopt affective strategies, unconsciously.

The results from this study also highlighted a significant relationship between students' English proficiency level and their public speaking anxiety. This means students of low English proficiency level experienced a higher level of test anxiety, communication apprehension, fear of negative evaluation, and a lower level of comfort in speaking English. Lecturers can be more aware of this matter and arrange for the inclusion of short presentations throughout the semester leading up to a final presentation at the end. The short presentations are meant to be formative - the university students get lots of feedback from the lecturer and their peers anonymously. It is because receiving feedback is something positive to presenters. "[Presenters are] blind to their mistakes or flaws when getting too nervous presenting in front" (Choo, Lai, & Kher, Group 6). Therefore, peer feedback allows them to review their mistakes and performance; subsequently, "identifying the reasons why [they were] so nervous during the presentation" (Fong, Group 1).

The present study also reveals that university students with moderate levels of public speaking anxiety should adopt management strategy after the presentation because they should monitor their experiences of public speaking

anxiety. This statement is supported by Lee (Group 8) stating that he would "record his presentation and do a post-mortem for [himself]" so that he could "detect his mistakes clearly". Adding to the previous, working on areas of weakness and strengths (Tang, Group 8; Yow, Group 1) is another technique of management strategy; that is, "recognizing [their] own strengths" after each presentation and "using the strengths as a tool to get rid of [their] nervousness in the coming presentation".

5.4 Limitations

This study has some limitations. First, the understanding of self-regulatory strategies for public speaking anxiety is limited to the studied university. It might yield a different set of findings due to cultural factors (e.g. course syllabus, teaching and learning methods, student-lecturer rapport). The COVID-19 pandemic and sudden change in the teaching and learning mode might also affect the findings in the way that the undergraduates in this semester would face less psychological barriers compared to face-to-face presentation. It is possible that exploring students' perspectives through classroom observations would deepen the understanding of students' actual use of self-regulatory strategies in regulating public speaking anxiety.

Second, this study only recruited participants from Public Speaking classes in the studied university. University students may use different self-regulatory strategies to alleviate anxiety in different courses such as Law, Education, Journalism, Business. Much larger sample size is recommended to check differences in adopting self-regulatory strategies across different disciplines through self-reports and interviews.

5.5 Further Research Opportunity

Although the findings could be catered for undergraduates in the university currently taking public speaking courses to mitigate their anxiety, expanding the research at different public and private universities is nevertheless important to further explore the impact of the levels of public speaking anxiety on the use of self-regulatory strategies. This in turn helps informing the development of public speaking assessments in which undergraduates' public speaking anxiety is taken into consideration.

Further studies targeting university students who take different classes that require them to do presentations are recommended to enable a more comprehensive understanding of self-regulatory strategies for public speaking anxiety. For example, given that students who face public speaking anxiety in the Public Speaking classes respond well to some strategies, these strategies might be used differently by the students who take other courses. Therefore, a longitudinal study should be conducted to check the differences in using different self-regulatory strategies to reduce public speaking anxiety across different courses.

5.6 Summary

To conclude, the present study had deepened the understanding of public speaking anxiety levels faced by undergraduates and their self-reported strategies to cope with the anxiety. Also, findings were discussed to provide pedagogical implications and directions for future studies. Using these findings, educators are, hopefully, led to better attitudes towards public speaking anxiety and improving students' oral performances. Overcoming the challenges in mitigating public speaking anxiety suffered by undergraduates is a huge and

inevitable endeavour, but the benefits will be worthwhile and rewarding for educators, undergraduates, and society.

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Appendix A: Email Requesting for the Approval of Using Public Speaking Class Anxiety Scale

Request of Using the EFL Public Speaking Class Anxiety Scale

XT **XUE TING TEE <tiffany0727@1utar.my>**
4/11/2019 10:45 AM

To: kriangkrai267@gmail.com

Dear Mr/Ms Kriangkrai,

I am Tee Xue Ting, a Master's student from Universiti Tunku Abdul Rahman (UTAR), who is majoring in Philosophy and Social Sciences. I have come across a published journal article of yours titled **A Measure of EFL Public Speaking Class Anxiety: Scale Development and Preliminary Validation and Reliability** (2012). As the title above, I wish to adopt the EFL Public Speaking Class Anxiety Scale developed by you in my research. For your information, my research titled **ESL Public Speaking Anxiety: An Exploration of Self-Regulatory Strategies Used by the Malaysian Undergraduates** aims to achieve the following objectives:

1. To measure public speaking anxiety levels among ESL undergraduates.
2. To identify the strategies used by ESL undergraduates in coping their public speaking anxiety.
3. To measure the difference of the means between ESL undergraduates with different public speaking anxiety levels and their use of coping strategies.

My research is expected to be done by the end of Year 2020. A completed analysis and discussion will be sent to you after completing my dissertation. Again, I would like to request the permission of using the scale and interview questions in my research. Your approval is valuable for the smooth-running in my research and I truly appreciate it.

I look forward to receiving your reply. Thank you and have a nice day.

Best Regards,
Xue Ting

Appendix B: Public Speaking Classroom Anxiety Scale (PSCAS)

Below are the characteristics that may or may not apply to you. Circle the number that best indicates the extent you agree or disagree with the statements.

1	2	3	4	5
Strongly Disagree	**Slightly Disagree**	**Neither Agree nor Disagree**	**Slightly Agree**	**Strongly Disagree**

#	Statements					
1.	I never feel quite sure of myself while I am speaking English.	**1**	**2**	**3**	**4**	**5**
2.	I start to panic when I have to speak English without preparation in advance.	**1**	**2**	**3**	**4**	**5**
3.	In a speaking class, I can get so nervous I forget things I know.	**1**	**2**	**3**	**4**	**5**
4.	I feel confident while I am speaking English.	**1**	**2**	**3**	**4**	**5**
5.	I get nervous and confused when I am speaking English.	**1**	**2**	**3**	**4**	**5**
6.	I am afraid that other students will laugh at me while I am speaking English.	**1**	**2**	**3**	**4**	**5**
7.	I get nervous when the English teacher asks me to speak English which I have prepared in advance.	**1**	**2**	**3**	**4**	**5**
8.	I have no fear of speaking English.	**1**	**2**	**3**	**4**	**5**
9.	I feel relaxed while I am speaking English.	**1**	**2**	**3**	**4**	**5**
10.	I can feel my heart pounding when I am going to be called on.	**1**	**2**	**3**	**4**	**5**
11.	It embarrasses me to volunteer to go out first to speak English.	**1**	**2**	**3**	**4**	**5**
12.	I face the prospect of speaking English with confidence.	**1**	**2**	**3**	**4**	**5**
13.	Certain parts of my body feel very tense and rigid while I am speaking English.	**1**	**2**	**3**	**4**	**5**
14.	I feel anxious while I am waiting to speak English.	**1**	**2**	**3**	**4**	**5**
15.	I dislike using my voice and body expressively while I am speaking English.	**1**	**2**	**3**	**4**	**5**
16.	I have trouble coordinating my movements while I am speaking English.	**1**	**2**	**3**	**4**	**5**
17.	Even if I am very well prepared, I feel anxious about speaking English.	**1**	**2**	**3**	**4**	**5**

Appendix C: Demographic Questions

CIRCLE/FILL only one answer on each of the following questions.

1. Gender: MALE / FEMALE

2. Age: _____

3. Race: CHINESE / MALAY / INDIAN

Other: _____

4. Program of study: _____

5. Year of Study: 1 / 2 / 3 / 4

6. SPM English Results: A+ / A / B+ / B / C+ / C / D / E

Appendix D: Group Interview Questions

Thank you for participating in this interview. In this interview, all of you will answer 5 questions. Should you have any doubts, please do not hesitate to ask me.

1. What language do you mainly speak at home? Why?
2. When do you speak English Language, except during classes?
3. What are the strategies you use to relax before the presentation? Why?
4. What are the strategies you use when you get nervous during the presentation? Why?
5. What are the strategies you use so that you won't get nervous in the next presentation? Why?