

CHAPTER ONE

INTRODUCTION

1.1. Introduction

University and college students are susceptible to anxieties which can impede academic performance. Among the types of academic anxieties identified by the Academic Anxiety Resource Center are; mathematics anxiety, reading anxiety, foreign language anxiety, science anxiety and social phobia (What is academic anxiety, 2013). Battle (2004) indicated library anxiety as one of the academic anxieties that can affect college students, besides maths anxiety, test anxiety, information anxiety, and language anxiety. In a study among Malaysian undergraduates (Prima, et al., 2010), the potential sources of study anxiety identified related to examination, presentation, mathematics, language, social, family and library anxieties. Evaluation of anxiety among medical and engineering students revealed that the common anxiety factors are anger, exhaustion, worry, lack of confidence, and confusion (Ercan, et al., 2008). The National Graduate Employability Blueprint, 2012-2017 (Malaysia, Ministry of Higher Education), reported that one of the major problems faced in hiring fresh graduates is a poor command of English as well as poor general knowledge.

Academic anxieties are of relevant concern to libraries and librarians. Firstly, substantial funds are allocated annually to provide adequate information resources, services and facilities for students. The optimal use of library resources and services can be hindered by anxieties faced by students. Secondly, a large portion of the print and electronic resources procured by the libraries are in the English language. While

some students have had no problems searching and accessing these electronic databases and journals, there are many students who have difficulty trying to differentiate the various resources available. This observation is made by the author who has had many years of experience facilitating information literacy sessions and manning the reference desk. It has been observed that students who are reasonably proficient in English language are able to cope better than the less proficient students who have problems understanding, analysing and interpreting keyword search strategies (Janaki, 2006). Thirdly, advancement in information and communication technology (ICT) can be a challenge for some students as it requires adequate proficiency in English language to use, retrieve, and manage information records obtained from the library computerised catalogs and web interfaces. Young students wishing to search the Internet for information and use the social media tools for communication inevitably need at least a moderate level of proficiency in the use of English language. Thousands of new terminologies of technological and scientific advancement are added to the English lexicon frequently (Crystal, 2003). Even when students have mastered the rules of English, it poses a challenge when it changes from a subject to a tool of communication (McCroskey, 1978).

Students in Malaysia who are actually non-native speakers of English are diversified in their competency of English language. There are various reasons for the uneven distribution of English proficiency. Prior to independence under the colonial rule, the main language of official communication was English language. Following independence in 1957, the Malay language was adopted as the national language. The role of English in the country then, was more for international rather than intra-national purposes (Crystal, 2003). Over the years, English language increasingly became more

of a foreign language for some and a second language for some. In a study among third year students in a public university, 50.7% identified English as a second language, 36.2% as a third language and 10.2% as a fourth language (Faridah Noor, 2004). In some parts of the country, it has become the mother tongue for a small minority (David, 2004). Another reason for the uneven English language skills particularly among university students in the country, is due to the country's digital and economic divide. Students coming from the west part of Peninsular Malaysia speak relatively good English due to urbanization as compared to the east part of Peninsular Malaysia. The eastern states, Sabah and Sarawak are less developed. In some of these states, government funding for computers in schools is a recent initiative. Students entering the Universities at a young age of 17-20 years of age come from all parts of the country resulting in a very diversified group of learners. A survey carried out on the Generic Students Attributes of students at the University of Malaya (UM, 2010) revealed that one of the core area for improvement is the communication skills especially conversion in English.

There are also vast differences in the family and economic background of these students. Some can originate from states where there are no public or school libraries. On the other hand, there are students who had been members of public libraries ever since they were children. Students from well to do families have parents buying books for them and inculcating reading habit amongst them as when compared to students who had only read school textbooks and may find the library, books and reading intimidating. This awareness of students' background is vital for libraries because it reveal that students using libraries have individual differences which can influence their perceptions and use of the library resources, facilities and services.

1.2. Background of the Study

Students' anxieties while using the libraries were best described by Constance A. Mellon when she reported that students feel scared and inhibited to use library resources because they feel inferior and thought the other students were smarter and also were afraid of how others perceive them (Mellon, 1986). She conceptualized this as 'library anxiety' which states that “*when confronted with the need to gather information in the library for their first research paper many students become so anxious that they are unable to approach the problem logically or effectively*” (p.163). In 1992, Sharon L. Bostick (Bostick, 1992) developed a quantitative measure, called the Library Anxiety Scale (LAS) to measure library anxiety. She categorised five areas for the occurrence of library anxiety; barriers to library staff, affective barriers, comfort with the library, knowledge of the library, and mechanical barriers. Since then, other researchers have examined library anxiety of students from all levels including diploma, undergraduates, and postgraduates.

Among the prolific researchers who have attempted to study the various antecedents of library anxiety are Anthony Onwuegbuzie (1997, 1998, 1999, 2000, 2004); Jiao Qunn (1997, 1999, 2002, 2003, 2004, 2006); Sharon Bostick (1992, 2004, 2006); Phillip Bailey (1997, 1999); Christine Daley (1997); and Lichestein (1996). A summary of the findings of Onwuegbuzie and Jiao were tabulated by Cleveland (2004) and is used as a referral source for this study (Table 1.1). Some of the antecedents included inherent characteristics of students' associated with personality traits such as persistence, perfectionism, procrastination, negative self-evaluation, and learning preferences. Another important finding was that students whose native language is not

English demonstrated high levels of library anxiety despite attending more library instruction courses than their English-speaking counterparts. This was also supported in other studies such as, Onwuegbuze, Bailey, and Daley (1997), Jiao, and Onwuegbuzie (1997), Jiao, Onwuegbuzie, and Lichtenstein, (1996). The general observation in these studies is that anxious students feel embarrassed which can be attributed to factors which originate from the students' own sense of self, or from the situation or social environment of which he/she is part of.

There had been an increase in research in library anxiety among non-native speakers of English (Abusin & Zainab, 2010; Anwar, Al-Kandari & Al-Qallaf, 2004; Jiao, Onwuegbuzie, & Lichtenstein, 1996; Mohd Shariff & Zainab, 2007; Noor & Ansari, 2010; Onwuegbuzie, Bailey, & Daley, 1997; Onwuegbuzie, Jiao, & Daley, 1997; Shoham & Mizrachi, 2001; Swigon, 2011). The analysis of students' diaries among Sudanese undergraduates reveal that they become anxious if the textbooks are written in English, especially if the mastery of English language is poor (Abusin & Zainab, 2010). It has also been found that the highest levels of library anxiety are found in young males who do not speak English as their native language (Jiao, Onwuegbuzie, & Lichtenstein, 1996). Non-native speakers of English do have problems with communication as was reported by Grassian (2001), that international students are reluctant to approach the reference desk with their questions due to feelings of insecurities about communication skills. This arousal of anxiety when communicating in English seems more significant among Asians than Europeans or Americans (Maio, 1995).

1.3. Problem Statement

The mission of a University is to produce quality graduates who are equipped with the relevant information skills for lifelong learning. Academic related anxieties are of relevant concern for libraries because they pose as barriers to the optimal use of library resources, services, and facilities. It has to be acknowledged that fewer now regard the library as a primary source of information (Changing, 2006). Studies have shown large amounts of no/low use of library resources and substantial numbers of students that have never taken out a book, logged on to electronic resources (Goodall & Pattern, 2011). The study also reported a positive correlation between library usage and final degree award stating that "those students achieving a third class degree make less use of library resources, than those student that achieve a lower second, who themselves make less use of library resources than those students who achieve an upper second class degree" (p166). Simeng (2013) agreed with OCLC's report in her presentation that 73 % of college students used the physical library but only 47 % used the online library compared to 75 percent for Internet search engines. Furthermore, 89 % begin their search with a search engine while only 2 % begin their research at a Library Web site. When asked which sources they preferred, 72 % answered search engines, 14 % the physical library, and 10 % the online library. Amir (2013) is of the opinion that the net generation think they can find everything in Google or Wikipedia and perhaps for this reason there might exist a dis-connect between the existing library services and the needs and wants of the net generation.

Early studies on student behaviour in libraries have reiterated that libraries tend to misunderstand students as not interested in getting information when in fact they

maybe experiencing some kind of fear and anxiety and are actually afraid of approaching library staff for assistance (Karabenick & Knapp, 1988). Keefer (1993) categorization of such students as 'hungry rats syndrome' aptly describes the students' behaviour when using the library resources, services, and facilities. The students when desperate for information tend to overlook signages, brochures, and other form of help offered by libraries. Kwon, Onwuegbuzie, & Alexandar (2007) detected that thinking dispositions can cause significant fear and inadequacy among students. Khairi and Nurul (2011) also reported that Malaysian students feel nervous and self-conscious when having to speak in front of others and so might avoid seeking assistance. In general, students in Malaysia as ascertained by Aidah, et al. (2010), merely want to comply and fulfill classroom assignments and requirements while teachers expect students to engage with information sources in a systematic way. The size of the library collection can also create problems among Malaysian students and make them feel confused and uncomfortable (Ansari, 2009). The Information Seeking Anxiety scale validated among Malaysian students identified barriers associated with information sources as the main factor in addition to barriers associated with library and searching for information (Erfanmanesh, Abrizah & Noor Harun, 2012). Asian students studying abroad were found to lack academic literacy that become an obstacle in their learning (Campbell & Li, 2008). Gilton (2007) also quoted that students speaking English as a second language have half the reading comprehension of their US counterparts and less oral comprehension (p425).

Libraries conduct bibliographic instruction programs with the objective of imparting required information literacy skills to the students when they need information. At the University of Malaya, where this study is carried out, all

undergraduates are required to register and pass the Information Skills Course which was upgraded to a compulsory university course since 1998. It is one credit hour course for a duration of 14 weeks and is conducted in a large computer lab with internet facilities. Evaluation of the course using pre and post tests have revealed the effectiveness of the course although the subsequent impact on the students' academic performance in other courses have not really been verified. However, even after attending this course, students had been found to be more concerned with locating materials listed in their reading lists rather than searching additional reference materials for increasing knowledge (Chan & Zaharah, 2001). Browsing the reference lists in final year project theses from the departments of Geology, History, Sociology, and Anthropology, revealed that none of the references were from the electronic resources subscribed by the library although students are taught in-depth use of these resources (Janaki, 2006). The behavioural pattern of students in this university when looking for information sources for their final year projects favored internet sources, followed by lecturers, friends, seniors, and only then the sources in the library (Mohd Shariff & Zainab, 2007; Nor Edzan, 2007). In fact, the roundtable meet by Association of College and Research Libraries (Changing, 2006) agreed that young people too often conceive the research process as beginning and ending with an Internet search.

Why students do not optimize the use of library resources, services, and facilities despite having knowledge of the 'know-hows' of using the library, could be probably be the influence of other student related anxieties. Generally, learning theories such as constructivism, behaviorism, experiential learning, and social learning have indicated that learning usually occurs in ways which are dependent on past learning experiences and environment of the individual. Asking for help by some students was

perceived as a failure and so, by seeking help, the student runs the risk of being perceived as needy and is seen as a public admission of failure. Self-esteem and the accumulation of repeated failures are cited as important factors for the refusal of students to communicate and seek guidance from librarians (Karabenick & Knapp, 1988).. There is a possibility that students who actually need assistance are afraid to approach library staff to seek help because of their inherent anxieties in communication. James C. McCroskey (1984), the father of research on communication apprehension claims that communicating with people who are similar to themselves is easier than talking to people who are greatly different. The only method of avoiding the unpleasant aspects of situational communication apprehension is to withdraw from or avoid such communication situations (McCroskey, 1984, pp 26). This had been confirmed in Jiao and Onwuegbuzie (1997), where it was reported that students' levels of library anxiety perhaps are exacerbated by their own incompetence and belief that the others are better resulting in the individual feeling shameful of their incompetence. The library has to look outside the library to find out if other forms of anxieties inherent in students can have an effect on their behavior and attitude towards the library.

In Cleveland's (2004) summary of the antecedents of library anxiety, as shown in Table 1.1, behavioral characteristics, learning preferences, self-esteem, perfectionism, and study habits have been identified. It can be observed from the findings that the two elements of not speaking English as a native language and fear of negative evaluation by others are also found in other anxieties such as foreign language anxiety and communication anxiety (Horwitz, Horwitz & Cope, 1986; McCroskey, 1984). There is a possibility that the experience of library anxiety might be a consequence of the students' experience of other anxieties which requires further research.. A scan of literature

related to students related anxieties, have shown that such antecedents are also reported in foreign language anxiety (Horwitz, Horwitz & Cope, 1986) and communication anxiety (McCroskey, 1984). Foreign language anxiety is related to apprehensive feeling when communicating while communication anxiety is related to the perception of the communication settings whether it is formal, group discussion, dyadic, and public speaking. The general constructs of communication theory (McCroskey, 1984) states that communication apprehension, reticence, unwillingness to communicate and shyness relate to each other and so may result in students perceiving a barrier to communicate.

In the past, efforts by libraries to reduce any form of library anxiety have tended to be more library-centered rather than student-centered. It is the usual practice for libraries to procure the state-of-art collection, digital initiatives, provide services and facilities benchmarking against universities from English speaking countries. Non-native speakers of English have to contend with the vast amount of resources that are available in English. Additionally information literacy programs are conducted in English language using ICT retrieval methods which also emphasise on English language. Individual differences of students are seldom investigated by libraries. Interventions designed to reduce library anxiety in the form of bibliographic instruction classes, online tutorials and collaboration with faculty had reduced library anxiety at times (Anwar, Al-Kandari, & Al-Qallad, 2004; Battle, 2004; Jiao & Onwuegbuzie, 1997) but also had no impact sometimes (Mohundro, 1999; Moore, 2005) citing other factors influencing the affective behavior of students. The failures in the transfer process of information literacy skills can be traced to failures of method (library's responsibility) or the information recipients' deficits (students' problems) (Grassian, 2001). What

constitutes information recipients' deficits are seldom explored by libraries and librarians. The increasing concern is that these students' other problems may be spilling over and influencing students' behaviour when using the library resources, facilities, and services. Thus, exploring the relevant academic anxieties of students will enable librarians to understand students' feelings of anxiety and consequently take steps to meet users' needs in relation to these dimensions.

Table 1.1: Antecedents of Library Anxiety Based on the Major Findings of Jiao & Onwuegbuzie (Cleveland, 2004)

Antecedents	Barriers with staff	Affective barriers	Comfort with the library	Knowledge of the library	Mechanical barriers
Being male	✓		✓	✓	✓
Little or no library instruction		✓	✓	✓	
Not speaking English as a native language	✓	✓			✓
Being a freshman	✓	✓	✓		
Lack of persistence	✓			✓	✓
Socially prescribed perfectionism		✓	✓		✓
General academic procrastination		✓	✓		✓
Negative self-perception		✓	✓		
Infrequent library visits		✓	✓	✓	
Heavy course load	✓				✓
Require mobility when learning	✓	✓		✓	✓
Prefer visual information	✓	✓	✓		
Prefer structure		✓	✓		
Not tactilely oriented		✓	✓		
Use library for online/computer indexes				✓	✓
High GPA			✓		✓
Employed full-time	✓				

1.4. Research Objectives

This study is particularly interested in Malaysian students who represent non-native speakers of English and the anxious feelings they experience when using the library for their study and research. Instruments used will be translated into the Malay language for ease of understanding by Malaysian students. It was considered very necessary to translate the instruments because all Malaysian students entering into the public universities in the country, are relatively well versed in the Malay language unlike the English language. Therefore, if the questions are in the Malay language, it will ensure the students understand the questions accurately and answer accordingly.

The research objectives of this study thus are as follows:

(i) Research Objective 1:

To test whether Malay translated versions of the Library Anxiety Scale (LAS), Foreign Language Classroom Anxiety (FLCAS), and Personal Report of Communication Apprehension (PRCA-24) yield different factors from that of the original instruments.

(ii) Research Objective 2:

To find out the prevalent level of academic related anxieties among final year undergraduates namely; library anxiety, language anxiety, and communication anxiety.

(iii) Research Objective 3:

To find out if there are differences between male and female students on the anxiety levels associated with library, language, and communication anxieties.

(iv) Research Objective 4:

To find out if there are differences in the levels of library, language, and communication anxieties when the dominant language used by students is English, Malay, Chinese, Tamil, and Other Languages.

(v) Research Objective 5:

To investigate if there are significant relationships among the dimensions of library, language, and communication anxieties.

1.5. Research Design

This research is a cross-sectional study among three academic related anxieties namely library, language, and communication anxieties. The conceptual model used is the 'Library Anxiety Expectation Antecedent Model' from Onwuegbuzie, Jiao and Bostick's (2004) where the prevalent antecedents among students' at-risk of library anxiety are identified as situational antecedents, environmental antecedents and dispositional antecedents. Situational antecedents refer to factors that are in the immediate environment, environmental antecedents refer to demographic factors and dispositional antecedents are innate factors specific to the individual. A simplified version of this model is shown in Figure 1.1. Library anxiety represents a situational antecedent. Both language anxiety and communication anxiety represent the environmental antecedents which students bring to the situation. The objective of this study is to explore the relationships of the three academic related anxieties. The finding of this study will facilitate librarians to acknowledge and incorporate dimensions of

other anxieties in the future strategic planning of libraries. The research focus is more on students themselves rather than the library staff, environment and infrastructure.

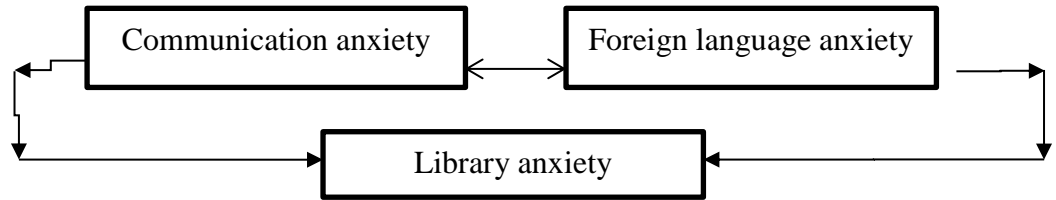


Figure 1.1: The Relationship Among The Academic Related Anxieties

1.6. Research Questions

In line with the research objectives, the research questions for this study are as follows:

(i) Research Question 1:

Do the Malay translated versions of LAS, FLCAS, and PRCA-24 yield similar dimensions as that of the original instruments when tested among students who are non-native speakers of English?

(ii) Research Question 2:

Do what extend final year students experience library, language, and communication anxieties?

(iii) Research Question 3:

Are there statistically significant mean differences in the levels of library, language, and communication anxieties between male and female students?

(iv) Research Question 4:

Are there differences in the levels of library, language, and communication anxieties among students who use English, Malay, Chinese, Tamil, and Other Languages as their dominant language?

(v) Research Question 5:

Are there statistically significant relationships among the dimensions of language and library anxieties?

(vi) Research Question 6:

Are there statistically significant relationships among the dimensions of communication and library anxieties?

1.7. Research Hypotheses

Based on the research questions, the following directional hypotheses (H) are formulated:

H1: Translated versions of the three instruments yield dimensions different from that of the original instruments when tested among students who are non-native speakers of English.

H2: Final year students who are non-native speakers of English experience library, language, and communication anxieties.

H3: There are mean differences in the levels of library, language, and communication anxieties between male and female students.

H4: There are mean differences in the levels of library, language, and communication anxieties when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages.

H5: There are significant relationships among the dimensions of language and library anxieties.

H6: There are significant relationships among the dimensions of communication and library anxieties.

1.8. Significance of the Study

Library and information environment is now in a competitive edge with other technologically advanced information source sites. Libraries are increasingly faced with the challenge of retaining existing users and attracting new users. In order to maintain the significance and relevance of libraries, it must be ensured that students do not avoid using the library resources, services and facilities. Finding out if the dimensions of language anxiety and communication anxiety are possible antecedents of library anxiety, will enable librarians to be more alert of students' needs and deficiencies.

Past research studies have studied the link between library anxiety, statistics and composition anxieties (Onwuegbuzie, 1997); research anxiety (Jiao & Onwuegbuzie, 1997); and computer anxiety (Jerabek, Meyer, & Kordinak, 2001; Mizrachi & Shoham, 2004). Jiao and Onwuegbuzie had also examined the relationships between library anxiety and variables such as self perception (1999a), social interdependence (2002),

and reading ability (2003). The scope of this study focus on two academic related anxieties; English language anxiety and communication anxiety among students who are non-native speakers of English.

This study hopes that the findings on the relationships among the three academic related anxieties can be used as empirical evidence to resolve problems arising from using English language and communication issues among non-native speakers of English. If the findings of this study supports the hypotheses, acknowledgement of the existence of language anxiety and communication anxiety among students can help libraries and librarians to make learning in the library less stressful. Knowing that the possibility of some other form of anxiety is responsible for the students behavior will enable librarians to approach providing assistance in a more friendly manner. When students choose not to ask the librarians for help, how can libraries make them ask for help? The findings of this study, if confirmed, can help librarians to employ more approachable methodologies with the students' anxieties in mind.

To date, empirical links between library anxiety, foreign library anxiety and communication anxiety have not been formally investigated. Onwuegbuzie (1997) had studied the link between library anxiety, statistics anxiety, and composition anxiety, while Jerabek, Meyer and Kordinak (2001) have studied the link between library anxiety and computer anxiety. There has been no empirical studies so far, to investigate whether communication anxiety and foreign language anxiety can influence library anxiety. This study thus will investigate if the dimensions of foreign (English) language anxiety and communication anxiety can be identified as possible antecedents of library anxiety. Investigating the prevalence of English language and communication anxieties

among students will enable libraries to undertake future efforts and initiatives with students inherent problems in mind. Students' bad or negative experiences during library visit and use can create negative outcomes for the library which are less apparent immediately and often can only become visible in the long term development (Poll & Rayne, 2006). Since students are the means and ends of a university library, their needs and problems have to be considered in line with collection development policies, outreach to students in the form of information literacy classes, and undertaking digital initiatives..

1.9. Research Limitations

There are a few factors which are seen as limitations to this research study.

They are:

- a) The researcher was unable to obtain an equal proportion of students representing the various ethnic groups. The random sample selected from the final year students did not differentiate the ethnic group. As a result, the number of students using Tamil, and Other languages as their dominant language were too few to compute certain tests. For instance, post-hoc tests did not permit in-depth analysis because the number of cases were too small.
- b) This study was conducted at a research university in Malaysia. The results of the study may not be generalizable to the final year students of other public universities.
- c) This study was limited to only final year undergraduates and not across year of study. The results may not be applicable to students from other years of study.

- d) The surveys in this study were conducted online. There was no face to face interaction. This might imply inaccurate or flawed information.

1.10. Research Assumptions

This study is carried out among undergraduates at the University of Malaya which is situated in the administrative capital state representative of a typical urban area. The usage of English language in urban areas is usually higher than in the outskirts and rural areas, If students are found to have language anxiety and communication anxiety, it can be assumed that these two variables will be on a higher level in the other government sponsored universities in this country which are away from the capital state. Some of the other universities are located in the outskirts. This study also assumed that the three races in the country comprising of Malays, Chinese and Indians are representative of the others in the country in terms of language ability to communicate and to use the library resources which are in the English language. It also assumed that all final year students participating in this study are required to conduct a research project as partial fulfilment of their academic degree program.

1.11. Definition of Terms

Anxiety

Anxiety is an experience as well as act (Fischer, 1970). It is a mode of behaving whereby the person experiencing anxiety is already in an affective state unselfconsciously and this particular affective manner of the experiencing contributes both to the forming of the situation. In this study, it is assumed that the experience of language and communication anxiety by students can contribute to the experience of library anxiety.

Library Anxiety

It is a generalized feeling of fear and discomfort which results in the inability of a student to approach a library research problem logically or effectively and may result in coping, defensive or avoidance behavior (Zahner, 1992). It assesses five sub-scales: Knowledge of the library, Comfort level, Barriers to staff, Affective barriers and Mechanical barriers.

Library Anxiety Scale

The instrument developed by Sharon L. Bostick (Bostick, 1992) to quantitatively measure library anxiety. The scale measured five (5) subscales as stated below:

Knowledge of the library : Assess library users' perceptions on how familiar users are with the library's resources and services. A high score will indicate low anxiety whereas a low score will indicate higher levels of library anxiety (Noor Harun & Ansari, 2010).

Comfort level : Assess library users' perceptions of the library's ambiance. A high score will indicate lesser levels of library anxiety whereas lower scores will indicate greater level of library anxiety (Noor Harun & Ansari, 2010).

Barriers to staff: Assess library users' perceptions of library staff as intimidating, unapproachable, as well as too preoccupied to render any form of assistance whatsoever to them (Noor Harun & Ansari, 2010)

Affective barriers : Assesses library users' perceptions of adequacy regarding their abilities to make effective use of resources and services in the library. A high score will indicate low anxiety whereas a low score will indicate high levels of library anxiety (Noor Harun & Ansari, 2010).

Mechanical barriers : Assess library users' perceptions of how difficult it is to operate mechanical library equipment such as photocopying machines, change machines, computer printers, etc. A high score will indicate higher levels of library anxiety (Noor Harun & Ansari, 2010).

Information Skills Course

The code refers to the course which is a compulsory one credit hour course for all undergraduates at the University of Malaya. It is the only university in the country which has made the Information Skills Course as a compulsory university course.

Communication apprehension

It is a feeling of discomfort and fear when communicating orally with another person. Communication apprehension can be trait-like, context-based, audience-based and situational-based (Richmond & McCroskey, 1998). In this study, the experience of library anxiety is seen as situational and so communication apprehension refers to situational-based anxiety.

Foreign language anxiety

MacIntyre (1999) defines foreign language anxiety as 'the worry and negative emotional reaction aroused when learning or using a second (non-native) language'. Horwitz, Horwitz, & Cope (1986) views foreign language anxiety as a 'distinct complex

of self-perceptions, beliefs, feelings and behaviour related to classroom learning arising from the uniqueness of the language learning process'. The feelings, symptoms and behavioural responses of the anxious foreign language learner are essentially the same as for any specific anxiety (Chen & Chang, 2004). In a country where English is the dominant language, English is a second language for students who are immigrants or visitors. There is ample opportunity to use the language outside the classroom and students have extensive daily exposure to English-speaking culture. Whereas, in a country where English is not the dominant language, English is considered as a foreign language. There are few opportunities to use English outside the classroom. For some students, learning English as a foreign language may not have any obvious practical benefit.

1.12. Organization of the Thesis

This thesis has six chapters; Chapter one is introduction to the study, Chapter two is literature review, Chapter three is on the Methodology, Chapter four is data findings, Chapter five is discussion of the analysis of the data findings and Chapter six concludes the entire findings with some suggested recommendations. This study is a quantitative study and therefore many tables are included. Where a table is considered necessary, it will be included as part of the thesis text. Otherwise, the tables will be included as Tables and Appendices.

CHAPTER TWO

REVIEW OF THE LITERATURE

2.1. Introduction

This chapter reviews the literature on (i) library anxiety, (ii) foreign language anxiety, and (iii) communication anxiety. The literature of each of the anxieties will be categorized into five broad headings: (i) concept, (ii) dimensions, (iii) development and validation of the instruments used to measure the anxieties, (iv) dispositional antecedents, and (v) environmental antecedents. The aim is to explore the similarities among the antecedents of the anxieties since the research objective is to investigate the correlation among these three anxieties. To collect materials for this review, databases such as ERIC, Science Direct, Wilson Library Literature, Ebsco, Proquest, print books and journals available at the University of Malaya Library were searched. In addition, Internet sources and blogs by McCroskey, Kuhlthau, and Onwuegbuzie were also examined.

The framework for the dispositional and environmental antecedents was modified from the Library-Anxiety-Expectation Model (LEM) by Jiao, Onwuegbuzie, and Bostick (2004). In this model, dispositional antecedents which are inherent in the students include self-esteem, self-concept, self-perception, perfectionism, study habits, hope, and social interdependence. Environmental antecedents include what is brought by the students into the situation which include gender, native language, year of study, race, and ethnic. For the purpose of this study, literature on dispositional antecedents was limited to; (a) self-esteem/self-concept/self-perception, (b) personality and social

behavior, and (c) learning preferences. Literature on environmental antecedents was limited; (a) gender, (b) race/ethnic, and (c) student level.

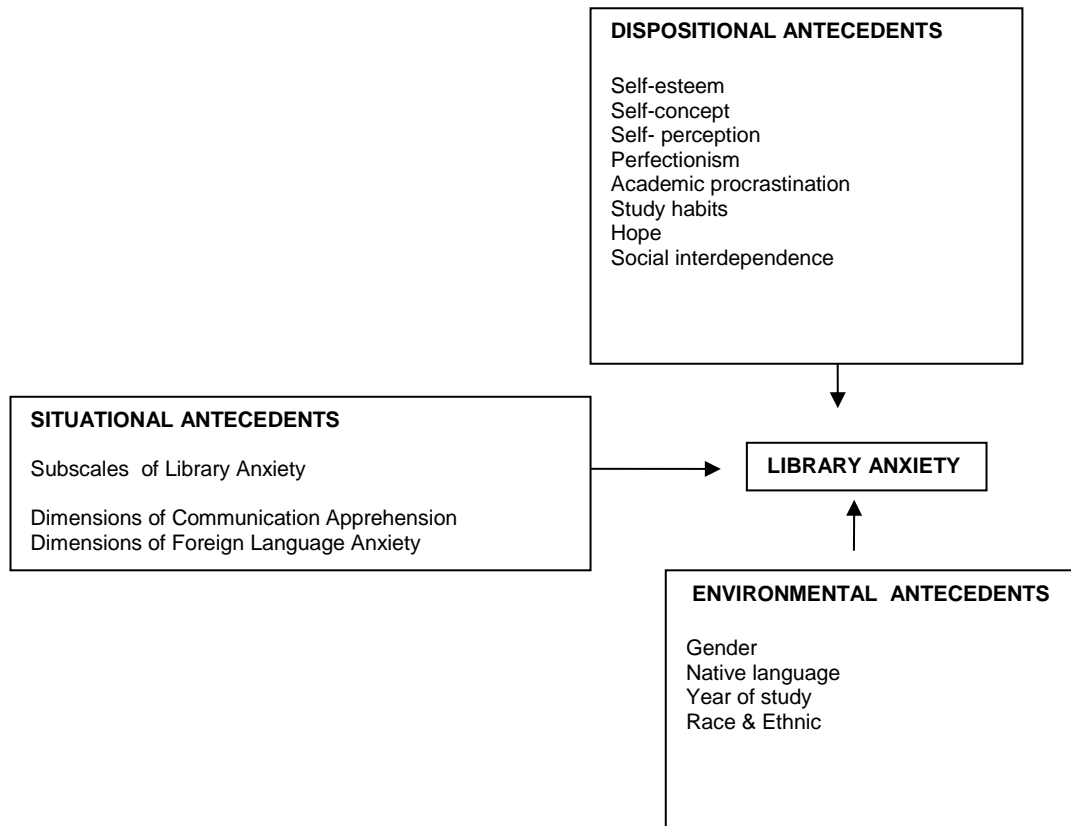


Figure 2.1: Antecedents Of The Anxieties
 (Modified from Source: Jiao, Onwuegbuzie & Bostick, 2004)

2.2. Library Anxiety

2.2.1. Concept Of Library Anxiety

Constance A. Mellon (Mellon, 1986), was the first to conceptualize students' attitudes toward library research. Mellon conducted a qualitative study with six thousand students over a two-year period, to explore their feelings while conducting research in an academic library. About 75-85% of the respondents used terms related to

fear or anxiety. However, the students, instead of discussing problems they encountered with their research, actually expressed feelings of fear when using the library even as early as the beginning of their research process. This kind of phobic feeling observed by Mellon, is also common among students with ‘math anxiety’ and ‘test anxiety’. Based on that, Mellon categorized the reasons for students' feelings of fear or anxiety about using the library into four categories: (i) size of the library, (ii) lack of knowledge about location of things, (iii) how to begin research, and (iv) what to do. Mellon was perplexed that the size of the library can be the cause because the study was conducted in a relatively small academic library that had only three floors.

Mellon also pondered over why students do not approach the faculty and librarians when they needed help. A closer look at the qualitative data revealed that the students feel inadequate with their lack of competency in using the library because they feel other students were more competent than them. They also feel shameful to seek help for fear of revealing their incompetency. Mellon’s observation was supported by other studies where it was reported that students are likely to be susceptible to experience some kind of anxiety using the library are found to have experienced repeated academic failures (Karabenick & Knapp, 1988). They are also poor performers facing feelings of low expectations and experience cognitive and emotional obstacles to obtain help needed. (Keefer, 1993). Keefer referred to this emotional state as ‘hungry rats’ syndrome’ where students who are desperate for information often do come to the reference desk. However, their need for information was immediate. It is probable that had such a need not been immediately gratified, the student could have return feeling frustrated and anxious. This explanation of help seeking is explained by Daly and Stafford's study (1984) that if an individual has had prior unpleasant experiences, that

individual often withdraws from or avoid that communication situation in future. In another study conducted among international students at the University of Malaya, 9.3% of the respondents who admitted encountering barriers seeking information, felt hesitant to approach the reference desk and the personal at the desk (Safahieh & Diljit, 2006). This feeling of anxiety and uncertainty among students when using the library is also explained by Kuhlthau (2004) in the Information Search Process (ISP) Model. Kuhlthau explains that a person's information seeking feelings, thoughts and actions are influenced by the individual's past experiences and the anticipation of future events.

2.2.2. Dimensions of library anxiety

Sharon Bostick (Bostick, 1992) attempted to measure Mellon's library anxiety construct, with a valid and reliable instrument. Being product of a qualitative study, Mellon's theory had to be quantified for further empirical support. Bostick developed a multidimensional instrument called the Library Anxiety Scale (LAS) which had five subscales, namely: (i) *barriers with staff*, (ii) *affective barriers*, (iii) *comfort with the library*, (iv) *knowledge of the library* and (v) *mechanical barriers*. *Barriers with staff* assess the library users' perceptions of how approachable and helpful the library staff are. *Affective barriers* refers to their own feelings of competencies and aptness in using the library. *Comfort with the library* assess the library users' perceptions of the library's ambience, its welcoming atmosphere. *Knowledge of the library* is how familiar and confident they users are in using the resources for their learning and research. Finally, *mechanical barriers* is whether the library equipment and machinery such as computerized catalogs, computer printers, computer labs, are easily accessible and usable. Sharon's LAS also ensured the instrument does not discriminate among

levels of college students, age, gender and geographical locations. The final instrument was administered to three classes: a local community college class, an undergraduates class at a private college, and a graduate class at an urban university. It was found that the dimensions of the instrument did not differentiate levels of college students, age or gender. However, it did yield some differences. Graduate students had a higher library anxiety score than the community college and undergraduate students. Students over 50 years age group reported higher levels of library anxiety than the 41-50, 31-40 and under 30 age group.

Onwuegbuzie (1997) used qualitative research techniques to further explain the dimensions of library anxiety and noted that library anxiety comprised of perceived anxieties quite similar to Bostick's (1992) findings. The perceived anxieties are: *interpersonal anxieties, perceived library competence, perceived comfort with the library, location, mechanical anxiety and resources anxiety*. *Interpersonal anxiety* relates to an increase in anxiety levels when a student contemplates or is in the process of seeking help from the librarian or other library staff. *Perceived library competence* refers to an increase in levels of anxiety culminating having a negative perception of his or her ability to utilize the library competently. *Perceived comfort* with the library arises from a student's perception of how safe and welcoming the library is. *Location anxiety* pertains to the students' level of perceived familiarity with the library. *Mechanical anxiety* refers to anxiety levels when using mechanical library equipment. Even waiting to use computer facilities as a result of inadequate number of computers can be a source of anxiety (Onwuegbuzie, Jiao & Bostick, 2004, pp. 37).

A decade after the development of the LAS by Bostick (1992), Van Kampen (2003) incorporated factors relating to the Information Search Process (Kuhlthau, 2004) into the LAS and subsequently developed the Multidimensional Library Anxiety Scale (MLAS) with 53 items. The scale yielded six factors: (i) *KNOW*-comfort and confidence when using the library; (ii) *ISPLIB*-Information Search Process and general library anxiety; (iii) *STAF*-perceived barriers concerning staff; (iv) *IMPLIB*-perceived importance of understanding how to use the library; (v) *TECH*-comfort level with technology as it applies to the library; and (vi) *BUIL*-comfort level while inside the library building. Bowers (2010) validated Van Kampen's (2004) MLAS among law students. Using confirmatory analysis, six components were yielded. The six components are: *general library and research anxiety, comfort with technology and online access, perceived value of understanding how to use the library, comfort with the library as a physical place, perceived value of using the library in person, and comfort with library staff*. The MLAS administered to doctoral students revealed new areas of library anxiety antecedents related to confidence in using the library resources for information search process.

2.2.3. Development and validation of the Library Anxiety Scale (LAS)

The Library Anxiety Scale instrument underwent several phases of rigorous instrument development and has been shown to have good psychometric properties (Bostick, 1992; Onwuegbuzie, Jiao & Bostick, 2004). The first pilot instrument consisting of 294 statements was administered to students at University of Toledo, Wayne State University, Macomb County Community College, and Madonna College.

The class levels ranged from first year to graduate students. Factor loading coefficient of greater than 0.30 resulted in 24 factor with 88 items. The analysis was run again to fit the 88 items into four categories which became the second pilot instrument which was then administered to students at University of Toledo, Wayne University, and Macomb County Community College. Additional factor loading coefficient of greater than .50 resulted in 43 items with five factors explaining 45.5% of the variance. The final instrument consisting of 43 items had the following factors: (i) barriers with staff (15 items, 25.4%); (ii) affective barriers (12 items, 8%); comfort with library (8 items, 7.4%); knowledge of library (5 items, 6.1%) and mechanical barriers (3 items, 4.9%). It was given to the same students twice, at two to three week intervals. The final instrument has five factors with 43 items which explained 51.8% of the variation in library anxiety. The internal consistency for the overall score is 0.80 and the test-retest reliability for the overall scale is 0.74.

Jiao and Onwuegbuzie being the predominant researchers in the field of library anxiety cross-validated the LAS in subsequent studies. In their study (Jiao & Onwuegbuzie, 1997), 522 undergraduate and graduate students from a mid-southern and northeastern university in USA were administered the Library Anxiety Scale. The results of running an exploratory factor analysis resulted in the following dimensions: barriers to staff ($\alpha=0.90$); affective barriers ($\alpha=0.80$); comfort ($\alpha=0.66$); knowledge ($\alpha=0.62$); and mechanical barriers ($\alpha=0.60$). In 2002, Jiao and Onwuegbuzie (2002) examined the relationship between library anxiety and social interdependence among graduate students course at a mid-southern university in the US. The scale yielded five factors and structural coefficients reveal sub-scale knowledge of library explaining 70.6% of the variance followed by comfort with the library (48.2%) and barriers with

staff (45.6%). The instrument was reported to have alpha reliability coefficient value as follows: barriers with staff ($\alpha=0.93$); affective barriers ($\alpha=0.90$); comfort with the library ($\alpha=0.72$); knowledge ($\alpha=0.69$); and mechanical barriers ($\alpha=0.68$).

In another study on the relationship between library anxiety and reading ability among African-American graduate students from various disciplines., Jiao and Onwuegbuzie (2003) reported the Library Anxiety Scale to have alpha reliability coefficient value as follows: barriers with staff ($\alpha=0.93$); affective barriers ($\alpha=0.89$); comfort with the library ($\alpha=0.71$); knowledge ($\alpha=0.62$); and mechanical barriers ($\alpha=0.51$). In 2004, Jiao, Onwuegbuzie & Bostick (2004) administered the Library Anxiety Scale to 94 African American graduate students enrolled in the College of Education at a historically black college and university in the eastern US. The instrument was reported to have alpha reliability coefficient value as follows: barriers with staff ($\alpha=0.89$); affective barriers ($\alpha=0.84$); comfort with the library ($\alpha=0.53$); knowledge ($\alpha=0.62$); and mechanical barriers ($\alpha=0.70$). There are also other researchers who have investigated the validity of the Library Anxiety Scale. In 2001, Jerabek, Meyer, and Kordinak (2001) administered the Library Anxiety Scale to 171 undergraduates enrolled in the introductory English, philosophy, and psychology classes at Sam Houston State University in United States. The respondents were between the ages of 17 to 52. The scale yielded five factors accounting for 41.22% of variance: (i) barriers with staff (13.2%); (ii) affective barriers (8.74%); (iii) comfort with the library (8.32%); (iv) knowledge (7.79%); and (v) mechanical barriers (3.36%). Although the finding differs slightly from the original five factors of the original Bostick's Library Anxiety Scale, it was consistent particularly in highlighting the fact that barriers with staff (25.4%) seem to be the predominant anxiety causing factor of library anxiety,

followed by affective barriers (8%), comfort with the library (7.4%), knowledge barriers (6.1%) and mechanical barriers (4.9%).

Details of the factors and the alpha coefficient value for the dimensions of library anxiety are tabulated in Table 2.1. When the original LAS is administered to non-native speakers of English, the total number of item statements and reliability value almost always differ from the original LAS by Bostick's as shown in Table 2.2. When the LAS is retained in the English language, it is observed that the factor loadings are similar to that of the original LAS. However, when the scale gets translated, the factor loadings differs. This implies that user needs and library environment differs when users are native speakers of English and when they are non-native speakers of English.

Table 2.1: Validation Of The Library Anxiety Scale (LAS)

	Level	Items	Factors	Alpha α	Name of Scale
Bostick Sharon (1992)	Community class, undergraduates and graduates	43 Items	5 factors: i. Barriers to staff ii. Library comfort iii. Knowledge iv. Mechanical barriers v. Affective barriers	0.60 0.35 0.19 0.58 0.75	LAS: Library Anxiety Scale
Jiao & Onwuegbuzie (1997)	Undergraduates and graduates	43 items	5 factors: i. Barriers to staff ii. Library comfort iii. Knowledge iv. Mechanical barriers v. Affective barriers	0.90 0.80 0.66 0.62 0.60	LAS: Library Anxiety Scale
Jerabek, Meyer & Kordinak (2001)	Undergraduates		5 factors: i. Staff ii. Affective iii. Comfort iv. Knowledge v. Mechanical	13.2% 8.74% 8.32% 7.79% 3.36%	LAS: Library Anxiety Scale
Jiao & Onwuegbuzie (2002)	Graduate students	43 items	5 factors: i. Barriers to staff ii. Library comfort iii. Knowledge iv. Mechanical barriers v. Affective barriers	0.93 0.72 0.69 0.68 0.90	LAS: Library Anxiety Scale
Jiao & Onwuegbuzie (2003)	Graduate students	43 items	5 factors: i. Barriers to staff ii. Library comfort iii. Knowledge iv. Mechanical barriers v. Affective barriers	0.93 0.71 0.62 0.51 0.89	LAS: Library Anxiety Scale
Van Kampen (2004)	Doctoral students	53 Items	6 factors: i. Comfort & Confidence ii. Information Search Process iii. Staff iv. Library importance v. Comfort with technology vi. Comfort inside library building	0.86 0.87 0.73 0.73 0.74	M-LAS: Multidimensional Library Anxiety Scale
Jiao, Onwuegbuzie & Bostick (2004)	Graduate students	43 items	5 factors: i. Barriers to staff ii. Library comfort iii. Knowledge iv. Mechanical barriers v. Affective barriers	0.89 0.84 0.53 0.62 0.70	LAS: Library Anxiety Scale
Bowers (2010)	Law undergraduates	53 items	6 factors: i. General library & research anxiety ii. Comfort with technical & online access iii. Understanding how to use the library iv. Comfort with the library as a physical place v. Using the library in person vi. Comfort with library staff	0.91 0.79 0.86 0.76 0.73 0.72	M-LAS: Multidimensional Library Anxiety Scale

2.2.3.1. Library Anxiety Scale among non-native speakers of English

As this study used a Malay translated version of LAS to suit the needs of Malaysian students who are non-native speakers of English, it was considered necessary to review all the literature pertaining to the measure of library anxiety among non-native speakers of English in non-native English speaking countries (Table 2.2). Shoham and Mizrachi (2001) was the first to validate the Library Anxiety Scale among non-native speakers of English. A total of 339 Israeli B.Ed. students at Beit Berl Teachers College and another 325 students from seven other teachers' colleges were administered the LAS. The scale was translated into Hebrew language as the students comprise of 82% who specified Hebrew as their mother tongue while 12.8% specified Arabic as their mother tongue. The Hebrew translated version of LAS named as H-LAS yielded seven factors: (i) staff ($\alpha=0.75$); (ii) knowledge ($\alpha=0.77$); (iii) language ($\alpha=0.76$); (iv) physical comfort ($\alpha=0.60$); (v) computer comfort ($\alpha=0.51$); (vi) library policies/hour ($\alpha=0.45$); and (vii) resources ($\alpha=0.52$). All the factors were shown to have adequate internal reliability except for the library policies/hour factor.

Anwar, Al-Kandari & Al-Qallaf (2004) used a modified version of LAS to investigate library anxiety among first year undergraduate biological students of Kuwait University. Four statements from the original LAS relating to personal safety were dropped because safety was not a problem in Kuwait universities. Three statements related to *mechanical barriers* and two statements related to the *library environment* were dropped. The results of running the exploratory factor analysis on the remaining 34 statements revealed four factors explaining 47% of the total variance. The four factors are: *staff approachability* (13 statements, $\alpha=0.91$), *feelings of inadequacy* (6

statements, $\alpha=0.79$), *library confidence* (7 statements $\alpha=0.78$), and *library constraints* (6 statements, $\alpha= 0.41$). The factor loadings for two other statements (26 and 32) were too small to be included in any of the four factors. Anwar, et al, (2012) remodified the scale to cover more areas of the library environment related to electronic resources and application of information and communication technology. The resulting scale, named AQAK with a Cronbach's alpha value of 0.904, consists of 40 statements with five factors; library resources, library staff, user knowledge, library environment, and user education.

Noor and Ansari (2010) assessed the LAS psychometric properties in a Malaysian university library environment where English is not the native language. Bostick's instrument was modified to include items that are meaningful to Malaysian undergraduates. The number of items was increased from the original 43 to 49 items. Exploratory factor analysis using a factor loading criteria of 0.4 and greater yielded five interpretable factors with 35 items which explained 39.6% of total variance. The highest proportion of variance is explained by the sub-scale: *barriers with staff* (19.21%), followed by *comfort with library* (6.6%), *affective barriers* (5.8%), *cognitive barriers* (4.07%) and *comfort with the library* (3.86%). The findings revealed a five factor solution consistent with that of Bostick's (1992). The sub-scale *barriers with staff* have the highest internal reliability coefficient alpha value of $\alpha=0.91$. Each of the sub-scales was found to have met the criteria internal reliability coefficient value of $\alpha=0.70$.

Abusin and Zainab (2010) carried out an exploratory study of library anxiety among Sudanese university students using the LAS. The scale yielded seven factors that explained 50.74% of the total variance of library anxiety construct. The alpha reliability

coefficient value of the seven factors are as follows: *negative perception towards library environment* ($\alpha=0.93$), *affective barriers* ($\alpha=0.91$), *negative perception towards peers* ($\alpha=0.94$), *negative perception towards library services* ($\alpha=0.81$), *negative perception towards library collection* ($\alpha=0.85$), *negative perception towards library regulation* ($\alpha=0.70$), *cognitive barriers* ($\alpha=0.70$). It was observed that the seven factors scored high reliability coefficient value except for the dimension *negative perception towards library regulation* and *cognitive barriers* which yielded cronbach's alpha reliability value of $\alpha=0.70$.

Swigon (2011) developed and validated the Polish LAS among Polish student population from three universities in Poland. The instrument was reported to have an internal reliability coefficient alpha value of $\alpha=0.91$. The original instrument was modified to include 46 statements because it was considered as not suitable for Polish students. The biggest problem in Polish libraries is a lack of resources. The internal reliability coefficient alpha for each subscale was as follows: *barriers with staff* ($\alpha=0.75$), *affective barriers* ($\alpha=0.80$), *technological barriers* ($\alpha=0.73$), *library knowledge barriers* ($\alpha=0.78$), *library comfort barriers* ($\alpha=0.47$), and *resources barriers* ($\alpha=0.75$). The resultant alpha coefficient of $\alpha=0.91$ for all 46 items provided evidence of adequate internal consistency.

Table 2.2 : Validation Of LAS Among Non-native Speakers of English

	Level	Items	Factors	Alpha α	Name of Scale
Shoham & Mizrachi (2001) (Translated)	Undergraduates	35 items	7 factors: i. Staff ii. Knowledge iii. Language iv. Physical comfort v. Computer comfort vi. Library Policies/Hour vii. Resources	0.75 0.77 0.76 0.60 0.51 0.45 0.52	Hebrew LAS (H-LAS)
Anwar, Al-Kandari & Al-Qallaf (2004)	Undergraduates	32 items	i. Barriers to staff ii. Library comfort iii. Knowledge iv. Mechanical barriers v. Affective barriers	0.91 0.79 0.78 0.71	
Noor Harun & Ansari (2010)	Undergraduates	35 items	i. Barriers with staff ii. Comfort with library services iii. Affective barriers iv. Cognitive barriers v. Comfort with library technology	0.91 0.73 0.70 0.80 0.67	
Abusin (2010)	Undergraduates	36 items	i. Negative perception toward library environment ii. Affective barriers iii. Negative perception towards peers iv. Negative perception towards library services v. Negative perception towards library collection vi. Negative perception towards library regulation vii. Cognitive barriers	0.93 0.91 0.94 0.81 0.85 0.70 0.70	Sudanese Library Anxiety Construct (SULAS)
Swigon (2011).	Undergraduates, Masters level, doctoral students and faculty members		6 factors: i. barriers with staff ii. affective barriers iii. technological barriers iv. library knowledge barriers v. library comfort barriers vi. resources barriers	0.75 0.80 0.73 0.78 0.47 0.75	Polish LAS (P-LAS)

2.2.4. Antecedents of library anxiety

2.2.4.1. Dispositional antecedents

Dispositional antecedents in the library anxiety context relate to self-esteem, self-concept, self perception, perfectionism, academic procrastination, study habits, hope, social interdependence (Onwuegbuzie, Jiao & Bostick, 2004). Similarly, in the foreign language anxiety context, students' low self-esteem, their beliefs regarding the learning of a foreign language, negative experience associated with the language or culture, and the general experience of language learning are some of the factors reported for the experience of foreign language anxiety. Such antecedents of language anxiety can stem from the students, teachers or the method and instructional practice (Von Worde, 1998). Young (1990) believe that personal and interpersonal anxieties seem to be the preambles for the experience of foreign language anxiety inside the classroom and outside. The following section will review literature on dispositional antecedents for the each of the three anxieties. The antecedents will be broadly categorized as: (i) personality, (ii) self-esteem/self-concept/self-perception, (iii) personality/social behavior, and (ii) learning preferences.

(a) Self-esteem/Self-concept/Self-perception

A number of studies have indicated that students' self perception do hinder the way they do research, seek assistance, benefit from instructional programs. Students who are highly anxious do have a negative experience when using the library (Fliotsis, 1992). High anxious students also feel that other students are adept at using the library

while they are inept. They feel embarrassed at their own incompetence and to avoid revealing their ignorance, they do not ask questions (Mellon, 1986). The reluctance of high anxious students to share their feelings of anxiety apparently can lead to instructors over estimating their students' library skills (Jacobson, 1991). High anxious individuals feel less competent, confident and understood in communication settings than their low anxious counterparts and the lack of self confidence can affect the way students conduct research (Onwuegbuzie, 1997). Students' level of library anxiety are exacerbated by their own incompetence and belief that the others are better resulting in the individual feeling shameful of their incompetence (Jiao & Onwuegbuzie, 1997). One of the important factor behind students' refusal to ask for help is self-esteem and the accumulation of repeated failures (Karabenick & Knapp, 1988). The threat to self-esteem generated by the need to ask for help is often more painful than the resulting risk of academic failure. In Abusin and Zainab study (2010) among Sudanese students, 37.2% cited low self-esteem as a source of anxiety and avoidance behavior in using the library.

(b) Personality / behaviour

Introverts who have experienced repeated academic failure are least likely to seek help even if they could benefit from assistance. They are faced with feelings of low expectations and face cognitive and emotional obstacles to obtain help needed. Low expectations would lead to low task performance and withdrawal. Also, students who have the poorest sense of successful goal-related determination and are less ambitious tend to have the highest level of library anxiety associated with barriers with staff, affective barriers and barriers to knowledge of the library (Onwuegbuzie & Jiao,

1998a). Extroverts who are cooperatively oriented tended to have the lowest levels of library anxiety stemming from barriers with staff, comfort with the library, and knowledge of the library (Jiao & Onwuegbuzie, 2002). A canonical correlation analysis ($R=0.41$) revealed that cooperative attitudes were related significantly to barriers with staff, comfort with the library, and knowledge of the library. Library anxiety has a social context and this cooperative attitude promotes interdependence not only among students but also between students and librarians. Students who do not have a cooperative orientation may be less inclined to seek assistance from librarians, thereby elevating their levels of library anxiety stemming from barriers with staff and affective barriers (p.76).

Similarly, perfectionism is another trait where the individual sets high standards. It is important for them to maintain a perceived need to attain standards and expectations prescribed by significant others namely friends, family, professors and classmates. Such individuals have high levels of library anxiety associated with affective behavior (Onwuegbuzie & Jiao, 1998b). These students may overlook maps, signs or misinterpret directions and cues when looking for books in the library and subsequently refrain from asking for help or give up their search quickly (Keefer, 1993).

A relationship between library anxiety and social independence has been reported in a study among graduate students (Jiao & Onwuegbuzie, 2002). Social interdependence comprise of cooperative, competitive and individualistic attitudes. Students with the greatest cooperative orientation tended to have the lowest levels of library anxiety. They are more likely to seek help from librarians unlike the less cooperative students who are less inclined to seek assistance. It has been reported that

students who refrained from asking librarians for help show statistically significant high levels of library anxiety than their help seeking counterparts (Abusin, 1998). Sudanese university students admit feeling shy approaching people especially if it is the first time entering the university (Abusin & Zainab, 2010). This is consistent with Mellon's theory (1986) conducted two decades ago which states that students feel lost and ashamed to seek help when in the library.

(c) Learning preferences

Graduate students whose perception of librarians heightened their level of anxiety tended to be less persistent, like to receive information via visual mode and to require mobility in learning environment (Jiao & Onwuegbuzie, 1999b). Students who are less persistent do not perceive the library as a safe, welcoming and nonthreatening environment. Academic procrastination is significantly related to library anxiety associated with affective barriers. There is a reciprocal relationship between academic procrastination and library anxiety with each affecting the other (Onwuegbuzie & Jiao, 2000). Persistence appears to be an important predictor of library anxiety (Onwuegbuzie & Jiao, 1998a) because students who lacked persistence give up easily and maybe unwilling to persevere in their quest for knowledge. It is a form of vicious cycle where increased degrees of anxiety diminish their threshold for persistence even further. Onwuegbuzie and Jiao also explained that such students with dislike of any library equipment or mechanical structure tend to give up more easily when faced with difficulties using the resources. About 66.6% of the respondents in Abusin and Zainab's study (2010) cited the indifference attitude of library staff as a source of anxiety. 29.4% perceived library staff to be irritable. Interestingly, 78.4%

indicated psychological barriers when looking for books and references in the library. About 40% of the surveyed Polish students revealed that they experience library anxiety and 80% of them reported having encountered many difficulties in accessing information (Swigon 2011).

2.2.4.2. Environmental antecedents

(a) Gender

Generally, there seems to be no statistically mean difference between males and females. Bostick (1992) found no statistically significant mean differences between males ($M=116.77$) and females ($M=117.68$) with respect to all the sub-scales of the Library Anxiety Scale. This was supported by Swigon (2011) and Anwar, Al-Kandari and Al-Qallaf (2004) findings which reported that the mean value for the sub-scales did not produce significant difference between males and females. The mean value for females, however was higher for sub-scales barriers with staff (Males=1.84, Females=2.00) (Swigon, 2011). Bowers (2010) also reported that male and female law students do not experience different levels of library anxiety overall or related to the six components of the multidimensional library anxiety scale.

In Jiao and Onwuegbuzie's study (1997), it was reported that male students who did not speak English as their native language experienced mechanical barriers ($F[1,512]=7.32, p<0.01$) and that their perception of librarians ($F[1,512]=.73, p<0.01$) heightened their level of anxiety.. Students who did not perceive the library as providing

a safe, welcoming and non-threatening environment ($F[1,513]=3.65, p<0.01$) are the young males. Students for whom a lack of knowledge of the library resources increased their anxiety level are the males ($F[1,514]=2.74, p<0.01$). However, in a study to investigate the library anxiety scales before and after bibliographic instruction, Battle (2004) did not observe any change in male students.

Female students after receiving bibliographic instruction were significantly less anxious than females who did not receive bibliographic instruction. No change in males was recorded before and after treatment (Battle, 2004). The results of running independent sample t-tests on each of the five sub-scales with gender as the independent variable was found to be statistically significant only on the cognitive barriers $t(303)=2.22, p<0.05$ between male students ($M=7.64$) and female students ($M=8.2$) (Noor Harun & Ansari, 2010).

(b) Race/ethnic

Students who are non-native speakers of English tend to experience higher levels of anxiety. In Shoham and Mizrachi's study (2001), the language factor which yielded a total mean of 3.65 was the only factor that showed significant relationships with all the independent variables in the study. This is a significant finding because the mean value of library anxiety in Shoham and Mizrachi's study (2001) was reported to be not that high. The study also reported that students find searching and using English materials and resources as the most debilitating library task. Shoham and Mizrachi's study also compared the library anxiety level between the Hebrew speaking native speakers with the Arabic speaking native speakers. A high level of library anxiety for

Hebrew speakers emerged in the English language factor while a higher level of library anxiety for Arabic speakers emerged in the Knowledge sub-scale. Abusin and Zainab (2010) exploration of library anxiety among Sudanese students reported that 9.8% expressed the view that language affects their acceptance of a given task. If a book is written in English language, the students feel anxious especially if his mastery of the language is poor.

African-American graduate students reported statistically significantly lower levels of library anxiety than the Caucasian-Americans (Jiao, Onwuegbuzie, & Bostick, 2004). However the two racial sample groups were from different types of institutions. The authors were not able to conclude whether the differences found in the library anxiety levels were the result of race or the groups educational experience. A replication study was conducted by the authors (Jiao, Onwuegbuzie, & Bostick, 2006) using a sample from the same institution and having a similar range of cumulative grade point. In this study, the African-American graduate students reported consistently lower levels across all five dimensions of library anxiety than the Caucasian-Americans. The direction of the five pair-wise differences was reexamined using a test of aggregate z-scores. The three-step procedure suggests strongly that the African American students reported consistently lower levels of anxiety than the Caucasian American students. Thus, it can be concluded from this study that race is an environmental antecedent of library anxiety and that library anxiety has a racial context.

(c) Student level

In Jiao and Onwuegbuzie's study (Jiao & Onwuegbuzie, 1997), freshmen and sophomores report significantly more anxiety than the graduate students. Anxiety levels however subsequently declined as a function of year of study. Freshmen and sophomores score highest in the sub-scale affective barriers while seniors and graduates score the lowest. Freshmen reported highest discomfort with the library while graduates had the least discomfort. Scores for sub-scale knowledge of library resources decrease steadily as year of study increased. Sophomores and seniors report more difficulties with library mechanics than did freshmen and graduate students. Peak scores were for the sophomores and seniors. In Shoham and Mizrachi's study (2001), the level of library anxiety increased every year from a mean of $M=3.42$ in first year to $M=3.85$ in second year to a higher level in third year with a mean of $M=3.87$. But, library anxiety level particularly relating to barriers with staff increased with year of study where first year students mean was $M=2.15$, second year $M=2.22$, and third year $M=2.23$. For sub-scale knowledge of library resources, there was a slight increase in third and fourth year of study. Generally, freshmen are more anxious than the other student levels especially in the sub-scales of barriers to staff, affective barriers, comfort with the library and knowledge of library resources. Bowers (2010) did not find a significant difference in the year of study among law students in a private law school in mid-western US.

Bostick (1992) findings did not differentiate between non-graduate students ($M=118.41$), undergraduates ($M=118.61$) and graduate students ($M=114.13$). This is consistent with Swigon's study (2011) where the level of library anxiety did not statistically differ with the students' level. Doctoral students' knowledge of the library

however, seems to trigger a higher level of anxiety in that dimension when compared to undergraduates. This was also reported in Jiao and Onwuegbuzie (2003) where doctoral students had a higher mean for knowledge barriers.

Non-traditional students attending part-time evening courses have greater levels of library anxiety than full time students attending day courses (Bowers, 2010). In an exploratory study of library anxiety among basic skills English students in a California Community college (Lee, 2011), the mean of $M=102.07$ was slightly lower than Bostick's (1992). There are a few other studies which have explored library anxiety among different course programs. Law students have only a moderate level of library anxiety (Bowers, 2010) particularly associated with general library and research anxiety, comfort with the library technical and online access. The highest score was on perceived value of using the library in person while the lowest score was on the perceived value of understanding how to use the library. In another study (Anwar, Al-Kandari & Al-Qallaf, 2004), students pursuing Humanities and Social Science program had a higher mean when compared to students in Science, Engineering and Health program. This is in consistent with Abusin and Zainab's (2010) study where students pursuing Fine & Applied Art program and Language program have high levels of library anxiety in almost all the dimensions except for negative perception towards library services. The lowest levels were among students pursuing computer science and IT programs particularly dimensions such as affective barriers, cognitive barriers and negative perception towards library services.

2.3. Foreign language anxiety

2.3.1. Concept of foreign language anxiety

Foreign language anxiety is a distinct complex of self-perceptions, beliefs, feelings and behavior related to classroom learning arising from the uniqueness of the language learning process (Horwitz, Horwitz, & Cope, 1986; p.128). Traditionally, the foreign language anxiety was used to evaluate performance in class. Many of the research studies have reported a negative relationship between foreign language anxiety and performance (Aida 1994, MacIntyre & Gardner 1991, Phillips 1989). Students whose learning experience has been negative and who have suffered low grades are more prone to foreign language anxiety (Chen & Chang, 2004). There are also studies which have shown the relationship between foreign language anxiety as a facilitative anxiety to performance (MacIntyre and Gardner, 1989).

The feelings, symptoms and behavioral responses of the anxious foreign language learner are essentially the same as for any specific anxiety (Chen & Chang, 2004, p.125). The learner's level of anxiety is influenced by linguistic and socio-cultural standards. It must be realized that the effects of foreign language anxiety are not limited to problems encountered during speaking in class or performance but actually pervade the entire language learning process. Anxious students feel a deep self-unconsciousness when asked to risk revealing themselves by speaking the foreign language in the presence of others (Horwitz, Horwitz, & Cope, 1986, p 129). This anxious feeling rarely emerges when individuals communicate in the native language (Sparks & Ganschow, 1991).

Other studies have also reiterated that speaking in a foreign language in the classroom and outside the classroom is the most anxiety provoking activity for students. In a study among university students in South Taiwan, 48% reported having difficulties in listening and speaking than in reading (Banya & Cheng, 1997). In another study to investigate the sources of language anxiety, it was reported that many of the anxiety provoking factors appeared to be generated by speaking activities (Von Worde, 1998). (Young, 1990). Difficulty in speaking in the class is probably the most frequently cited concern of the anxious foreign language learner especially when the learner has no control of the communication situation. This is also supported in a study to identify sources of anxiety over speaking in the classroom (Young, 1990). The theoretical interpretation by Young (1990) imply that students become more anxious when they have to speak in front of others, experience social anxiety where they fear being negatively evaluated not only by their peers but by instructors and finally the fear of making mistakes in front of peers and instructors which have an effect on learners' self-esteem.

2.3.2. Dimensions of foreign language anxiety

Elaine Horwitz was one of the first to examine closely the dynamics of foreign language and thereafter conceive a foreign language anxiety model (Horwitz, 1986). The model relates foreign language anxiety to three performance anxieties, namely; *communication apprehension*, *test anxiety*, and *fear of negative evaluation*. *Test anxiety* is included because foreign language learning often involves testing situations such as tests and quizzes. The items in FLCAS are found to be useful to identify individuals who have experienced state anxiety arousal in the past and predicting those who will be

most likely to experience state anxiety in the future (MacIntyre, 1999). The FLCAS has been used in studies related to foreign language anxiety and also in studies investigating foreign language anxieties in relation to other anxieties (MacIntyre & Gardner, 1989; Daly & Stafford, 1984; Foss & Reitzel, 1988; Horwitz, Horwitz & Cope, 1986; Young, 1990). FLCAS has been found to be very reliable (Aida, 1994; Ganshow & Sparks, 1996; MacIntyre & Gardner, 1989; Young, 1990). Principally, foreign language anxiety focus on two basic task requirements of foreign language learning; listening and speaking (Horwitz, Horwitz & Cope, 1986).

Prior to the development of the FLCAS, studies on the role of anxiety in foreign language learning showed findings which contrasted from one study to another because of the lack of a reliable and valid measure of foreign language anxiety (Horwitz, 1986). The first instrument that was developed to measure second language anxiety was by MacIntyre and Gardner (1991). However, the instrument was limited to the use of French language only. Horwitz, Horwitz and Cope (1986) examined closely the dynamics of foreign language based on the reports of the experiences among students and thereafter conceive a scale to measure foreign language anxiety.

Factor analysis in Aida's study (1994) showed evidence that speech anxiety and fear of negative evaluation are indeed important subscales of foreign language anxiety. This is in consistent with the factors stated in the original FLCAS (Horwitz, Horwitz and Cope, 1986) except for test anxiety which is one of the constructs of FLCAS. This is because items in FLCAS which are indicative of test anxiety did not load on any of the factor loadings in Aida's study (1994). In fact, 83% of students rejected item 21 which is 'studying for a test'. This finding is also supported in another study where test

anxiety was not found to be a contributory factor to the communicative anxiety of the language classroom (MacIntyre & Gardner, 1989).

The FLCAS was administered to university students in Malaysia with to investigate feelings of anxiety experienced during second language learning. In the study (Hizwari, et al., 2011), it was reported that there were four factor components: communication anxiety (8 items); fear of negative evaluation (9 items); test anxiety (5 items); and English class anxiety (11 items). In another study among university students in Malaysia, the modified FLCAS included 'general feeling of anxiety' as one of the factors in addition to 'communication apprehension' and 'fear of negative evaluation' Khairi and Nurul (2011). In a study by Tok (2009), factor analysis of FLCAS revealed three different components from that of Horwitz, Horwitz and Cope (1986). The factors are; fear of negative evaluation, communication apprehension, and anxiety of speaking to native people

2.3.3. Validation of the Foreign Language Classroom Anxiety Scale (FLCAS)

The Foreign Language Classroom Anxiety Scale has 33 items anchored on a 5-point Likert-scale, self-report questionnaire format with responses ranging from Strongly Agree, Agree, Neutral, Disagree to Strongly Disagree. 20 out of the 33 items are related to speaking. Possible scores on the FLCAS range from 33 to 165. This instrument has demonstrated internal reliability achieving an alpha coefficient of 0.93 with all items producing significant corrected item-total scale correlations. Test-retest yielded an internal reliability coefficient alpha value of 0.83 ($p < 0.01$).

There have been studies to investigate the psychometric stability of FLCAS. (Rodriguez, 2003). The instrument was administered to college students who were simultaneously learning English and French as foreign language. Two Spanish versions of the scale was used. Where the term 'foreign language' was used, it was replaced by English or French. Both versions were found to have an internal reliability coefficient alpha value of 0.90. Using paired sample t tests, no statistically significant mean difference was found between overall levels of general English (M=85.98, SD=21.03) and French (M=89.60, SD=20.11) anxieties thus endorsing the stability of FLCAS across situations and across languages.

One of the first studies to investigate foreign language anxiety on a non-western language was Aida (1994). The FLCAS was adapted and administered among students studying Japanese. The sample was students at the University of Texas in Australia enrolled in Japanese classes. FLCAS is reported to be a reliable tool regardless of language. The validity of the scale showed a consistency Cronbach's alpha coefficient value of 0.94 very similar to the original FLCAS (Horwitz, Horwitz & Cope, 1986). When the survey was administered to the same students who had enrolled for the next level of Japanese class in the following semester, the correlation between the scores in the two semesters was 0.80, $p < 0.01$, indicating that FLCAS measures a person's level of anxiety with high accuracy at different times. In a study among English majoring university students at three universities in China, the FLCAS yielded a cronbach's internal reliability coefficient alpha value of 0.92 (Liu & Huang, 2011). Chinese versions of the FLCAS administered to students from 10 universities and colleges around Taiwan showed Cronbach's alpha coefficient of 0.95 with all items producing significant corrected item-total scale correlations (Chen & Chang, 2004). Japanese

versions of FLCAS distributed to students majoring in English at a large university in Kyoto revealed Cronbach's internal reliability coefficient alpha value of 0.78 (N=252, M=100.75 and SD=11.44) (Matsuda & Gobel, 2004). A principle component analysis with varimax rotation produced seven factors with eigenvalues greater than one. Since to retain all seven factors would create a model too complex, the last five factors were discarded as the scree plot of the eigenvalues turned right following factor two. The two remaining factors are: General English classroom performance anxiety (31.1% variance); and Self-confidence in speaking English (6.1% variance). It was reported that there is a clear connection between the factor Self-confidence in speaking English and overseas experience. This indicated that overseas experience benefit students in enhancing their self-confidence. Kim (2009) examination of the affective experience of college students enrolled in English reading and conversation courses at a university in Korea revealed Cronbach's internal reliability coefficient alpha value of $\alpha=0.95$. However, it was reported that different classroom contexts have a significant difference on student anxiety in learning English as students are more anxious in conversation than in reading.

A study of foreign language anxiety among students of Japanese in the University of Texas at Austin (Aida, 1994), yielded an internal reliability Cronbach's coefficient alpha value of 0.94 similar to that of Horwitz, Horwitz and Cope (1986). However, test anxiety was not found to be a component of the scale. In addition to fear of negative evaluation and speech anxiety, other factors such as fear of failing the class, comfortableness in speaking with native speakers and negative attitudes toward the language class emerged as sub-scales of the Foreign Language Classroom Anxiety Scale.

The validation of the Foreign Language Classroom Anxiety Scale across different populations are tabulated in Table 2.3: Validation of FLCAS. The factor loading of test anxiety as a sub-scale to FLCAS is not significant in some of the studies (Tok, 2009; Aida, 1994; Chen & Chang, 2004). However, other factor components such as English classroom anxiety (Hizwari, et al.,2011, Aida, 1994, Chen & Chang, 2004), anxiety of speaking to native people (Tok, 2009), and negative attitudes toward the language class (Aida, 1994) do surface.

Table 2.3: Validation of Foreign Language Classroom Anxiety Scale (FLCAS)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Horwitz, Horwitz & Cope, 1986	fear of negative evaluation	communication apprehension		test anxiety	
MacIntyre & Gardner, 1989	Social evaluation anxiety		Language anxiety		State anxiety
MacIntyre & Gardner, 1991		Communication apprehension			General anxiety
Aida , 1994	fear of negative evaluation	Speech anxiety	English class anxiety		Negative attitudes toward the language class
Chen & Chang, 2004		Self-confidence in speaking English			General English classroom performance anxiety
Tok, 2009	fear of negative evaluation	communication apprehension	anxiety of speaking to native people		
Hizwari, 2011	fear of negative evaluation	communication anxiety	English class anxiety	test anxiety	
Khairi & Nurul, 2011	fear of negative evaluation	Communication apprehension			General anxiety

2.3.4. Antecedents of foreign language anxiety

2.3.4.1. Dispositional antecedents

(a) Self-esteem/Self-concept/Self-perception

Students with high levels of foreign language anxiety tend to have at least one of these characteristics: female, older, high-academic achievers, have a negative perception of their intellectual ability, had positive perception of their scholastic competence, negative perception of their appearance, negative perception of their self-worth, did not like cooperative learning, and did not value competitive learning (Onwuegbuzie, Bailey, & Daley, 1999). The relational model of communication competence (Spitzberg & Cupach, 1984) was used as a foundation to understand students experiencing anxiety in using a second language (Foss & Reitzel, 1988). Foss identified several dimensions which can influence the experience of second language anxiety: motivation; rational emotive therapy; anxiety graph; knowledge & skills; outcomes; and context. Self-perception is seen as a critical factor in both language-learning anxiety and communication anxiety (p.439). The highest point of anxiety in an interaction is during the greeting/opening line and the individual's impressions of a communication event will influence continuing competence for future events. Student perception, self-evaluation, low self-esteem, negative experience associated with the language are important attributes which predict foreign language anxiety (Won Worde, 1998). Kitano's (2001) study found that students' fear of negative evaluation and self-perception speaking ability as lower than that of peers and native speakers experience a higher level of language anxiety.

(b) Personality/Behaviour

The most researched personality aspect in language studies has been the extroversion-introversion dimension because this trait is fundamental to a number of personality models such as Myer-Briggs Type Indicator, and Eysenck's Model where one of dimensions is extroversion-introversion dimension. Shy personality has been shown to be one of the antecedents for foreign language anxiety (Razlina, 2010) and self-esteem is said to have a strong negative correlation with shyness (Buss, 1984).

c) Learning preferences

Good language learners hold more favorable attitudes, higher motivational intensity, positive beliefs, use more learning strategies and less anxious learning English as a foreign language (Banya & Cheng, 1997). Students with high anxiety and high self-competence received higher final course grades (M=83.0) and oral skills scores (M=88.7) than students with high anxiety and low self=competence (M=79.6) and oral skills scores (M=86.0) (Aida, 1994). Other dispositional antecedents such as perfectionism do have an effect on the experience of foreign language anxiety. Perfectionists set high standards for their performance. In a study among two groups of students who had high scores in the FCLAS (high anxious) and students who had low scores (low anxious), it was found that anxious language learners and perfectionists have a number of characteristics in common (Gregersen & Horwitz, 2002). Both categories of students are equally aware of imperfect performance but differ in their reactions. Anxious learners linked their mistakes to the possibility of negative evaluations by others while low anxious students accepted their mistakes but also

enjoyed their victories. The findings of this study indicate that language anxiety and perfectionism can have similar manifestations in anxious language learners.

2.3.4.2. Environmental antecedents

(a) Gender

Gender is observed as one of the basic drivers of foreign language anxiety and both males and females are prone to anxiety. The anxiety level of an individual male student was higher as he perceived his performance in tasks in spoken Japanese to be less competent (Kitano, 2001). Female learners of English as a second or foreign language experience higher language anxiety levels than the males (El-Banna, 1989), however male learners of English as a foreign language experienced more anxiety than the male learners of English as a second language.

There are also studies reporting no significant mean difference between males and females. Gender was not found to have a significant effect on overall general reading anxiety or subcomponents of both anxiety such as low self-confidence in speaking English, reading confidence/enjoyment, etc (Khairi & Nurul, 2011). Matsuda and Gobel (2004) also reported that there was no significant effect of gender as an independent variable on anxiety of the students as a whole. In another study on anxiety and speaking in a foreign language classroom, the variable gender did not show any significant relationship (Phillips, 1989). Aida (1994)'s also did not differentiate between males (M=97.4) and females (M=95.6).

(b) Race/ethnic

A study was carried out among 413 heritage (50.6%) and non-heritage (49.4% out of which 31.6% of them had Spanish as their native language) students pursuing Spanish classes at a large university in the southwestern US (Tallon, 2009). An independent sample *t* test conducted yielded significant difference in anxiety scores between heritage students ($M=78.78$, $SD=24.52$) and non-heritage students ($M=94.66$, $SD=24.75$; $t [398]= -6.617$, $p<0.000$).

Regardless of any race or ethnic, the exposure and time spent learning a foreign language can influence the experience of foreign language anxiety. In a study by Liu and Huang (2011), Chinese students at three major universities in China did not experience much foreign language anxiety ($M=99.79$, $SD=18.72$). The low level of anxiety might be attributed to the fact that these learners have been learning English for more than six years since junior high school or even earlier from primary school although they seldom use English in their daily lives.

Similarly, in another study by Kitano (2001), to examine the Japanese class anxiety, it was revealed that the experience of living or staying in Japan was one of the factors to influence the relationship between Japanese class anxiety and fear of negative evaluation.. Students with a strong fear of negative evaluation and who had been to Japan, believed they were expected to be more proficient than those who had never been to Japan. Because they put pressure on themselves to fulfill that image, they ended up becoming more anxious in the classroom. However, students with little fear of

negative evaluation and who had also spent some time in Japan were likely to be free from such self-expectations.

(c) Student level

Higher level and advanced students experience a higher level of anxiety when compared to intermediate, elementary or diploma level students. The higher or advanced level students are strongly influenced by their fear of negative evaluation (Kitano, 2001) In a study on students from technological and vocational educational system (TVES) in Taiwan, the FLCAS scores revealed that students pursuing four-year university programs had a higher mean level ($M=92.4$) while students pursuing a two-year diploma program had a lower mean ($M=89.3$) (Chen & Chang, 2004). In the study (Kitano, 2001) on students enrolled in Japanese language courses at two major state universities in the mid-western United States, a correlation was found between Japanese class anxiety and fear of negative evaluation for advanced level students ($r=.540$, $p=.000$, $n=58$) while the correlation for intermediate and elementary level students was lower ($r=.237$, $p=.002$, $n=15.3$). In another study (Marcos-Llinas & Garau, 2009) among college students enrolled in Spanish as a foreign language at a mid-western American university, it was reported that there is a significant difference across language levels at $F(3,56)=3.54$, $p<0.031$. It was indicated that the higher the language level, the higher the level of anxiety as was revealed in the level of language anxiety whereby elementary level students had a mean level of 100.53, intermediate 106.47 and advanced level 113.95.

Foreign language anxiety appeared to increase linearly as a function of year of study (Onwuegbuzie, Bailey, & Daley, 1999) with freshmen being the most anxious ($M=2.84$, $SD=0.58$), sophomores reporting the lowest levels ($M=2.79$, $SD=0.58$), followed by juniors ($M=2.89$, $SD=0.72$) and seniors ($M=3.19$, $SD=0.68$). A pos-hoc Scheffe analysis of the means revealed that seniors reported significantly higher levels of foreign language anxiety ($p<0.05$) than did sophomore students.. A univariate analysis of variance (ANOVA) revealed no difference ($F[2, 207]=2.74$, $p>0.05$) in levels of foreign language anxiety between students enrolled in beginning ($M=2.94$, $SD=0.70$), intermediate ($M=3.10$, $SD=0.70$), and advanced level classes ($M=2.66$, $SD=0.59$).

In Aida (1994)'s study, the same students who had enrolled for Japanese classes in semester one and passed the level one examination were administered the FLCAS in semester two. It was revealed that students who registered for the language course to fulfill university requirements had a significantly higher level of anxiety ($M=99.6$) than the students who had from the elective group ($M=93.1$). There do not seem to be much correlation between the level of foreign language anxiety and student major. Students pursuing law, engineering, mechanics, economics and management at three universities in China had only a moderate level of foreign language anxiety ($M=99.79$) (Liu & Huang, 2011). In another study in Malaysia to measure the level of language anxiety among students from nine different faculties, only students pursuing economics, environmental science and engineering showed a tendency to have high language anxiety scores (Rahil, Noran & Habibah, 1994).

2.4. Communication anxiety

2.4.1. Concept of communication anxiety

Communication apprehension is one of the constructs of the communication theory, the other constructs being Unwillingness to communicate, Shyness and Reticence (McCroskey, Fayer, & Richmond, 1983). While reticence can be traced to the trait behavior of an individual, communication apprehension can lead to shyness and eventually unwillingness to communicate. Trait anxiety is characterized by fear or anxiety with respect to many different types of oral communication encounters while state anxiety is specific to a given oral communication situation (McCroskey, et al., 1977). The concept of communication apprehension was originally described as a "broadly based anxiety related to oral communication" (McCroskey, 1984). Later, it was narrowed to that of a trait conceptualization and is defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (p13). McCroskey's (1984) cognitive approach to communication apprehension explains that people develop expectations with regards to other people and situations. When expectations are not met and found to be inaccurate repeatedly, anxiety is produced. In new situations, strong anxious feelings can be evoked creating a state of helplessness. McCroskey (1984), gives an example of an event when an individual is in a new country or social context, or where one does not understand the language, the helplessness state of conditions can generate anxiety feelings because basically communication behavior is a learned response to one's environment. Mellon (1986) too, describes how freshmen at college feel lost and helpless when using the academic library for the first time.

Communication apprehension (hereafter abbreviated as CA) seems to be a common phenomenon with college students. Students with high CA do not actively participate in club membership (Blue, et al., 1998). In the study on CA among pharmacy students in the US (McCroskey, Fayer, & Richmond, 1983), it was found that one in five students was highly communication apprehensive and will avoid communication as far as possible. Students with high levels of CA had significantly greater difficulty participating in problem based learning sessions (Blue, et al., 1998). Interestingly, private university students have lower CA than students in public universities (Gecer & Gumus, 2010). These studies indicate that students with problems of communication anxiety avoid various situations. The possibility of avoiding the academic library and library staff due to the students' inherent anxieties cannot be ignored.

The study of communication apprehension enables one to understand people's behavior because high anxious individuals often feel less competent, confident and understood in communication settings than their low anxious counterparts (Onwuegbuzie, Bailey, & Daley, 1999). The higher the amount of anxiety produced by any communication content for an individual, the less the type of communication will be valued. In a communication environment, communication apprehension is produced by others and to a large extent, controlled by them (Buss, 1984). Buss (1984) explains that anxiety arises when there is status discrepancy between participants in communication. Subordinate status, unfamiliarity and formality in the communication setting can lead to anxiety. One of the ways to avoid this unpleasant situation is to withdraw from or avoid such communication situations. This is further aggravated when the students' perception of their communication competence is low, as it has been

observed that the prerequisite for communication is competence and skill and when the students' perception of their communication competence is high, there is less communication anxiety (Indra Devi & Farah, 2008).

Prior history of an individual having failed in communicating before can result in communication apprehension for fear of failing again (Daly & Stafford, 1984). Prior history is an important element because if an individual has had prior unpleasant experiences, that individual often withdraws from or avoid communication situations. This phenomena is referred to as social communicative anxiety (Daly & Stafford, 1984). In their study, Daly and Stafford report that high anxiety individuals trust others less.

2.4.2 Dimensions of communication anxiety

McCroskey's new scale, the PRCA-24 includes 24 items and four factor contexts with six items in each factor. The PRCA-24 was built upon contexts representative of common communication situations (McCroskey et al, 1985) including: public speaking, speaking in meetings, speaking in small groups such as group discussions, and speaking in dyadic/interpersonal communication. The sum of scores of all the four contexts will indicate a person's degree of communication apprehension. Scores can range from 24 to 120. Scores <51 indicates low level of communication apprehension, 51-80 moderate level and >80 indicates a high level of communication apprehension (McCroskey, 1982). The degree of communication apprehension can also be assessed for each of the contexts separately.

Almost all the studies using the PRCA-24 instrument to measure communication apprehension report a four factor context dimensionality. The four factor context dimensionality describing: group, meeting, dyad and public speaking, has proven its internal reliability over time (Refer to Table 2.4). It has also proven its usability with English speaking subjects outside US (Klopf, 1984). There were a few studies however, which have addressed PRCA-24 as a unidimensional instrument (King, Andersen & Carlson, 1988).

2.4.3. Validation of the Personal Report of Communication Apprehension (PRCA-24)

The original instrument to measure communication apprehension (PRCA: Personal Report of Communication Apprehension) focused more on public performance settings. It was revised to include new items directed towards dyadic or group communication settings (McCroskey, 1978). Over 12,000 college students and 4,000 other adults have completed the measure. The internal reliability estimate for the scale ranged from .92 to .96: $\alpha=.91$ for public speaking; $\alpha=.89$ for meetings; $\alpha=.92$ for group discussions and $\alpha=.90$ for dyadic interactions. Test retest reliability over a seven week period was .82. The normative mean score used as a benchmark for other studies is $M=65.6$, $SD=15.3$.

The reliability of PRCA-24 in various studies of diverse populations is shown in Table 2.4. Overall, the cronbach alpha reliability value range from .81 to .95. This closely supports McCroskey's (1978) internal reliability estimates for the instrument to

range from .92 to .96. Studies carried out in US (King, Anderson & Carlson, 1988; Blue, et al., 1998; Trevor, 2007) show a reliability value closer to McCroskey's. Studies outside US reveal a differing alpha reliability value (Muhammad, Ibrahim & Abdul Aziz, 2010; Pribyl, et al.,1998).

Table 2.4 : Validation Of The Personal Report Of Communication Apprehension (PRCA-24)

Dimensions	Coefficient Alpha Value					Sample
	Group	Meeting	Dyadic	Public	Overall	
McCroskey & Beatty (1984)	0.92	0.89	0.90	0.91	0.90	American
King, Andersen & Carlson (1988)	0.86	0.86	0.86	0.80	0.92	
Blue , etal., (1998)	0.92	0.90	0.91	0.88	0.88-0.92	
Trevor (2007)	0.89	0.92	0.90	0.89	0.95	
Dwyer (1985)	0.88	0.91	0.86	0.89	0.95	
Pribyl, Keaten, Sakamoto & Koshikawa (1998)	0.87	0.81	0.85	0.86	0.93	Japanese
Muhammad, Ibrahim & Abd Aziz (2010)	0.81	0.67	0.76	0.72		Malaysian
Byrne, Flood & Shanahan (2012)	0.90	0.87	0.87	0.88	0.95	
Butler, Pryor & Marti (2004)	0.89	0.94	0.89	0.91		

2.4.4. Antecedents of communication anxiety

2.4.4.1. Dispositional antecedents

(a) Self-esteem/self-concept/self-perception

One of the most consistent variables in the literature of social communicative anxiety is self-esteem (Daly & Stafford, 1984). Regardless of how either anxiety or esteem is operationalized, the inverse relationship holds (p.132). The relationship between oral communication apprehension and self-esteem is not specific to any one subject population. It can be generalized to college students as well as to adults, and across self-esteem and oral communication apprehension measures (McCroskey, et al., 1977). In McCroskey's study (1976) among five samples representing three diverse populations, McCroskey confirms that self-esteem is negatively associated with high oral communication apprehension. The study between CA and self-esteem index revealed that sociability, composure, competence and extroversion are associated with communication apprehension.

A similar explanation can be given for the prevalence of library anxiety. It has been reported that dispositional antecedents for library anxiety include self-esteem and self-concept (Jiao & Onwuegbuzie, 1997; Jiao & Onwuegbuzie, 2002). Library anxiety studies have reported that one of the cause factor is when students believe other students are adept at using the library whereas they alone are inept (Mellon, 1986). Jiao and Onwuegbuzie (Jiao & Onwuegbuzie, 1999a) found that graduate students with the lowest levels of perceived academic self-competence, intellectual ability, creativity and

social competence tend to have the highest levels of library anxiety associated with affective barriers and comfort with the library. Fear of negative social evaluation and the desire to keep their perceived ineptness secret leads to avoidance behavior.

Students with low self confidence are also found to have low social competence and fear negative evaluation by others, consequently affecting the way they conduct research in the library (Onwuegbuzie, 1997). High and low anxious individuals also differ in their self-perceptions. Making mistakes or having them corrected in front of people is one of the common factors. In Young's study among Spanish students (Young, 1990), it was found that they are more afraid of making mistakes in front of peers/teachers for fear of risking their self-esteem and self-exposure revealing themselves in front of others.

(b) Personality/ behaviour

Communication apprehension may not represent a single, unique personality variable, but rather maybe related to a number of previously isolated dimensions of personality (McCroskey, Daly & Sorensen, 1976, p376). When the possible relationships between 21 personality variables and communication apprehension was examined in their study among undergraduates, 18 variables were found to be significantly related. Among them, adventurousness, surgency and general anxiety showed the greatest association followed by self-control, emotional maturity and tolerance for ambiguity. Although on one personality dimension could be labeled a communication apprehension dimension, highly communication apprehensive individuals are likely to exhibit tendencies to work alone, silent, prefer low task

orientations, feels inferior, withdrawn, avoids people, avoids participation in groups, shy and are ineffective speakers, among other dimensions.

Students' personalities can influence their communication skills and competence. Extraverts feel more competent and thus can be hypothesized to have low CA. In MacIntyre's (1999) study among university students, it was found that there were positive paths between extraversion and self-esteem and perceived competence. A positive path was also found between emotional stability and self-esteem, indicating that an individual who is higher in emotional stability is also likely to have high self-esteem. In Opt and Loffredo's study (2000) of the relationship between Myers-Briggs personality types and CA, introverts were found to have a higher mean ($M=70.67$) compared to extroverts ($M=64.45$). It was hypothesized that 'extroverts draw energy from the outside world of people, prefer face to face communication to written communication and seek opportunities to communicate in groups' (p561). In their study, the introverts scored significantly higher in overall communication apprehension and across all four contexts than participants who preferred extraversion. Other personality types such as Sensing had a higher mean ($M=64.90$) than Intuition ($M=56.76$); Feeling ($M=63.95$) higher than Thinking ($M=59.30$); and Judging ($M=61.67$) more or less similar to Perceiving ($M=61.37$). Participants who preferred sensing are more anxious than those who preferred intuition and participants who preferred feeling have high anxiety levels than participants who preferred thinking

A relationship between library anxiety and social independence has been reported in a study among graduate students (Jiao & Onwuegbuzie, 2002). Social interdependence comprises of cooperative, competitive and individualistic attitudes.

Some college students use the library on an individual basis and some in groups. In Jiao's study, individualistic dimension appeared to serve as a suppressor variable and hence assist in the prediction of library anxiety. Overall, the findings in the study indicated a moderate relationship between library anxiety and social independence. Students with the greatest cooperative orientation tended to have the lowest levels of library anxiety stemming from barriers with staff, comfort with the library and knowledge of the library. Students who are cooperative orientated maybe more likely to seek the help from librarians unlike the less cooperative students who are less inclined to seek assistance. It has been reported that students who refrained from asking librarians for help show statistically significant high levels of library anxiety than their help-seeking counterparts (Abusin, 1998).

2.4.4.2. Environmental antecedents

(a) Gender

Research studies have reported females to be more vulnerable to CA. In a study carried out among freshmen enrolled in General Physics course at the East Central University US, females had a mean score of 75.1 whereas males had a score of only 66.2 (Williams, 2001). In another study to investigate CA in UK and Spanish business and accounting students (Hassall, et al., 2000), UK females pursuing business and accounting programs had a mean of $M=64.30$ and $M=69.22$ respectively. The males in the same programs had a mean of $M=61.30$ and $M=66.34$ respectively. Spanish females had a mean of $M=69.50$ while the males had a mean of $M=66.10$. In another study,

female students with accounting majors have higher CA especially in public speaking contexts than the non-accounting major females (Borzi & Mills, 2001).

It is observed that Asian women seem more apprehensive than Asian men. This is particularly in areas of meetings and public speaking. In Nik Hasnaa's study (2006) among a group of undergraduates in Malaysia, the only demographic variable to have a significant relationship with CA was gender. In Abdul Wahab, Saad and Ahmad's (2004) study in Malaysia, females had a mean of 65.01 whereas the males had a mean of 63.30. A significant difference was observed especially in the public speaking context where the females score was 19.08 as compared to the males with a score of only 17.97. In Thailand, female students have higher levels of CA than the males in meetings, interpersonal and public speaking. This is explained by the Masculine theory where the Thai society practiced a traditional role for females and males and inevitably males are dominant. The anxiety for female students was less in group discussion because the participants were college students and could have interpreted group discussion as informal communication (Soonthornsawad, 2009). However, in Apaibanditkul's study (2006) among Thai students studying in US, the males had a higher mean ($M=63.75$) than the females ($M=61.0$). This was also supported by studies outside Asia (Ibrahim & Majidul, 2000; Byrne, Flood & Shanahan, 2012). Female students have been found to be slightly more apprehensive in formal communication contexts such as meeting and public speaking but lowest in dyad context (Ibrahim & Majidul, 2000). This was consistent with Byrne, Flood and Shanahan's study (2012), where female business and accounting students in Ireland had a mean score of 20.34 in the public speaking context as compared to the male students who only scored 18.23. Asian women feel uncomfortable communicating in public and formal situations (Allen,

et al.1985) and traces this to culture. Where the Asians can communicate well interpersonally with friends, they are not encouraged to talk in public.

Other studies show that gender does not make a significant difference in CA. No statistically significant difference was found in the mean score between Malaysian pharmacy female students (M=70.38) and male students (M=72.02) (Azmi & Gillani, 2011). In another study, it was reported that there is no difference in communication anxiety levels between the males and females in speaking with friends in the first language and the second language (Dewaele, 2007). In the study, gender also did not have an effect on the communication anxiety/foreign language anxiety with speaking with strangers in the first, second, third and fourth language.

(b) Race/Ethnic

Native language seem to have an influence on communication apprehension. Asians and Latin Americans are reported to be anxious and uncomfortable in all contexts when English is the mode of communication. They experience significantly more apprehension when speaking in English than the Europeans or Middle Eastern students (Allen, et al., 1985). In that study, bilinguals reported a mean of M=63.64 when communicating in their native language and a mean of M=69.2 communicating in English. A comparison of CA levels of Puerto Rico college students with mainland US students revealed that Puerto Rico students are much less apprehensive in their native language but are much more apprehensive about communicating in English (McCroskey, Fayer & Richmond, 1983).

In a study to examine the relationship of communication apprehension, perceived communication competence and willingness to communicate in the students' first language (Burroughs & Marie, 1995). Micronesian students were found to be significantly less willing to communicate in their first language. They perceive themselves as less communicatively competent and more apprehensive ($M=76.7$) than US students ($M=65.6$). The study also reported that when individuals are asked to communicate with one another, the communication orientation maybe influenced by the language they choose or are required to use. The findings indicate that there is a relationship between willingness to communicate and perceived communication competence whether or not, the communicator is called upon to communicate in his/her own native language or second language. People generally feel less competent in second language than they are in their native language. This perception substantially correlate with their willingness to communicate. It has also been reported that perhaps cultural differences, communication difficulties, and the inability to articulate their thoughts in English could be the reason behind the high levels of library anxiety experienced by these students (Goudy & Moushey, 1984).

In 1982, McCroskey (1982) carried out a nationwide survey among 25,000 Americans to measure the mean CA in the population. He reported a mean of $M=65.6$ and standard deviation of $M=15.3$. The normative mean for the separate contexts are as follows: Group - $M=15.4$, Meeting - $M=16.4$, Dyad - $M=14.2$ and Public Speaking - $M=19.3$. Since then, studies in CA have used this measure as a base of comparison and have observed that the mean for the four contexts in US studies (McCroskey, 1982; Trevor, 2007; Dwyer, 1995 and King, Andersen & Carlson, 1988), remain similar to the normative mean given by McCroskey (1982).

In the Asia and Pacific region, there seems to be slight difference especially in group and public speaking contexts. Thai students living in US have lower levels of CA than Thai students in Thailand (Apaibanditkul, 2006). Japanese students have high CA levels in all contexts indicating a positive relationship between a high context culture and CA levels (Pribyl, et al., 1998). A cross cultural apprehension research in the Pacific Basin (Klopf, 1984), reported that Japanese students had the highest CA (M=65.9), followed by Americans (M=63.34), Chinese (M=62.18), Micronesians (M=60.78), Australians (M=60.37), Filipinos (M=58.09) and Koreans the lowest (M=52.78). In another comparative study between Japanese undergraduates from two universities in Japan, and American undergraduates at University of Central Florida, it was reported that the Japanese had a higher mean (M=83.22, SD=14.25) than Americans (M=59.53, SD=14.96) citing culture and race as an important contributor to the level of communication anxiety (Pryor, Butler & Boehringer, 2005). As a collective culture, the Japanese education system and society place less value on individual assertiveness than does American society (p. 250). In Soonthornsawad's study (2009), the relationship between communication apprehension and culture was investigated among Thais who lived in Thailand all their life and those who were in United States for less than or more than five years. Findings showed that Thais who were in US for a shorter time experience higher levels of communication apprehension when compared to those who lived in US longer. It was explained that when people were away from their old culture and were exposed to a new culture, they blend into the new culture.

In Malaysia, the Malay ethnic students were more apprehensive with a mean score of M=74.24 compared to the Chinese ethnic students with a mean of 68.49 (Azmi & Gillani, 2011). Similarly, in Wan Zakaria, et al., (2007) on anxiety level among the

three ethnic groups in Malaysia, the Malay ethnic students form the biggest group with high CA (M=56.7%) as compared to the Chinese ethnic (M=40.8%) and Indian ethnic (M=26.7%). But the Indian ethnic students had a very high mean score in group contexts with a mean of M=20.0 as compared to the Malay (M=17.64) and Chinese (M=16.80). They also had a unusual low score in dyad (M=12.0) and public speaking (M=13.00). In another study however, the Chinese ethnic group were found to be the most apprehensive (M=67.29), followed by the Malays (M=64.05) and the Indian ethnic group (M=63.50) with the lowest level of apprehensiveness (Abdul Wahab, Saad & Ahmad, 2004).

There are also studies where race do not play an important role in the existence of CA. In a cross-cultural investigation between Argentinean college students from University of Buenos Aires and El Salvador, and American students from University of Central Florida (Sarquisse, Butler & Pryor, 2003), no significant difference was reported. The Argentians' score was M=74.47, SD=17.44 and the Americans' score was M=72.96, SD=14.9333. However both means were higher than McCroskey's norm mean of 65.6. It has been suggested that perhaps Argentineans culture differs from the typical South American collectivist profile.

(c) Student level

CA scores have been reported to remain unchanged as students progress through their courses of study (Hassall, et al., 2000). Other reports as in Abdul Wahab, Saad and Ahmad's study on communication apprehension among university students in Malaysia (2004), the second year students were reported to have the highest level of CA

(M=66.15) followed by the freshmen (M=65.85). The CA level starts reducing as they progress through their course. The third year students had a mean of 63.25, fourth year 61.76 and the final year students had a mean of 61.50.

Generally, diploma students seem less apprehensive. In Nik Hasnaa's study (2006), it was reported that only 29.5% diploma students in UTM city campus had high CA 48.5% of them had medium and 22% low CA. In another study, college students pursuing a two year program were found to have a lower CA level than university students following a four year program (Trevor, 2007). Similarly, non-honors students seem to have low levels of communication apprehension (M=58.71) than honors students (61.04) especially in the context of public speaking where non-honors mean was 16.67 whilst honors students mean was 18.39 (Butler, Pryor & Marti, 2004). Meanwhile, graduate students pursuing MBA had a mean of M=64.95, comparable to undergraduates (Burk, 2001).

Engineering students seem to have only moderate level of communication apprehension while medical, pharmacy and accounting students reveal a higher level of CA. Indra Devi and Farah (2008) reported a moderate level CA among electrical engineering students. In another Malaysian study among engineering students, 96.7% were found to have moderate level of CA (Khairi & Nurul, 2011). Students pursuing science and technology course programs were also found to have moderate levels of CA (Nik Hasnaa, 2006), In Azmi and Gillani's study among Malaysian pharmacy students (Azmi & Gillani, 2011), the average overall score was 71.03 which is slightly above McCroskey's mean. The study also reported that one in every four students have high CA. In the study to explore communication apprehension among medical students

(Blue, et al., 1998), the four-factor components explained 66.1% of total variance with public speaking accounting for 52.8% of the total variance. Accounting major students, have higher CA in public speaking contexts than the non-accounting major females (Borzi & Mills, 2001). 45 percent of undergraduates pursuing business and marketing course programs were found to have high CA (Wan Zumusni, et al., 2010). This was supported by Joyce and Hassal's (2006) study which reported that first year students about to enter the university for accounting and business courses feel more apprehensive.

2.5 Conceptual framework correlating library anxiety, foreign language anxiety and communication anxiety

Table 2.5 : Dispositional Antecedents Similar To All Three Academic Related Anxieties

Dispositional Antecedents: Self-esteem, Self-concept, Self perception, Personality, Social behavior, Learning preferences		
Library anxiety	Foreign language anxiety	Communication anxiety
Mellon, 1986		
Fliotsis, 1992		
Karabenick & Knapp, 1988	Foss & Reitzel, 1988	Daly & Stafford, 1984
Jiao & Onwuegbuzie, 1997	Onwuegbuzie, 1997\	McCroskey, et al., 1977
Onwuegbuzie, 1997	Banya & Cheng, 1997	McCroskey, 1976
Abusin, 1998	Aida, 1994	MacIntyre, 1995
Onwuegbuzie & Jiao, 1998	Won Worde, 1998.	
Jiao & Onwuegbuzie, 1999	Kitano 2001	
Onwuegbuzie & Jiao, 2000	Gregersen & Horwitz, 2002	
Jiao & Onwuegbuzie, 2002	Razlina, 2010	
Abusin & Zainab, 2010		

Table 2.6 : Environmental Antecedents Similar To All Three Academic Related Anxieties		
Library anxiety	Foreign language anxiety	Communication anxiety
Bostick,1992 Swigon,2011 Anwar, Al-Kandari & Al-Qallaf, 2004 Bowers,2010 Jiao & Onwuegbuzie, 1997 Battle, 2004 Noor Harun & Ansari, 2010 Shoham & Mizrachi, 2001 Abusin & Zainab, 2010 Jiao, Onwuegbuzie & Bostick, 2004	Kitano, 2001 El-Banna, 1989 Khairi & Nurul, 2011 Matsuda & Gobel, 2004	Williams, 2001 Hassall, et al., 2000 Borzi & Mills, 2001 Nik Hasnaa, 2006 Abdul Wahab, Saad & Ahmad, 2004 Pichayat, 2009 Apaibanditkul, 2006 Ibrahim & Majidul, 2000 Byrne, Flood & Shanahan, 2012 Azmi & Gillani, 2011 Dewaele, 2007 Allen, et al., 1985 McCroskey, Fayer & Richmond, 1983 Burroughs & Marie, 1995 Goudy & Moushey, 1984. Butler, Pryor & Marti, 2004 Burk, 2001 Trevor & Miller, 2008 Khairi & Nurul, 2011 Pryor, Butler & Boehringer, 2005 Blue, et al., 1998 Wan Zumusni, et al., 2010 Joyce & Hassal, 2006

From the compilation above in Tables 2.5 and 2.6, it can be observed that the studies on the three different anxieties actually report on same or similar antecedents. Dispositional antecedents in the form of self-esteem, self-concept, self-perception, perfectionism, procrastination, study habits, hope, social interdependence, high anxious and personality type can be the cause of library anxiety, foreign language anxiety or communication apprehension. A student with high levels of library anxiety may then

also have high levels of communication apprehension or foreign language anxiety since the antecedents are similar. It can thus be hypothesized that students who have high levels of foreign language anxiety and communication apprehension will likely to also have high levels of library anxiety.

2.6 Summary

The inference which can be deduced from the literature review for this study is that the demographic variables (environmental antecedents) and dispositional antecedents of students susceptible to library anxiety are also prevalent in students susceptible to other forms of anxieties such as communication apprehension and foreign language anxiety. It is necessary therefore, to show empirical evidence of the correlative effect of communication apprehension and foreign language anxiety on library anxiety. This would enable librarians and faculty to be alert to the antecedents of the prevalent of anxieties among students and take necessary steps to diminish these anxieties.

The following chapter will discuss the methodology of obtaining data from students for the three related academic anxieties: Library anxiety, Foreign language anxiety and Communication apprehension. The methodology of using statistical analysis to verify the empirical link among the three anxieties will also be discussed.

CHAPTER THREE

RESEARCH METHODS AND PROCEDURES

3.1. Introduction

The literature review in chapter 2 provided an overview of the dimensions and antecedents of the three academic related anxieties; library anxiety, language anxiety, and communication anxiety. The review led to the understanding that the antecedents resulting in anyone or all of the three academic related anxieties are more or less similar in nature. This similarity is used as a basis to trace the relationship among the three anxieties. As stated in chapter 1, the objectives of this study in addition to comparing and contrasting the dimensions of the Malay translated instruments with that of the original instruments, intends to find out the anxiety levels among final year students and to investigate the relationships among the dimensions of the three anxieties. This chapter will present the research design, research questions, hypotheses, instruments validated during the pilot study and description of the final survey instruments.

3.2. Research Design

The design of this study is a cross-sectional survey among three anxieties; library, language, and communication anxieties with the aim of explaining relationships. Onwuegbuzie, (1997) describes explanation methodology as the development of a theory with the goal of clarifying the relationships among phenomena and ascertaining reasons for occurrences of events. The model used to collect and analyze data is based

on the Library Anxiety Expectation Model (LEM) by (Onwuegbuzie, Jiao, & Bostick, 2004). According to this model, one cognitive variable (anxiety) and one affective variable (expectation) are related to each other in a reciprocal manner. (p76). Onwugbuzie, Jiao, and Bostick (2004) hope that researchers would study this construct and subject the model to further tests using quantitative or qualitative methods. In this study, the LEM model is modified to include language anxiety and communication anxiety and the relationship with library anxiety. English language anxiety in this study is chosen because it is directly related to the information sources and search strategies, while communication anxiety deals with asking for assistance from the library either face-to-face or otherwise.

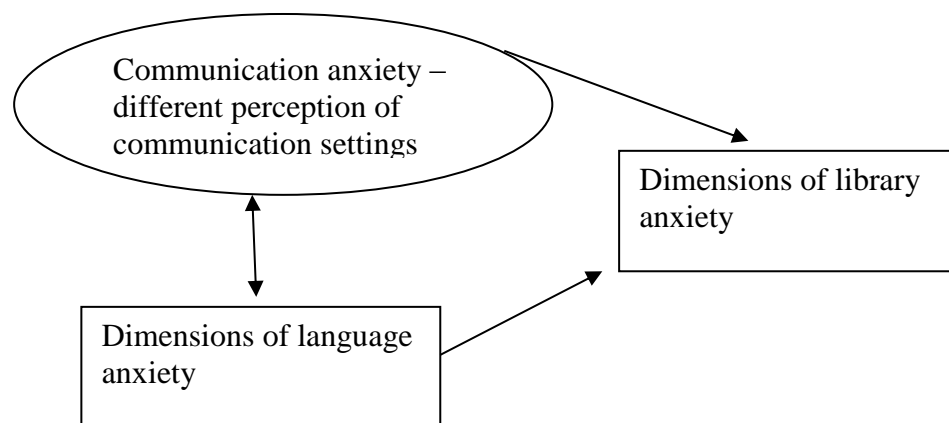


Figure 3.1: Modified Library Anxiety Expectation Antecedent Model

- (a) Communication in different settings such as formal, interpersonal conversations, group discussion, and public speaking are reciprocally related to the dimensions of the language anxiety.

- (b) The dimensions of communication anxiety mediate with the dimensions of language anxiety to manifest as one or more of the dimensions of library anxiety.
- (c) Individual students susceptible to communication and language anxieties are predicted to experience any one or more of the dimensions of library anxiety.

3.3. Research Questions and Research Hypotheses

The research questions for this study are as follows:

(i) Research Question 1:

Do the Malay translated versions of LAS, FLCAS, and PRCA-24 yield similar dimensions as that of the original instruments when tested among students who are non-native speakers of English?

(ii) Research Question 2: Do final year students experience library, language, and communication anxieties?

(iii) Research Question 3: Are there statistically significant mean differences in the levels of library, language, and communication anxieties between male and female students?

(iv) Research Question 4: Are there differences in the levels of library, language, and communication anxieties among students who use English, Malay, Chinese, Tamil, and Other Languages as their dominant language?

(v) Research Question 5: Are there statistically significant relationships among the dimensions of language and library anxieties?

(vi) Research Question 6: Are there statistically significant relationships among the dimensions of communication and library anxieties?

Research Hypotheses

Based on the research questions, the following directional hypotheses (H) are formulated:

H1: Translated versions of the three instruments yield dimensions different from that of the original instruments when tested among students who are non-native speakers of English.

H2: Final year students who are non-native speakers of English experience library, language, and communication anxieties.

H3: There are mean differences in the levels of library, language, and communication anxieties between male and female students.

H4: There are mean differences in the levels of library, language, and communication anxieties when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages.

H5: There are significant relationships among the dimensions of language and library anxieties.

H6: There are significant relationships among the dimensions of communication and library anxieties

3.4 Variables

The variables for this study include the dimensions of the three anxieties as shown in Table 3.1. In addition, gender and the dominant language used by the students are included.

Table 3.1: Independent And Dependent Variables

Independent Variables	Dependent Variables
Gender (Male, Female)	Library anxiety
Dominant language used by students (English, Malay, Chinese, Tamil, Other Languages)	English language anxiety Communication anxiety
Dimension of language anxiety	Dimensions of library anxiety
Dimensions of communication anxiety	

3.5. Pilot Instruments

Three sets of research instruments were used for this study. The 3 sets of instruments used are: (i) Library Anxiety Scale (LAS), (ii) Foreign Language Classroom Anxiety Scale (FLCAS) and (iii) Personal Report of Communication Apprehension (PRCA-24). The instruments are operationalised using a five-item measure that were anchored on a five-point Likert scale ranging from 5 (strongly agree),

4(agree), 3(neutral), 2(disagree), and 1(strongly disagree). High scores would mean high anxiety whereas low scores would mean low anxiety.

All the three sets of instruments were translated into the Malay language (Appendix A and B). The word 'foreign language' in FLCAS was replaced by 'English language'. One of the main reasons the instruments had to be translated is because English language is not the first language for most Malaysians. Malaysian students attend 12-13 years of educational life with much emphasis on the Malay language. It was considered very essential to translate the instruments into the Malay language to avoid confusion when responding to all instruments in the survey questionnaire. Efforts were taken to phrase the questions as closely as possible to the original questions. The translation/back translation method (Behling, 2000) was used to translate the instruments into the Malay language. The LAS and FLCAS were given to a librarian who was well versed in both languages. The translated instruments were then passed on to two (2) language and linguistic lecturers to translate back to English language. They do not have knowledge of the words of the original instrument. The original LAS and FLCAS were then compared with the Malay translated LAS (M-LAS) and FLCAS (M-FLCAS). Differences between the two instruments were modified with the help of another linguist who was well versed in both the languages. A translated scale may differ based on the understanding of differences between the source and target languages, culture, and societies (Nunnally & Bernstein, 1994). The PRCA-24 was earlier translated in 1995, by an academician at one of the research universities in Malaysia (Fuziah, 1995). An email was sent to her seeking permission to use her Malay translated version of PRCA-24. She kindly sent the instrument via email.

(a) Library Anxiety Scale

The original scale developed by Sharon Bostick in 1992 had 43 items which explains five factors: (i) barriers to staff, (ii) affective barriers, (iii) comfort with the library, (iv) knowledge of library resources, and (v) mechanical barriers. This original instrument was modified to exclude a total of 11 statements; six (6) considered as irrelevant and redundant, and five (5) removed due to duplication. The six irrelevant and redundant statements are: (i) *A lot of the University is confusing to me*, (ii) *I feel safe in the library*, (iii) *There is too much crime in the library*, (iv) *The copy machines are usually out of order*, (v) *The computer printers are often out of paper*, (vi) *The change machines are usually out of order*. The five duplicate statements are: (i) *The reference librarians are not approachable*, (ii) *I feel comfortable using the library*, (iii) *The people who work at the circulation desk are helpful*, (iv) *I don't feel physically safe in the library*, (v) *The library is a safe place*. Fourteen new statements were added to the scale. All these statements were related to the current state of affairs in the academic libraries in the country where library catalogues have been computerised and the use of online databases and digital services are on the rise. The modified Malay translated LAS for this study has a total of 46 statements.

(b) Foreign Language Classroom Anxiety Scale

The original scale developed by Horwitz, Horwitz & Cope (1986) had 33 items which are reflective of (i) communication apprehension, (ii) test anxiety, and (iii) fear of negative evaluation. The Malay translated version of FLCAS retained all 33 items. The term 'foreign' language was replaced by 'English' language wherever it occurred.

Hereafter it will be referred to as the English Language Classroom Anxiety Scale (EFLAS).

(c) Personal Report Of Communication Apprehension (PRCA-24)

The most commonly used measure for communication anxiety is the PRCA-24 devised by McCroskey in 1984 (Daly, 1991). It is highly reliable with a Cronbach's alpha value of more than 0.90. It is composed of 24 statements with 4 dimensions: (i) meeting, (ii) interpersonal conversations, (iii) group discussion, and (iv) public speaking. The Malay translated version of PRCA-24 retained all 24 item statements.

3.6. Pilot Study

A pilot study to test the Malay translated versions of LAS, ELCAS and PRCA-24 was carried out among 147 students. The students were selected from the Foundation in Science program at the University of Malaya. These students are bilingual and belong to the same ethnic group. Attending English class was a requirement for their course program. The three sets of Malay translated instruments were distributed in a lecture hall with the permission of the lecturer and the Dean of the Foundation School. Data from the completed questionnaires was entered directly into the Statistical Products Services and Solution (IBM SPSS 21.0). All instruments were tested for construct validity using exploratory factor analyses. Items which did not load on any factors were eliminated. The reliability of the instruments was tested using Cronbach's Coefficient Alpha value. Reliability is the extent to which scores that are generated from an

instrument demonstrate consistency (Onwuegbuzie, 1997). Validity is the extent to which an instrument measures what it is supposed to measure (Nunnally & Bernstein, 1994). The most widely used method of estimating reliability is Cronbach's internal reliability coefficient alpha or Cronbach's alpha (α), which is an estimate of internal consistency reliability (Coleman, 2010). Coleman further explained that a coefficient alpha value of 0.70 means that 30% of the variance in scores is random and not meaningful. A high reliability coefficient is 0.90 or above, 0.80 to 0.89 is very good, and 0.70 to 0.79 is adequate.

(a) Library Anxiety Scale

Based upon an eigenvalue of 1.00 or more and factor loadings of 0.40 and greater, the first run of exploratory factor analysis yielded 13 factors which explained 66.07% of total variance. Out of the 13 factors, six (6) factors (factors 9, 10, 11, 12, and 13) had only 2 items each. Hence it was necessary to eliminate them and retain the eight (8) factors which had more than three (3) items each. It was necessary to conduct a number of exploratory factor analyses because usually the first run of exploratory factor analysis did not represent the maximum percent of variance explained in the data set (Coleman, 2010). A second run of exploratory factor analyses was conducted using factor loadings of 0.40 or greater and an eigenvalue of 1.00 or greater, but limiting to eight factors. The eight factors accounted for 53.3% of total variance. However, the items in the eight factors could not be meaningfully interpreted. A 3rd run of exploratory factor analysis was administered to force the variables into four factors. The factor loadings criterion remained at 0.40 or greater and with an eigenvalue of 1.00 or greater. The four factors accounted for 39.9% of the total variance. The value for

Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.813 which was considered adequate. KMO statistic varies between '0' and '1'; '0.70' is often considered a minimum for conducting for factor analysis (Vogt, 2005).

The items were also tested for internal reliability using Cronbach's internal reliability coefficient alpha (Table 3.2). All the items met the minimum requirement as suggested by Nunnally and Bernstein (1994). Factor 1 with 10 items had alpha value of $\alpha=0.89$, factor 2 with 7 items had a value of $\alpha=0.78$, factor 3 with 4 items had $\alpha=0.69$, and factor 4 with 6 items had an alpha value of $\alpha=0.72$. None of the items in any of the four factors indicated that it can increase the overall Cronbach's alpha value if it was deleted.

Table 3.2: Pilot Study - Reliability Statistics of the Malay translated LAS (M-LAS)

Cronbach's Alpha value if item is deleted				
Items	Factor 1 ($\alpha=0.89$)	Factor 2 ($\alpha=0.78$)	Factor 3 ($\alpha=0.69$)	Factor 4 ($\alpha=0.72$)
1	0.87	0.74	0.57	0.73
2	0.88	0.75	0.65	0.75
3	0.88	0.74	0.60	0.74
4	0.88	0.76	0.67	0.75
5	0.88	0.76		0.76
6	0.88	0.77		0.78
7	0.88	0.78		0.73
8	0.88			0.72
9	0.89			
10	0.89			
	10 items	7 items	4 items	8 items

Table 3.3: Pilot Study - Factor Analysis Of M-LAS

Dimensions	Items	Cronbach's alpha	% of total variance
Library Staff Barriers	10 items	0.89	16.10%
Library Resources Barriers	7 items	0.78	9.26%
Library Services Barriers	8 items	0.72	7.73%
Library Environmental Barriers	4 items	0.69	6.85%
Total	29 items		39.93%

The Malay translated LAS to be used for the final survey had a total of 29 items subsumed within four factors (Table 3.3). Factor 1 with 10 items was named as 'Library Staff Barriers' because nine out of 10 items referred to library staff. The remaining one statement indirectly related to the library staff, '*there is often no one available in the library to help me*'. Factor 2 with 7 items was named as 'Library Resources Barriers' because six out seven items referred to the use of library resources except for one which was about using the self-check machines to borrow books. Factor 3 with 8 items was named 'Library Services Barriers' because the items indicated the services offered at the library; and factor 4 with 4 items was named 'Library Environmental Barriers' because it referred to the importance and comfort of the library.

(b) English Language Classroom Anxiety Scale (ELCAS)

All the 33 items of the translated FLCAS were tested for construct validity using exploratory factor analysis. Based upon an eigenvalue criterion of 1.00 or greater and factor loadings of 0.40 or greater, eight factors were extracted during the 1st run of exploratory factor analysis which explained 62% of the total variance. Out of the eight

factors, three factors had a total of two or less items. It was necessary to exclude factors 6,7 and 8. A 2nd run of exploratory factor analysis with eigenvalue criterion of 1.00 or greater and factor loading of 0.40 or greater, yielded five factors which explained 52.08% of the total variance. However, the items in the five factors were not meaningful enough. A 3rd run of exploratory factor analysis yielded four factors which explained 48.15% of total variance. The value for Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.894.

The items were also tested for internal reliability using Cronbach's alpha (Table 3.4). Factor 1 with 12 items had alpha value of $\alpha=0.92$, factor 2 with also 12 items had a value of $\alpha=0.86$, factor 3 with 3 items had $\alpha=0.36$, and factor 4 with 3 items had alpha value of $\alpha=0.36$. Although having an alpha value of less than 0.40 does not show much reliability (Nunnally & Bernstein, 1994), factors 3 and 4 were retained as this was a pilot study and will be subjected to further tests during the final survey. None of the items in any of the four factors indicated that it can increase the overall Cronbach's alpha value if it was deleted.

Table 3.4: Pilot Study - Reliability Statistics Of The Malay Translated ELCAS (M-ELCAS)

Cronbach Alpha value if item is deleted				
Items	Factor 1 $\alpha=0.91$	Factor 2 $\alpha=0.86$	Factor 3 $\alpha=0.37$	Factor 4 $\alpha=0.37$
1	78.09	60.41	2.81	2.52
2	80.23	61.90	2.43	3.07
3	80.48	65.31	2.42	2.79
4	80.46	64.16		
5	82.06	63.54		
6	80.55	64.69		
7	82.30	63.51		
8	82.61	66.91		
9	84.18	65.85		
10	80.08	67.14		
11	80.22	66.84		
12	85.68	63.87		
Total	12 items	12 items	3 items	3 items

The Malay translated ELCAS which will be used for the final survey had 30 factors with four factor components (Table 3.5). The factors are: *Speaking anxiety* (12 items); *Classroom anxiety* (12 items), *Personal evaluation anxiety* (3 items); and *Learner anxiety* (3 items). A total of 3 items which did not load on any of the factors were dropped from the final instrument. The statements are: (i) *I don't worry about making mistakes in language class*, (ii) *In language class, I can get so nervous I forget things I know*, (iii) *The more I study for a language test, the more confused I get*.

Table 3.5: Pilot Study - Factor Analysis Of M-ELCAS

Dimensions	Number of items	Cronbach's alpha	% of variance
Speaking Anxiety	12 items	0.91	19.94%
Classroom Anxiety	12 items	0.86	14.77%
Personal evaluation Anxiety	3 items	0.37	6.99%
Learner Anxiety	3 items	0.37	6.46%
Total	30 items		52.08%%

(c) Personal Report of Communication Apprehension (PRCA-24)

All the 24 items of the Malay translated PRCA were tested for construct validity using exploratory factor analysis. Based upon, eigenvalue criterion of 1.00 or greater and factor loadings of 0.40 or greater, the 1st run of exploratory factor analysis yielded five factors which explained 60.77% of the total variance. The 2nd run of exploratory factor analysis was conducted and the number of factors was limited to four in an attempt to be similar to the original PRCA-24 which had four factors; formal, interpersonal conversations, group discussion, and public speaking. It yielded four factors which explained 56.42% of total variance. However, the items in the four factors in the 2nd exploratory factor analysis did not complement each other and could not be meaningfully interpreted. As such, a decision was made in favour of the 1st exploratory factor analysis which had five factors that accounted for 60.77% of total variance. The KMO measure sampling adequacy was 0.880.

All the items were also tested for internal reliability using Cronbach's alpha (Table 3.6). Factor 1 with 7 items had Cronbach alpha value of $\alpha=0.87$, factor 2 with four item had a value of $\alpha=0.76$, factor 3 with five items had $\alpha=0.79$, factor 4 with four items had an alpha value of $\alpha=0.80$, and factor 5 with three items had alpha value of $\alpha=0.62$. None of the items in any of the five factors indicated that it can increase the overall Cronbach if it was deleted.

Table 3.6: Pilot Study - Reliability Statistics Of The Malay Translated PRCA-24 (M-PRCA)

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	$\alpha=0.87$	$\alpha=0.76$	$\alpha=0.79$	$\alpha=0.80$	$\alpha=0.62$
1	0.85	0.64	0.73	0.69	0.47
2	0.85	0.76	0.79	0.73	0.55
3	0.85	0.69	0.73	0.79	0.54
4	0.85	0.73	0.76	0.79	
5	0.86		0.76		
6	0.86				
7	0.87				
	7 items	4 items	5 items	4 items	3 items

The Malay translated PRCA which will be used for the final survey had 5 factor components (Table 3.7). The factors are *Meeting* (7 items), *Conversation* (4 items), *Public Speaking* (5 items), *Group Discussion* (4 items), and *General Anxiety* (3 items).

Table 3.7: Pilot Study - Factor Analysis Of M-PRCA

Dimensions	Number of items	Cronbach's alpha	% of variance
Meeting	7 items	0.87	16.29%
Conversation	4 items	0.76	12.37%
Public Speaking	5 items	0.79	11.88%
Group Discussion	4 items	0.80	11.65%
General Anxiety	3 items	0.62	8.58%
Total	23 items		60.77%

3.7. Final Instruments

Table 3.8: Validated Instruments For The Final Survey

M-LAS	Items	M-ELCAS	Items	M-PRCA	Items
Barriers with library staff	10	Speaking Anxiety	12	Meeting	7
Knowledge of the library	7	Learner Anxiety	12	Interpersonal Conversations	4
Barriers with library environment	4	Self-evaluation Anxiety	3	Public Speaking	5
Barriers with library services	8	Class Anxiety	3	Group Discussion	4
				General Anxiety	3
LAS – 29 items		FLCAS - 30 items		PRCA - 23 items	

The three Malay translated instruments were tested for construct validity and internal reliability during the pilot study. During the pilot study, the Malay translated LAS yielded four dimensions with a total of 29 items. The dimensions were: (i) Barriers with Library Staff (10 items), (ii) Knowledge of the Library (7 items), (iii) Barriers with Library Environment (4 items), and (iv) Barriers with Library Services (8 items). The Malay translated version of LAS for the final study thus had a total of 29 items. The Malay translated ELCAS during the pilot study yielded 4 dimensions with a total of 30 items. The dimensions are: (i) Speaking Anxiety (12 items), (ii) Learner Anxiety (12 items), (iii) Self-Evaluation Anxiety (3 items), and (iv) Class Anxiety (3 items). The Malay translated version of PRCA-24 during the pilot study yielded 5 dimensions with a total of 23 items. The dimensions are: (i) Meeting (7 items), (ii) Interpersonal Conversations (4 items), (iii) Public Speaking (5 items), (iv) Group Discussion (4 items), and (v) General Anxiety (3 items) (Appendix C).

3.8. Population

The population for the final study comprised undergraduate students from a public university representing the top most ranking and oldest university in Malaysia. The total student population at the University of Malaya is about 30,000. Students from this university can be considered as a representational sample of the 22 government funded university students in the country for the following reasons: i) same entrance qualifying examination in the form of Higher School Certificate/Matriculation/Foundation in Science; ii) similar syllabus throughout the government funded educational institutions/schools; iii) the use of English and Malay languages for teaching and learning follows the directive from the ruling government.

The population targeted for this study consisted of final year undergraduates registered during the first semester of session year 2012/2013. During the final year, undergraduates are expected to carry out research for their final year project which is a compulsory requirement before they can graduate. It is during this preparation for the final year project that students have a great need to search, retrieve use relevant information from various sources. The rationale therefore, for including only final year students is that they are seen to have a need to retrieve and use information resources to facilitate the completion of their project. Nor Edzan (2007) in her doctoral thesis had listed general characteristics of final year students at the University of Malaya. They are:; have attended the compulsory information skills course, have learnt how to use the library, skillful in using library services, moderately skillful in terms of computers and Internet. Mohd Shariff and Zainab (2007) in another study among final year students in the same university have reported that students need help in searching for information and selecting relevant databases, choosing keywords, searching Internet, using online catalog, verifying relevance of information, shy to ask lecturers and librarians for assistance, and have problems in communicating ideas orally. MacIntyre (1999) explained that when a given task is relatively simple, anxiety seems to have little effect. Hence, for the purpose of this study, final year students with a crucial final year project assignment were chosen.

3.8.1. Sample

The sample for this study were final year undergraduates enrolled at the University of Malaya for Semester I, 2012/13. The final year undergraduates' list of names registered during the first semester of session year 2012/2013 was obtained from

the Admissions Unit at the university together with their email addresses.. The students were from various faculties throughout the campus and the age range was between 23 to 24 years. The total registered for semester one, session 2012/13 was 1,395. The listing had details of the following: full name, degree program, department/faculty, student matrix number, university email and other emails (if any). All 1395 names of students were input into Statistical Products Services and Solutions (SPSS). Allowing for plus/minus 5% error rate, a sample of 438 students was randomly selected from the total population.

3.9. Data Collection

The three Malay translated instruments; Library Anxiety Scale (M-LAS), English Language Classroom Anxiety Scale (M-ELCAS), and Personal Report of Communication Apprehension (M-PRCA), were earlier validated and tested for reliability during the pilot study among 147 students. These instruments were arranged one after another accordingly but separated by the names of the instruments (Appendix B). There were a total of 82 questions: M-ELCAS - 30 questions, M-PRCA - 23 questions and M-LAS - 29 questions. Answers use the bullet horizontal for five statements: 1- Strongly Disagree, 2- Disagree, 3- Not Sure, 4-Agree, 5-Strongly Agree. In addition to the survey instruments, two demographic factors were included as part of the survey. They were; (i) gender, and (ii) dominant language.

The 84 survey questions were transferred into the online survey system of the university (umesurvey.um.edu.my) with the help of the University's Information

Technology Department. The URL link of the survey was then sent to the 438 emails of students who were selected using random sampling. These students were allowed flexibility when answering the questions. If they were constrained by time, they can save the online survey and return later to complete the unanswered questions. When they have finished, they were required to click on 'Finish'. If there are still unanswered questions, there will be a prompt statement requiring them to answer the unanswered questions. In this way, any incomplete response considered as null and void was avoided.

The online survey was displayed for four weeks from 22nd December 2012 until 7th January 2013. A week after the administration of the survey, another notification was sent but this time, it was sent to the students' alternate email addresses. Earlier, the official university email addresses were used. The aim was to ensure the students are aware of this survey either through the official student email or via their alternate email addresses. Another reason was that the initial response to the survey was slow and it was realized that some students seldom use the official student emails. They prefer to use their personal email addresses. The Information Technology Centre of the University was kind enough to retrieve the alternative emails of the respondents. To encourage students to answer the survey, thumb drives 8GB were given away as a token of appreciation to the respondents who completed the survey. This decision was made after the initial response rate was very slow. Reminders were sent after the first and third week. There were also a few comments from the students stating that there were too many questions to be answered. When the reward token 8GB thumb drives was announced, the response rate slowly picked up. At the end of four weeks, the total respondents are 114.

3.10. Data Analysis

The completed online survey questions were transferred into the Statistical Products Services and Solutions (SPSS version 21) for analysis. The values for negatively expressed statements were reverse-scored before the data was input. The independent variable, gender was labelled and coded as; Male (M) -1, Female (FM) -2 and used the nominal scale of measurement. A nominal scale is placing data into categories, without any order or structure. The other independent variable, first (dominant) language was labelled and coded as; Malay (BM)-1, English (BI)-2, Chinese (BC)-1, Tamil (BT)-4, and Other languages (LL)-5. The survey item statements were labeled according and used the interval scale of measurement. Descriptive statistical analysis and inferential statistics were used to report the results of the study.

3.11 Summary

This chapter described the rigorous efforts taken to translate the three instruments, LAS, FLCAS, and PRCA-24 into the Malay language. The Malay translated instruments developed and validated during the pilot study were given new names in the Malay language. The Malay translated LAS, (M-LAS) is known as '*Skala Kebimbangan Menggunakan Perpustakaan*' had 29 items. The Malay translated ELCAS, (M-ELCAS) known as '*Skala Kebimbangan Terhadap Kelas Bahasa Inggeris*' had 30 items. The Malay translated PRCA-24, (M-PRCA) was adopted from Fuziah (1995) with the name '*Laporan Kendiri Kekhuatiran Berkomunikasi*' had 23 items. The survey was conducted online and limited to final year undergraduates.

CHAPTER FOUR

FINDINGS OF THE STUDY

4.1. Introduction

The design of this study is a quantitative cross-sectional design to explore if other academic related anxieties in the form of English language anxiety and communication anxiety have significant relationships with the dimensions of library anxiety. The conceptual model was based on the Library Anxiety Expectation (LEM) model (Onwuegbuzie, Jiao & Bostick, 2004). In this model, variables, cognitive or affective, can correlate with each other to influence the behavior of a student using library resources and services (library anxiety). In this study, two affective variables; language anxiety and communication anxiety are selected. Three instruments, LAS, FLCAS, and PRCA-24 were translated into the Malay language. The foreign language in FLCAS was replaced by English language. The research questions for this study are as follows:

Research Question 1: Do the translated versions of the three instruments yield dimensions different from that of the original instruments when tested among students who are non-native speakers of English?

Research Question 2: Do what extend final year students experience library, language, and communication anxieties?

Research Question 3: Are there statistically significant mean differences in the levels of library, language, and communication anxieties between male and female students?

Research Question 4: Are there differences in the levels of library, language, and communication anxieties among students who use English, Malay, Chinese, Tamil, and Other Languages as their dominant language?

Research Question 5: Are there statistically relationships among the dimensions of language and library anxieties?

Research Question 6: Are there statistically significant relationships among the dimensions of communication and library anxieties?

4.2. Sample

A total of 439 final year undergraduates from various faculties were selected randomly from 1,395 students who had registered for Semester 1, 2012/2013 session. They were from various faculties; Built Environment (n=18), Business & Accountancy (n=45), Islamic Studies (n=53), Malay Studies (n=33), Engineering (n=123), Law (27), Medicine (31), Education (41), Cultural Studies (n=15), Science (2), Language & Linguistics (n=4), and Computer Science and Information Technology (n=37). All these students were about to begin their final year project thesis.

The three sets of Malay translated instruments had a total of 82 statements; LAS (29 items), ELCAS (30 items), and PRCA (23 items). In addition to that, students

were also required to indicate their gender, and their dominant language used. The survey was conducted for two weeks and the questionnaires were distributed online using the email addresses of the students. The email addresses were obtained from the University's Admission Unit. When the date due for the survey was over, the Information Technology Centre of the University who earlier assisted in formatting the online survey, transferred the completed respondents' questionnaires into Microsoft Excel format. The Excel file was then transferred into SPSS 20.1 for further analysis.

A total of one hundred and fourteen (114) students responded the online survey. No respondent was rejected because the online survey did not allow the respondent to 'finish' the survey without completion of all the questions. When and if the students missed out or did not answer any of the questions, the online system will prompt the students to complete the questions before clicking on the 'finish' button. Of the 114 respondents, 36.8% (n=42) were males and 63.2% (n=72) were females (Table 4.1). The dominant language used by the respondents are as shown in Table 4.2; Malay (60.5%, n=69), English (22.8%, n=26), Chinese (14%, n=16), Others (1.8%, n=2) and Tamil (0.9%, n=1).

Table 4.1 : Sample by Gender

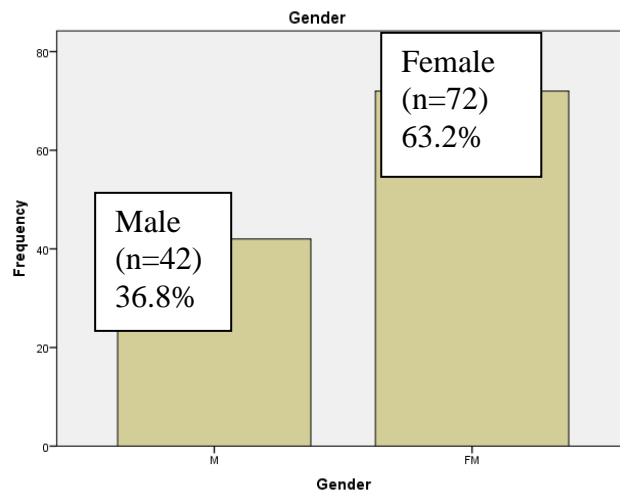
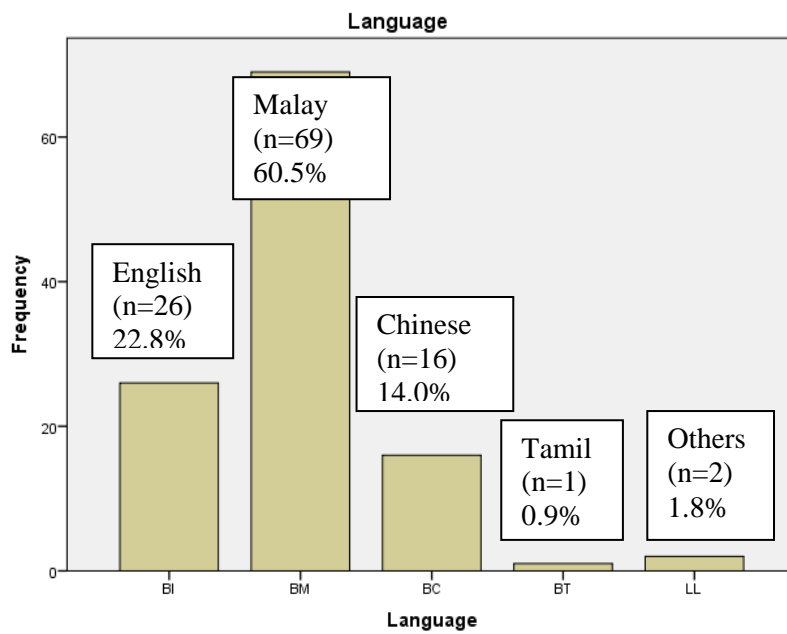


Table 4.2 : Sample by Dominant Language



4.3. Data Analysis

The following sections will report on the analysis based on the data findings and research questions.

4.3.1. Research Question 1 : Do the Malay translated versions of LAS, ELCAS, and PRCA yield similar dimensions as that of the original instruments when tested among students who are non-native speakers of English?

The data analysis for Research Question One reveal that the total number of item statements in all three translated scales, retained the basic dimensions which can assess anxiety although the individual items loaded onto the dimensions differ possibly due to varying interpretation by different populations. The M-LAS retained dimensions Library Staff Barriers and Affective Barriers as that of the original scale. The new dimensions which emerged are related to Library Services Barriers, Library Resources Barriers, and Internet Services Barriers. The M-ECLAS retained Speaking Anxiety dimension which was referred to as Communication Apprehension in the original scale. The two new dimensions which emerged are Classroom Anxiety, and Learner Anxiety. The M-PRCA retained three of the dimensions found in the original scale, Interpersonal Conversations, Group Discussion, and Public Speaking. The Meeting dimensions is renamed as Formal Settings.

(a) M-LAS [*Skala Kebimbangan Penggunaan Perpustakaan*]

During the pilot study, 4 (four) runs of exploratory factor analyses were conducted on the Malay translated LAS with 46 statements. Using eigenvalue greater than 1.00, and factor loadings of 0.4 or greater, four interpretable factors with a total of 29 items emerged, which explained 39.9% of the total variance. Factor 1 (Library Staff

Barriers) which had 10 items subsumed under it, had an internal reliability alpha value of 0.89. Factor 2 (Library Resources Barriers) which had 7 subsumed under it, had an internal reliability alpha value of 0.78. Factor 3 (Library Services Barriers) which had 8 items subsumed under it, had an internal reliability alpha value of 0.69. The fourth factor (Library Environment Barriers) which had 4 items subsumed under it, had an internal reliability alpha value of 0.69.

For the final study, the M-LAS was submitted to a construct validity and internal reliability assessment among final year undergraduates at the University of Malaya. Using eigenvalue greater than 1.00 and factor loadings of 0.5 or greater, the exploratory factor analysis yielded 27 items loaded on five interpretable factors which explained 56.81% of total variance. The five factor solution were identified as the following subscales; Library Staff Barriers (10 items), Library Services Barriers (5 items), Library Resources Barriers (5 items), Affective Barriers (4 items), and Internet Services Barriers (3 items).

A visual inspection of Table 4.3 show the factor structure of the M-LAS. The 1st dimension, Library Staff Barriers, had the largest number of items (10 items) and explained the highest proportion of total variance at 19.60%. The items had factor loadings from as low as 0.53 to as high as 0.85. A high score indicate higher anxiety associated library staff barriers. The 2nd dimension, Library Services Barriers, had five items which explained 12.19% of total variance. This dimension had item loadings from as low as 0.54 to as high as 0.83. A high score indicate higher anxiety associated with library services barriers. The 3rd dimension, Library Resources Barriers, which had five items subsumed under it, explained 9.53% of the total variance. The factor loadings

ranged from as low as 0.50 to as high as 0.67. A high score indicate high anxiety associated with library resources barriers. The 4th dimension, Affective Barriers, had four items and explained 8.77% of the total variance. The factor loadings ranged from as low as 0.50 to as high as 0.81. A high score indicate high anxiety associated with affective barriers. The 5th dimension, Internet Services Barriers, which had three items subsumed under it collectively explained 6.73% of the total variance. The item loadings ranged from as low as 0.56 to as high as 0.80. A high score indicate high anxiety associated with internet services barriers.

Each of the dimensions were subsequently examined for internal reliability and was found to have met the criteria of 0.70 or nearly as recommended by Nunnally and Bernstein (1994), except for Internet Services Barriers, which had a Cronbach's internal reliability coefficient alpha value of $\alpha=0.63$. The internal reliability of the overall M-LAS revealed a Cronbach's coefficient alpha value of $\alpha=0.88$. This value is similar as Bostick's (1992) original LAS indicating that the translated LAS is a reliable instrument. A visual inspection of Table 4.4 show the highest alpha value was obtained by the dimension, Library Staff Barriers, with a coefficient alpha value of $\alpha=0.91$, followed by Library Services Barriers, $\alpha=0.76$, Library Resources Barriers, $\alpha=0.74$, Affective Barriers $\alpha=0.68$, and Internet Services Barriers, $\alpha=0.63$. None of the items in any of the dimensions indicated that it can raise the Cronbach's alpha value if it was deleted. It can be concluded that the M-LAS for the final survey constitute a valid and reliable instrument which can be used by other university libraries in the country.

Table 4.3 : Factor structure of M-LAS
Total variance = 56.81%; Overall Cronbach Alpha value = 0.88;
Total items = 27; Total factors = 5

	Statements	
	Library Staff Barriers Eigenvalue 7.98; Variance 19.6%; Cumulative 19.6%; Cronbach Alpha 0.91	
1	I can't get help in the library at the times I need it	0.85
2	The library staff do not care about the students	0.79
3	Library staff do not have time to help me	0.78
4	Library staff do not listen to students	0.78
5	Library staff are helpful	0.75
6	Library staff do not have time to help students	0.67
7	Library staff do not have time to help because they are always on the telephone	0.63
8	Library staff do not have time to help because they are always busy doing something else	0.60
9	There is often no one available in the library to help me	0.56
10	The library staff are friendly	0.53
	Library Services Barriers Eigenvalue 3.33; Variance 12.19 %; Cumulative 31.79 %; Cronbach Alpha 0.76	
1	I always use the library catalog before going to the stacks	0.83
2	I always use the library catalog to look for information	0.78
3	I often use the self-check machine to borrow books	0.67
4	The library is a comfortable place to study	0.62
5	The library is an important part of my learning	0.54
	Library Resources Barriers Eigenvalue 1.93; Variance 9.53 %; Cumulative 41.31%; Cronbach Alpha 0.74	
1	The library staff are approachable	0.67
2	I don't know how to use the library online resources	0.66
3	I have never used the library online resources	0.66
4	I often use library online resources to look for exam papers	0.64
5	I always use online resources to look for information for my project	0.50
	Affective Barriers Eigenvalue 1.68; Variance 8.77 %; Cumulative 50.08 %; Cronbach Alpha 0.68	
1	The library staff are approachable	0.81
2	I get confused trying to find my way around the library	0.61
3	I don't know what to do next when the book I need is not on the shelf	0.56
4	I feel comfortable using the library	0.50
	Internet Services Barriers Eigenvalue 1.55; Variance 6.73 %; Cumulative 56.81 %; Cronbach Alpha 0.63	
1	Internet service is too slow	0.80
2	Internet service is available anytime	0.70
3	I feel like I'm bothering the library staff if I ask a question	0.56

Table 4.4: Content and Construct Validity of M- LAS

No	Description of Library Anxiety subscales	No of items	% of total variance	Cronbach's alpha
1	Library Staff Barriers	10	19.6%	0.91
2	Library Services Barriers	5	12.19%	0.76
3	Library Resources Barriers	5	9.53%	0.74
4	Affective Barriers	4	8.77%	0.68
5	Internet Services Barriers	3	6.73%	0.63
	TOTAL	27 items	56.81%	

Table 4.5 : Items of M-LAS in relation to the original LAS

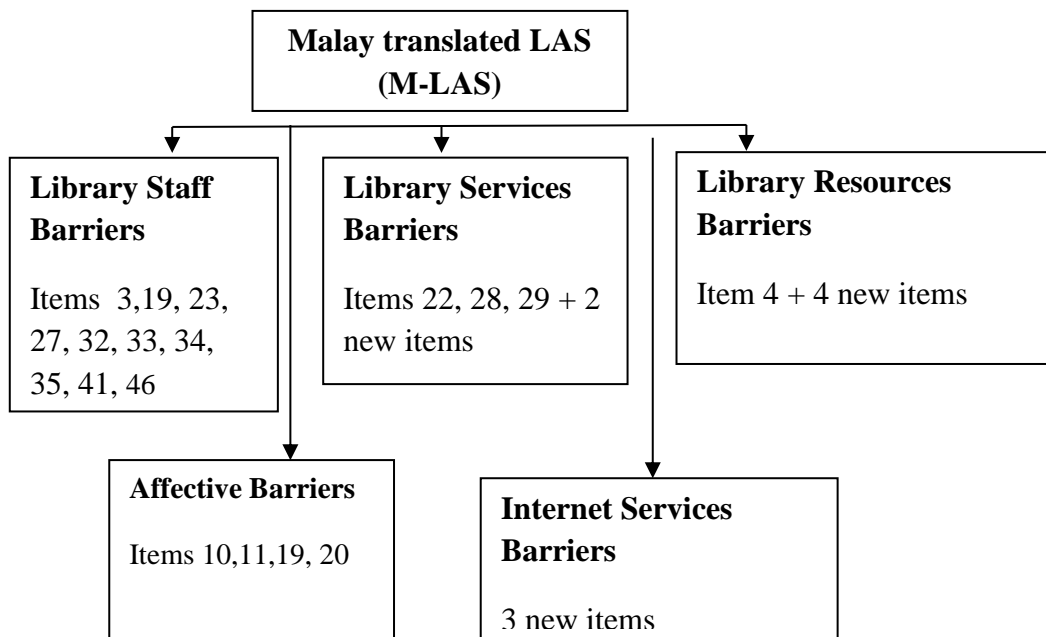


Table 4.5 shows the items which loaded into the dimensions. The items in dimension Library Staff Barriers were also found in the original LAS and are directly related to library staff. The implication is that the nature of services provided by the library staff will always remain an important component in the library anxiety construct. Similarly, dimension Affective Barriers will also remain an important component in the library anxiety construct as were all the four items in this scale were also found in the original LAS. The other three dimensions consisted mainly of new items implying that some of the item statements in the original LAS could be outdated. Furthermore, the use of electronic resources was less in demand when the original LAS was developed in 1992 and so the scale did not include such related item statements.

(b) M-ELCAS [Skala Kebimbangan Terhadap Kelas Bahasa Inggeris]

During the pilot study, three (3) runs of exploratory factor analyses was conducted on the M-ELCAS with 33 statements. Using eigenvalue greater than 1.00, and factor loadings of 0.4 or greater, four interpretable factors with a total of 30 items emerged, which explained 48.15% of the total variance. Factor 1 (Speaking Anxiety) with 12 items had an internal reliability coefficient alpha value of 0.91. Factor 2 (Classroom Anxiety) with 12 items had an internal reliability coefficient alpha value of 0.86. Factor 3 (Personal Evaluation Anxiety) with 3 items had an internal reliability coefficient alpha value of 0.37. The fourth factor (Learner Anxiety) with 3 items had an internal reliability coefficient alpha value of 0.37. A total of three items were dropped from the original list of 33 items. The M-ELCAS with a total of 30 items hence was used for the final survey.

For the final study, the M-ELCAS was submitted to construct validity and internal reliability assessments among final year undergraduates at the University of Malaya. Using eigenvalue greater than 1.00, and factor loadings of 0.5 or greater, the exploratory factor analysis yielded 26 items loaded on three (3) interpretable factors which explained 53.08% of total variance. The three factors were : Speaking Anxiety (17 items), Classroom Anxiety (5 items), and Learner Anxiety (4 items). Items which did not load on any of the factors and subsequently dropped were; *'I feel overwhelmed by the number of rules you have to learn to speak a foreign language'* (Item 30), *'I feel confident when I speak in foreign language class'* (Item 18), *'It wouldn't bother me at all to take more foreign language classes'* (Item 5) and *'I would probably feel comfortable around native speakers of the English language'*.

The factor structure of the M-ELCAS is shown in Table 4.6. The 1st dimension, Speaking Anxiety, constituted the highest contribution to the total variance (38.34%) with the highest number of items (17 items). The item loadings ranged from as low as 0.58 (item 17) to as high as 0.77 (items 1 and 3). Nine items had item loadings above 0.70 (items 1-9) and seven items from 0.60 to 0.69 (items 10-16). All the 17 items indicated a state of anxiety when having to communicate with the teacher or in front of the other students. The 2nd dimension, Classroom Anxiety, contributed 9.09% to the total variance with a total of six items. The items described the anxiety faced during the class. The item loadings ranged from as low as 0.54 to as high as 0.66. The 3rd dimension, Learner Anxiety, with four items constituted 5.65% of total variance. The item loadings ranged from as low as 0.59 to as high as 0.80. The items revealed the emotions related to self evaluation and perception of learning the language and attending English classes, such as 'I often feel like not going to my language class', 'During language class, I find myself thinking about things that have nothing to do with the course', and 'I feel more tense and nervous in my language class than in my other classes'.

Each of the factors were subsequently examined for internal reliability and was found to have met the criteria of coefficient alpha value of 0.70. The internal reliability of the overall M-ELCAS revealed a Cronbach's coefficient alpha value of 0.79. A visual inspection of Table 4.7 showed that the dimension Speaking Anxiety, which had 17 items subsumed under it had the highest coefficient alpha value of 0.95. This was followed by Classroom Anxiety with 5 items subsumed under it and a coefficient alpha value of 0.70. The third factor, Learner Anxiety, with four items subsumed under it, had coefficient alpha value of 0.71. None of the items in the three factors indicated that it

can raise the coefficient alpha value if the items were deleted. The validity and reliability of the M-ELCAS assessed using exploratory factor analysis and internal reliability using Cronbach's coefficient alpha value indicated both a valid and reliable instrument.

The internal reliability of the overall M-ELCAS revealed a Cronbach's coefficient alpha value of 0.79. A visual inspection of Table 4.7 show that the dimension Speaking Anxiety, which had 17 items subsumed under it had the highest coefficient alpha value of 0.95. This was followed by Classroom Anxiety with 5 items subsumed under it and a coefficient alpha value of 0.70. The third factor, Learner Anxiety, with four items subsumed under it, had coefficient alpha value of 0.71. None of the items in the three factors indicated that it can raise the coefficient alpha value if the items were deleted. The validity and reliability of the M-ELCAS assessed using exploratory factor analysis and internal reliability tests indicated a valid and reliable instrument.

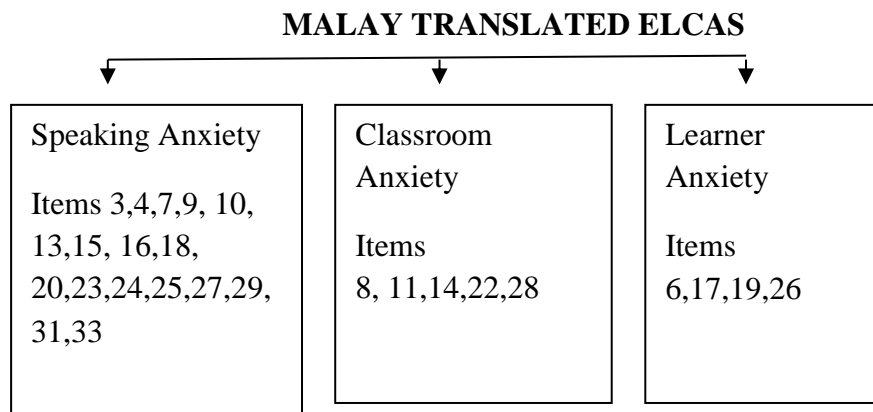
Table 4.6 : Factor structure of M-ELCAS

		Factor 1	Factor 2	Factor 3
	Statements	Speaking Anxiety	Personal Evaluation Anxiety	Classroom Anxiety
1	I get nervous when the language teacher asks questions which I haven't prepared in advance.	0.77		
2	I worry about the consequences of failing my language class.	0.76		
3	I tremble when I know that I'm going to be <i>called on</i> in language class.	0.77		
4	I feel confident when I <i>speak</i> in language class.	0.74		
5	I get nervous when the language teacher <i>asks questions</i> which I haven't prepared in advance.	0.74		
6	It frightens me when I don't understand what the <i>teacher</i> is saying in the English language.	0.74		
7	I can feel my heart pounding when I'm going to be <i>called on</i> in language class.	0.72		
8	Language <i>class</i> moves so quickly I worry about getting left behind.	0.71		
9	I feel very self-conscious about <i>speaking</i> the English language in front of other students.	0.71		
10	I get nervous when I don't understand every word the language <i>teacher</i> says.	0.68		
11	Even if I am well prepared for language <i>class</i> , I feel anxious about it.	0.66		
12	I get upset when I don't understand what the <i>teacher</i> is correcting.	0.66		
13	I get nervous and confused when I am <i>speaking</i> in my language class.	0.63		
14	I am afraid that the other students will laugh at me when I <i>speak</i> English.	0.62		
15	I always feel that the <i>other</i> students speak English better than I do.	0.60		
16	I keep thinking that the <i>other</i> students are better at languages than I am.	0.60		
17	It embarrasses me to <i>volunteer answers</i> in my language class.	0.58		
18	When I'm on my way to language class, I feel very sure and relaxed.		0.66	
19	I am usually at ease during <i>tests</i> in my language class		0.61	
20	I don't feel pressure to prepare very well for language class.		0.60	
21	I don't understand why some people get so upset over foreign language <i>classes</i>		0.56	
22	I would not be nervous <i>speaking</i> the foreign language with native speakers.		0.54	
23	I often feel like not going to my language class.			0.80
24	I am afraid that my language teacher is ready to correct every mistake I make.			0.61
25	During language class, I find myself thinking about things that have nothing to do with the course.			0.60
26	I feel more tense and nervous in my language class than in my other classes.			0.59
	Eigenvalue	11.50	2.73	1.70
	% of variation	38.338	9.092	5.652
	Cumulative variance	38.338	47.429	53.081
	Cronbach Alpha value	0.949	0.703	0.706

Table 4.7 : Content and Construct Validity of M-ELCAS

No	Description of Foreign Language Anxiety factors	No of items	% of total variance	Cronbach alpha
1	Speaking Anxiety	17	38.34%	0.95
2	Classroom Anxiety	5	9.09%	0.70
3	Learner Anxiety	4	5.65%	0.71
	TOTAL	26 items	58.08%	0.79

Table 4.8 : Items of M-ELCAS in Relation to the Original FLCAS



A visual inspection of Table 4.8 reveal that all the items which loaded into dimension Speaking Anxiety were directly related to speaking and listening during language class. This is consistent with other studies (Aida, 1994,Young, 1990, Horwitz, Horwitz, & Cope, 1986) that speaking in a foreign language is the most important component in the language anxiety construct. Tran (2012) had analyzed the items in FLCAS and reported that 20 out of the 33 items in the instrument involved comfort level with expressive or receptive language.

(c) M-PRCA [Laporan Khendiri Kekhuatiran Komunikasi]

During the pilot study, five runs of exploratory factor analyses were conducted on the M-PRCA with 24 statements. Using eigenvalue greater than 1.00 and factor loadings of 0.4 or greater, five interpretable factors with a total of 23 items emerged, which explained 60.77% of the total variance. Factor 1 (Meeting) with 7 items had an internal reliability coefficient alpha value of 0.88. Factor 2 (Interpersonal Conversations) with 4 items had coefficient alpha value of 0.76. Factor 3 (Public Speaking) with 5 items had coefficient alpha value of 0.79. The fourth factor (Group Discussion) with 4 items had coefficient alpha value of 0.80. The fifth factor (General Anxiety) with 3 items had coefficient alpha value of 0.62. Only one item was dropped from the original list of 23 items. The M-PRCA with a total of 23 items was used for the final survey.

For the final study, the M-PRCA was submitted to a test of construct validity and internal reliability assessment among final year undergraduates at the University of Malaya during the final study. Using eigenvalue greater than 1.00 and factor loadings of 0.5 or greater, the exploratory factor analyses yielded 23 items which loaded on four interpretable factors which explained 59.05% of the total variance. For the purpose of this study, the dimension Meeting was replaced by Formal Settings to reflect the actual scenario where students rarely attend meetings per se, but do get involved in formal gatherings and discussions. Three statements from the Dimension Public Speaking loaded into formal probably because students very seldom get involved in public speaking, and statements describing speech can be perceived as more of a formal setting than in public. The statements from the dimension Public Speaking which loaded into dimension formal are: 'I have no fear of giving a speech',

'I am relaxed while giving a speech' and 'I feel the prospect of giving a speech with confidence '.

A visual inspection of Table 4.9 show the factor structure of the M-PRCA. The 1st factor (Formal Settings) constituted the highest contribution to the total variance (31.70%) with the highest number of items (10 items). The items loadings ranged from as low as 0.50 to as high as 0.79. Statement such as *'I am calm and relaxed while participating in group discussion'* which was originally from Group Discussion dimension loaded into the dimension Formal Settings. The 2nd dimension (Interpersonal Conversations) contributed 11.57% to the total variance with a total of six items. The item loadings ranged from as low as 0.59 to as high as 0.71. All the item statements expressed fear and tension while communicating one-to-one or in small groups. The 3rd dimension (Group Discussion) constituted 9.43% of total variance with four items. All the three items were also found in the original scale and the item loadings ranged from as low as 0.59 to as high as 0.83. The 4th dimension (Public Speaking) with three items constituted 6.37% of total variance. The item loadings ranged from as low as 0.66 to as high as 0.77. The items were also found in the same factor of the original scale. The items reflect the fear of speaking in front of others.

The internal reliability of the overall M-PRCA revealed a Cronbach's internal reliability coefficient alpha value of 0.83. A visual inspection of Table 4.10 show that, Formal Settings, which had 10 items subsumed under it had the highest internal reliability coefficient alpha value of 0.90. This was followed by Interpersonal Conversations with coefficient alpha value of 0.80, and the third dimension, Group

Discussion with four items had coefficient alpha value of 0.80. The fourth dimension Public Speaking had coefficient alpha value of 0.80. None of the items in the three dimensions indicated that it can raise the alpha value if the items were deleted. The validity and reliability of the M-PRCA which was assessed using exploratory factor analyses and internal reliability using Cronbach's coefficient alpha value indicated both a valid and reliable instrument.

All items were found to have loaded onto the four dimensions but the items did not load exactly as was found in the original PRCA where the four dimensions had six items in each. The reason could be the different interpretation of the communication settings. Being undergraduates who have not embarked on the outside working life, the interpretation of the items could have been from the perspective of the students rather than the actual meaning of McCroskey (1982). The items numbering in Table 4.11 refer to the statements from the original PRCA-24 (McCroskey, 1984), where items 1-6 relate to Group Discussion, 7-12 relate to Formal (meeting), 13-18 to Interpersonal Conversations, and 19-24 relate to Public Speaking. In this study, 3 items from Interpersonal Conversations, 3 items from Public Speaking, and 1 item from Group Discussion loaded onto the Formal settings factor. Similarly, 3 items from Formal (meeting) loaded onto the Interpersonal Conversations. This showed that perception and interpretation of communication settings by Malaysian students differ.

Table 4.9 : Factor Structure of M-PRCA

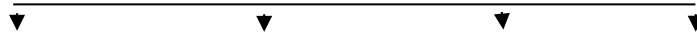
		Factor 1	Factor 2	Factor 3	Factor 4
No	Statements	Formal	Interpersonal Conversation	Group Discussion	Public Speaking
1	I am very relaxed when answering questions at a meeting.	0.79		0.78	
2	While conversing with a new acquaintance, I feel very relaxed.	0.72		0.79	
3	I am very calm and relaxed when I am called upon to express an opinion at a meeting.	0.71		0.83	
4	I have no fear of giving a speech.	0.67		0.53	
5	I feel relaxed while giving a speech.	0.61		0.58	
6	Usually I am calm and relaxed while participating in meetings.	0.60			
7	Ordinarily I am very calm and relaxed in conversations.	0.59			
8	Ordinarily I am very calm and participating in group discussions	0.58			
9	I have no fear of speaking up in conversations	0.52			
10	I face the prospect of giving a speech with confidence	0.50			
1	I'm afraid to speak up in conversations.		0.71		
2	I am afraid to express myself at meetings.		0.66		
3	Generally, I am nervous when I have to participate in a meeting.		0.66		
4	Ordinarily I am very tense and nervous in conversations.		0.62		
5	Communicating at meetings usually makes me uncomfortable		0.61		
6	While participating in a conversation with a new acquaintance, I feel very nervous.		0.60		
1	I like to get involved in group discussions			0.83	
2	Usually I am calm and relaxed while participating in group discussions.			0.79	
3	I dislike participating in group discussions			0.78	
4	I am tense and nervous while participating in group discussions			0.54	
1	My thoughts become confused and jumbled when I am giving a speech.				0.77
2	Certain parts of my body feel very tense and rigid while giving a speech.				0.72
3	While giving a speech, I get so nervous I forget facts I really know.				0.66
	Eigenvalue	7.28	2.66	2.17	1.47
	% of variation	31.7	11.57	9.43	6.37
	Cumulative variance	31.7	43.2	52.7	59.05

Table 4.10 : Content and Construct Validity of M-PRCA

No	Communication Anxiety dimensions	No of items	% of total variance	Cronbach's alpha
1	Formal	10	31.67%	0.9
2	Interpersonal conversation	6	11.57%	0.8
3	Group Discussion	4	9.3%	0.8
4	Public speaking	3	6.37%	0.8
	TOTAL	23 items	59.05%	0.83

Table 4.11: Items of M-PRCA in relation to the original PRCA

MALAY TRANSLATED PRCA-24



Formal Settings	Interpersonal conversations	Group discussion	Public speaking
Items 6, 8, 9, 12, 14,16, 17, 19, 21, 23	Items 7, 10, 11, 13, 15, 18	Items 1,2,3,4	Items 20, 22, 24

4.3.2. Research Question 2 : Do what extent final year students experience library, language, and communication anxieties?

4.3.2.1. What is the level of library anxiety ?

The overall mean of library anxiety level among final year students in this study is $M=72.23$, $SD=12.65$. Table 4.12 illustrated the means and standard deviations for each of the dimensions of LAS. The results revealed that the highest level of anxiety was found in the dimension Library Staff Barriers ($M=22.71$, $SD=5.69$); followed by Library Resources Barriers ($M=11.79$, $SD=3.59$); Library Services Barriers ($M=10.09$, $SD=2.63$); Affective Barriers ($M=8.73$, $SD=2.96$); and the least level of anxiety was found in dimension Internet Services Barriers ($M=7.55$, $SD=2.17$).

Table 4.12: Mean Level Of Library Anxiety Among Final Year Undergraduates

	N	Mean	SD
Overall library anxiety Mean	114	72.23	12.65
Valid N (listwise)	114		

	Library Staff Barriers	Library Services Barriers	Library Resources Barriers	Affective Barriers	Internet Services Barriers
N Valid	114	114	114	114	114
Missing	0	0	0	0	0
Mean	22.71	10.10	11.79	8.73	7.55
Std. Deviation	5.69	2.64	3.59	2.96	2.17

(a) Library Staff Barriers

The findings indicate that the final year students experienced slightly below average library anxiety level at $M=22.71$, $SD=5.69$. The minimum score is 10 while the maximum score is 50. A mean score of $M=30$ would be the cut-off score for average mean. Table 4.13 shows the score for the detailed statements of dimension Library Staff Barriers. An average of 67.5% agreed that 'library staff are helpful'. There are students who did not agree with negative statements related to library staff such as; with 'I can't get help in the library at the times I need it' (60.5%), 'library staff don't listen to students' (56.2%), 'library staff are unfriendly' (51.7%), and 'library staff don't have time to help me' (50.9%).

Table 4.13 : Detailed Statements Of Dimension Library Staff Barriers

No	Statements	SD	D	N	A	SA
1	Library staff don't have time to help students	9.6	39.5	43	7.9	0
2	Library staff don't have time to help me because they are always on the phone	9.6	40.4	46.5	3.5	0
3	Library staff don't have the time to help me because they are always busy doing something else	10.5	32.5	46.5	10.5	0
4	Library staff don't listen to students	12.3	43.0	38.6	6.1	0
5	Library staff don't have time to help me	11.4	39.5	39.5	7.0	2.6
6	I can't get help in the library at the times I need it	9.6	50.9	31.6	7.0	0.9
7	There is often no one available in the library to help me	9.6	37.7	36	14.9	1.8
8	Library staff doesn't care about students	11.4	35.1	38.6	12.3	2.6
9	Library staff are unfriendly	10.5	41.2	37.8	9.6	0.9
10	Library staff are helpful	0.9	6.1	25.5	60.5	7.0

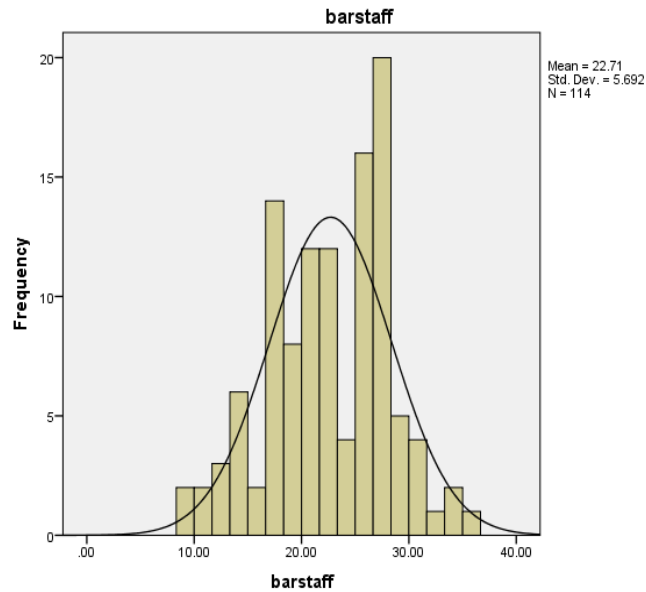


Figure 4.1 : Histogram for dimension Library Staff Barriers

(b) Library Services Barriers

The general mean for dimension library services barriers is $M=10.10$, $SD=2.64$. The findings indicated that the final year students experience an average anxiety level on the library services barriers variance of the library anxiety construct. The minimum score is 4 while the maximum score is 20. A cut-off score of $M=12$ would be the average mean score. Table 4.14 shows the score for the detailed statements of dimension Library Services Barriers. Space, services, and comfort seem to be an important factor for the students as is reflected by the high percentage of students who agreed with statements; 'the library is a comfortable place to study' (79.9%), 'the library is an important part of my learning' (72.8%), and 'always use the self-check machine to borrow books' (59.6%). The students are also comfortable with the library catalogue services as shown in statements such as, 'always use the library catalog before going to the book shelves' (84.2%), and 'they always use the library catalog when

looking for information' (84.2%). In this university where the study is conducted, Information Skills Course is a university requirement which means that almost all undergraduates are taught the know-how of using the library catalog, electronic journals and books. The effectiveness of the course is revealed here where it shows more than 80% of them use the library catalogs to look for information about books.

Table 4.14 : Detailed Statements Of Dimension Library Services Barriers

No	Statements	SD	D	N	A	SA
1	I always use the library catalog when I wish to look for information	0.9	6.1	8.8	57.0	27.2
2	I always use the library catalog before going to the book shelves	0.9	5.3	9.6	54.4	29.8
3	The library is an important part of my learning	3.5	23.7	0	57.0	15.8
4	I always use the self-check machine to borrow books	7.9	16.7	15.8	36.8	22.8
5	The library is a comfortable place to study	2.6	5.3	12.2	51.8	28.1

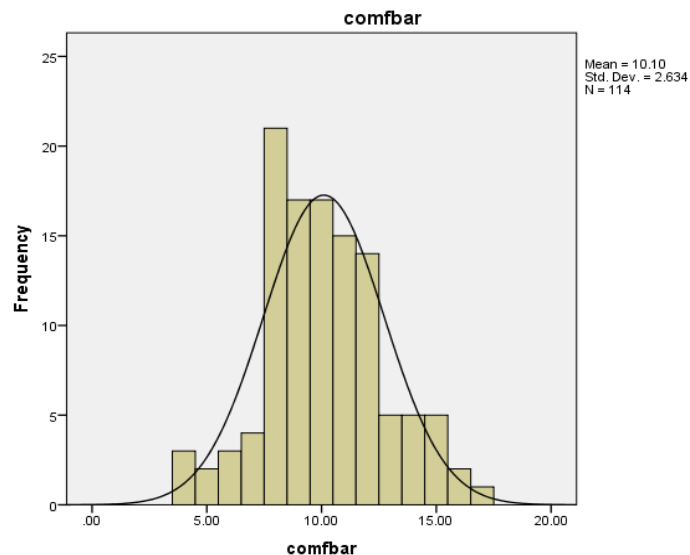


Figure 4.2 : Histogram For Dimension Library Services Barriers

(c) Library Resources Barriers

The general mean for dimension Library Resources Barriers is $M=11.80$, $SD=3.59$. The findings indicate that the final year students experience an average anxiety level of library resources barriers in the library anxiety construct. The minimum score is 5 while the maximum score is 25. A mean score of $M=15$ would be the cut-off score for average mean. Table 4.15 shows the score for the detailed statements of dimension Library Resources Barriers. The library resources barriers sub-scale revealed an encouraging sign as a high percentage of the students indicated they use the library resources in statements, 'always use the library online resources to search for materials for their project' (66.7%), and 'always use the library online resources to search for past year examination questions' (61.4%). A high percentage have also indicated that they know and have used the online resources as the disagreed in the statements, 'have never used the library online resources' (80.7%), and 'don't know how to use the library's online resources' (60.5%). The Information Skills Course which the students had attended during their first year, did prove useful as the majority of students have used the library online resources. However when students needed assistance with the library resources, only about 58.7% agreed that the 'library staff are approachable'.

Table 4.15 : Detailed Statements Of Dimension Library Resources Barriers

No	Statements	SD	D	N	A	SA
1	The library staff are approachable	4.4	8.8	28.1	49.1	9.6
2	I always use the library online resources to search for materials for my project	1.8	15.8	15.7	47.4	19.3
3	I always use the library online resources to search for past year examination questions	5.3	14.9	18.4	38.6	22.8
4	I have never used the library online resources	29.8	50.9	9.7	7.0	2.6
5	I don't know how to use the library's online services	11.4	49.1	18.4	15.8	5.3

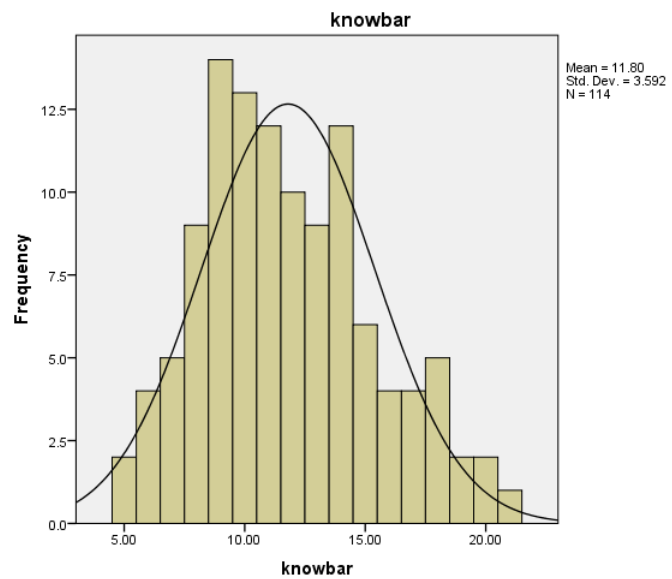


Figure 4.3 : Histogram For Dimension Library Resources Barriers

(d) Affective Barriers

The general mean for dimension Affective Barriers is $M=8.73$, $SD=2.96$. The findings indicated that the final year students experience low anxiety level of affective barriers in the library anxiety construct. The minimum score is 4 while the maximum score is 20. A mean score of $M=12$ would be the cut-off score for the average mean. Table 4.16 shows the score for the detailed statements of dimension Affective Barriers. In this case the findings show that the mean level of $M=8.73$ is 2 minus the standard deviation value of $SD=2.96$ indicating low anxiety level. It is also reflected in the high percentage of students who agreed with statements 'feel comfortable in the library' (83.3%), and 65.8% disagreed that they 'get confused trying to find way around the library'. Again, the Information Skills Course did prove useful as the majority of students are not confused looking for resources in the library and are also sure about conducting their research.

Table 4.16 : Detailed Statements Of Dimension Affective Barriers

No	Statements	*SD	D	N	A	SA
1	I get confused trying to find my way around the library	14.9	50.9	19.3	14.0	0.9
2	I feel comfortable in the library	0	5.3	11.6	65.6	17.5
3	I am unsure about how to begin my research	5.3	32.5	36.7	24.6	0.9
4	I don't know what to do when the book I need is not on the shelf	7.0	39.5	21.9	22.8	8.8

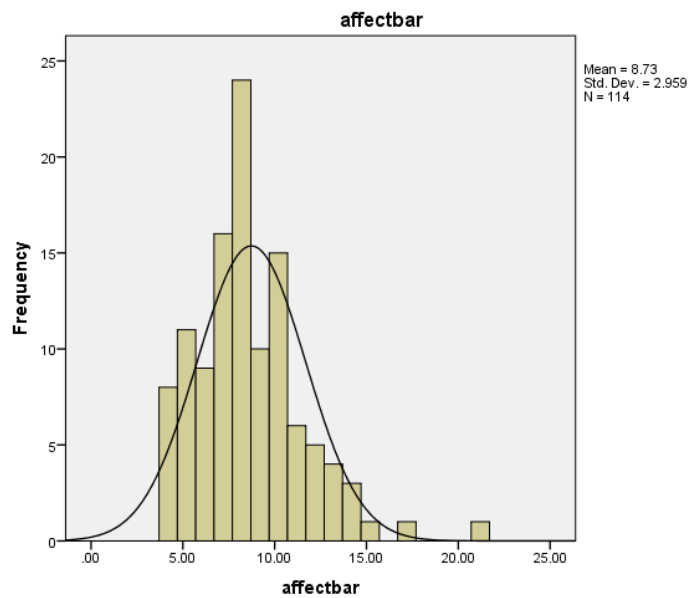


Figure 4.4 : Histogram For Dimension Affective Barriers

(e) Internet Services Barriers

The general mean for subscale Internet Services Barriers is $M=7.55$, $SD=2.17$. The findings indicated that the final year students experience an average level of internet services barriers on the library anxiety construct. The minimum score is 3 while the maximum is 15. A mean score of $M=9.00$ would be the cut-off score for the average mean. Table 4.17 shows the score for the detailed statements of dimension Internet Services Barriers. The percentage of students who agreed with 'internet service is very slow' is 57.9% agreed whereas only 22.8% disagreed. The statement 'internet services can be used anytime' was agreed by 41.3% while 37.3% disagreed. The last statement 'feel like they are bothering the library staff if they ask questions' was disagreed by 41.2% while only 22.8% feel they are bothering the library staff. This dimension revealed that internet services issues are important for students. The implication of this finding indicates that students expect more where internet services and facilities are concerned and generally feel anxious because of the lack of accessibility and availability.

Table 4.17 : Detailed Statements of Dimension Internet Services Barriers

No	Statements	*SD	D	N	A	SA
1	Internet services can be used anytime	12.3	25.4	21	32.5	8.8
2	Internet service is very slow	4.4	18.4	19.3	29.8	28.1
3	I feel like I am bothering the library staff if I ask questions often	7.0	34.2	26.3	28.1	4.4

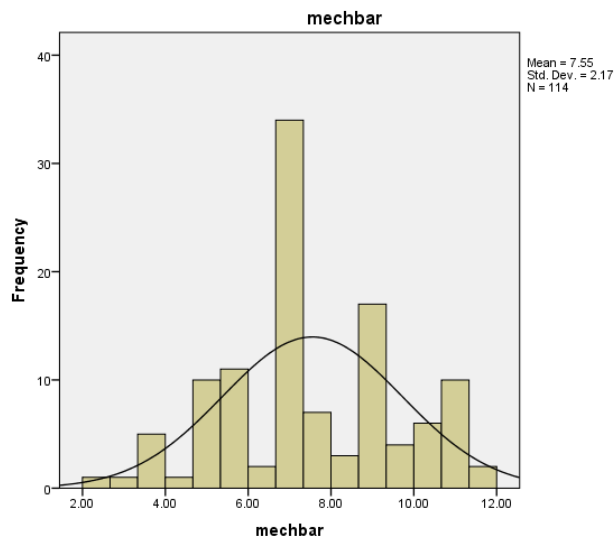


Figure 4.5: Histogram for Dimension Internet Services Barriers

4.3.2.2. What is the level of English language anxiety?

The overall mean of English language anxiety level among final year students in this study $M=87.35$, $SD=17.25$. The minimum score is 5 and the maximum 130. A mean of $M=67.5$ would be the cut-off score for the average mean. The findings indicated that the final year students in this study have an above average English language anxiety. Table 32 illustrated the means and standard deviations for each of the dimensions of English language anxiety. The results revealed that the highest level of anxiety was found in the dimension Speaking Anxiety is ($M=49.57$, $SD=12.71$); followed by Classroom Anxiety ($M=11.11$, $SD=2.77$); and the least level of anxiety in the dimension Learner anxiety ($M=8.88$, $SD=2.43$). The following section will discuss in detail the item statements.

Table 4.18: Mean Level of English Language Anxiety Among Final Year Undergraduates

	N	Mean	Std. Deviation
Overall mean of English language anxiety	114	87.35	17.25
Valid N (listwise)	114		

	Speaking Anxiety	Classroom Anxiety	Learner Anxiety
N Valid	114	114	114
Missing	0	0	0
Mean	49.5717	11.1140	8.8750
Std. Deviation	12.70964	2.76514	2.43187

(a) Speaking Anxiety

The mean for dimension speaking anxiety in the English language anxiety construct, is $M=49.57$, $SD=12.71$. The minimum score is 17 and maximum 85. A mean of $M=51$ would be the cut-off score for the average mean. Table 4.19 shows the score for the detailed statements of dimension Speaking Anxiety. The findings in this study indicated average mean level of Speaking Anxiety (within 1 SD from the mean). The indication is that students feel anxious and worried in situations which require them to speak in front of others as shown by the percentage of students who agreed in statements; students reveal that they think other students are better at languages than they are (60.6%), while 64.1% feel other students speak the foreign language better than they do, their heart begin to pound when called upon in language class (54.4%), tremble when they know they are going to be called on in language class (51.8%), and that they start to panic when they have to speak without preparation (47.9%).

Table 4.19 : Detailed Statements of Dimension Speaking Anxiety

No	Statements	SD	D	N	A	SA
1	I start to panic when I have to speak without preparation in language class.	6.1	19.3	16.7	47.4	10.5
2	I worry about the consequences of failing my foreign language class.	6.1	29.3	19	36.0	9.6
3	I can feel my heart pounding when I'm going to be called on in language class.	4.4	17.5	23.7	50.9	3.5
4	I never feel quite sure of myself when I am speaking in my foreign language class.	14.0	38.6	6.1	39.5	1.8
5	I get nervous when the language teacher asks questions which I haven't prepared in advance.	4.4	27.3	23.5	39.5	5.3
6	It frightens me when I don't understand what the teacher is saying in the foreign language.	12.3	38.6	14.9	31.6	2.6
7	I tremble when I know that I'm going to be called on in language class.	8.8	31.6	14.9	41.2	3.5
8	Language class moves so quickly I worry about getting left behind.	6.1	22.8	19.3	43.0	8.8
9	I feel very self-conscious about speaking the foreign language in front of other students.	7.9	32.5	50	39.5	2.6
10	I get nervous when I don't understand every word the language teacher says.	7.9	22.8	22.8	41.2	5.3
11	Even if I am well prepared for language class, I feel anxious about it.	7.9	34.2	24.6	30.7	2.6
12	I get upset when I don't understand what the teacher is correcting.	6.1	26.3	22.9	42.1	2.6
13	I get nervous and confused when I am speaking in my language class.	12.3	38.6	25.4	21.9	1.8
14	I am afraid that the other students will laugh at me when I speak the foreign language.	11.4	31.6	19.3	30.7	7.0
15	I always feel that the other students speak the foreign language better than I do.	3.5	9.6	22.8	55.3	8.8
16	I keep thinking that the other students are better at languages than I am.	2.6	14.9	21.9	47.4	13.2
17	It embarrasses me to volunteer answers in my language class.	9.6	32.5	21.9	34.2	1.8

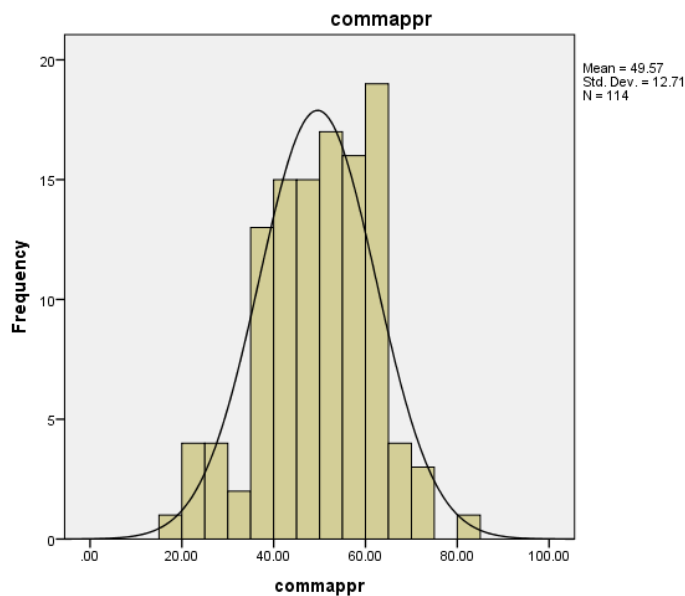


Figure 4.6 : Histogram for Dimension Speaking Anxiety

(b) Classroom Anxiety

The mean for dimension Classroom Anxiety is $M=11.11$, $SD=2.77$. The minimum score is 5 and maximum 25. A mean of $M=15$ would be the cut-off score for the average mean. The findings of this study showed below average mean for dimension Classroom Anxiety in the English language anxiety construct. Table 4.20 shows the score for the detailed statements of dimension Classroom Anxiety. The item statements however, reveal that students do not feel confident about language use and language classes. Only a mere 15.8% agreed they feel sure and relaxed on the way to language class, while 45.6% disagreed and 38.6% seem neutral. 57.9% do not feel at ease during language tests, 55.9% feel nervous speaking with native speakers and 53.5% feel pressured to prepare for language class.

Table 4.20 : Detailed Statements of Dimension Classroom Anxiety

No	Statements	SD	D	N	A	SA
1	When I'm on my way to language class, I feel very sure and relaxed.	7.0	38.6	38.6	13.2	2.6
2	I am usually at ease during <i>tests</i> in my language class.	8.8	49.1	26.3	13.2	2.6
3	I don't feel pressure to prepare very well for language class.	4.4	49.1	30.7	13.2	2.6
4	I don't understand why some people get so upset over language classes.	12.3	28.1	30.6	23.7	5.3
5	I would not be nervous speaking the foreign language with native speakers.	8.8	47.4	25.3	13.2	5.3

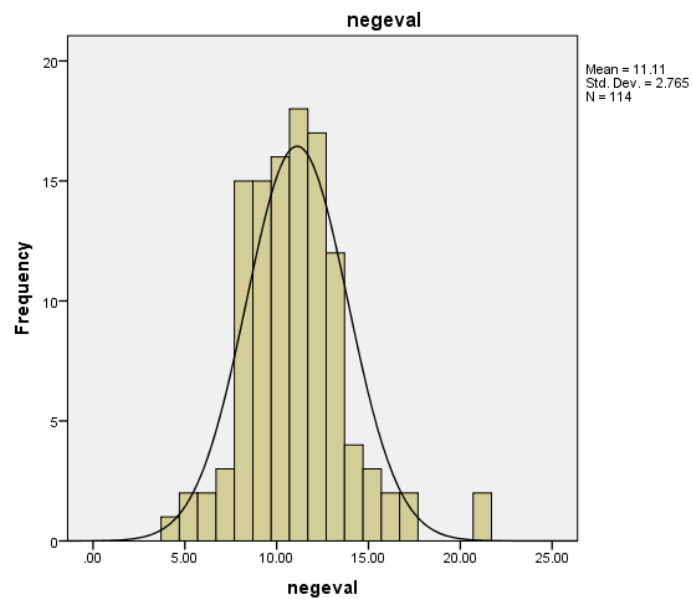


Figure 4.7 : Histogram for Dimension Classroom Anxiety

(c) Learner Anxiety

The mean for classroom anxiety is $M=8.88$, $SD=2.43$. The minimum score is 4 and maximum 20. A mean score of $M=12$ would be the cut-off score for average mean. The findings of this study showed a below average mean value for dimension Learner Anxiety of the English language anxiety construct. Table 4.21 shows the score for the detailed statements of dimension Learner Anxiety. On a general note, the individual items revealed that students do not feel much anxiety during the language class. The anxiety of using a English language seem more outside the classroom as shown in the other two dimensions, Speaking Anxiety and Learner Anxiety. More than half the students feel fine studying for language test (57.1%) and do not forget things they already know due to nervousness (50.9%). This could also be the reason why test anxiety did not surface in the factor loadings when the items were submitted for efa. Most importantly, one-third of the respondents were neutral when responding to the statements that 'they feel tense and nervous in language class than in other classes' and they 'think about things not related to the course'.

Table 4.21 : Detailed Statements of Dimension Learner Anxiety

No	Statements	SD	D	N	A	SA
1	The more I study for a language test, the more confused I get.	16.7	40.4	21	18.4	3.5
2	In language class, I can get so nervous I forget things I know.	7.9	43.0	24.5	22.8	1.8
3	During language class, I find myself thinking about things that have nothing to do with the course.	5.3	28.1	32.4	31.6	2.6
4	I feel more tense and nervous in my language class than in my other classes	10.5	34.2	21.1	33.3	0.9

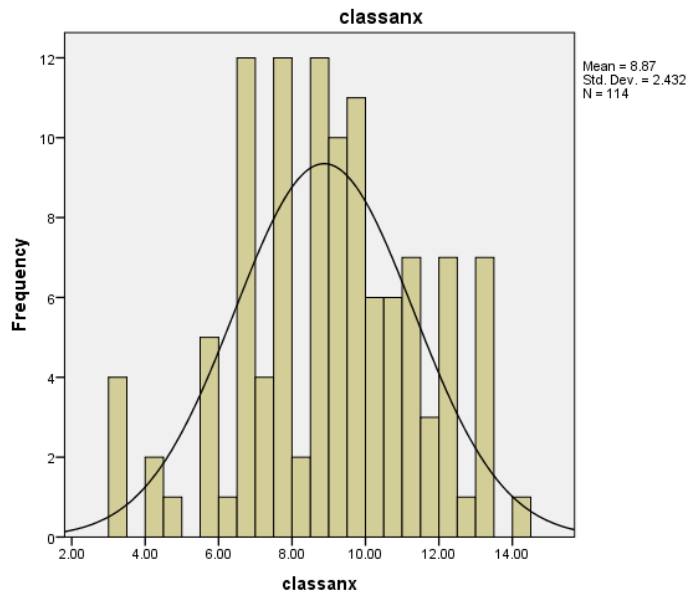


Figure 4.8 : Histogram for Dimension Learner Anxiety

4.3.2.3. What is the level of communication anxiety?

The overall mean of communication anxiety in this study is $M=59.74$, $SD=11.40$. The minimum score is 5 and maximum 115. A mean of $M=60$ would be the cut-off score for average mean. The findings of this study showed that the final years students have an average level of communication anxiety. McCroskey (1984) had indicated a score of 51-80 as moderate level of communication anxiety. Table 4.22 illustrates the means and standard deviations for each of the dimensions of communication anxiety. The results revealed that the highest level of anxiety was found in the dimension Formal Settings ($M=25.97$, $SD=5.89$), followed by Interpersonal Conversations ($M=13.07$, $SD=3.43$), Public Speaking ($M=6.99$, $SD=1.79$) and the least Group Discussion ($M=5.61$, $SD=2.01$).

Table 4.22 : Mean Level of Communication Anxiety Among Final Year Undergraduates

	N	Mean	Std. Deviation
Overall mean of communication anxiety	114	59.74	11.41
Valid N (listwise)	114		

	Formal Settings	Interpersonal Conversations	Group Discussion	Public Speaking
N Valid	114	114	114	114
Missing	0	0	0	0
Mean	25.9737	13.0658	5.6140	6.9912
Std. Deviation	5.88903	3.43414	2.01400	1.79503

(a) Formal Settings

The mean for formal is $M=25.97$ and $SD=5.89$. The minimum score is 10 and maximum 50. A mean of $M=30$ would be the cut-off score for the average mean level. Table 4.23 shows the score for the detailed statements of dimension Formal Settings. The findings in this study showed that final year students have an average level (within 1 SD) of anxiety in formal settings. On further analysis of the individual items, it is observed that students' perception of 'formal' settings includes meetings, group discussion, and conversing with new acquaintances. It could represent any area of communication where the other person may not be a familiar person. Students did not feel calm and relaxed during formal conversation (71.9%), fear speaking in formal conversations (61.4%), and feel stressful communicating in group discussions (71.0%). Merely 16.7% feel relaxed when answering questions at a meeting, 12.2% when conversing with a new acquaintance and 13.2% feel confident giving a speech. Meanwhile, more than half the students feel stress when called upon to express opinions in a formal setting (57.9%), when conversing with new acquaintance (60.6%), and during meetings (54.4%).

Table 4.23 : Detailed Statements of Dimension Formal Settings

No	Statements	SD	D	N	A	SA
1	I am very relaxed when answering questions at a meeting	8.8	40.4	34.1	15.8	0.9
2	When conversing with a new acquaintance, I feel very relaxed	8.8	51.8	27.2	9.6	2.6
3	I am calm and relaxed when I am called upon to express an opinion at a meeting	10.5	47.4	21	19.3	1.8
4	I have no fear of giving a speech	1.8	26.3	40.6	29.5	1.8
5	I feel relaxed while giving a speech	2.6	22.8	38.6	35.1	0.9
6	Usually, I am calm and relaxed while participating in meetings	8.8	45.6	29.8	14.0	1.8
7	Ordinarily I am very calm and relaxed in conversations	9.6	62.3	19.4	6.1	2.6
8	Ordinarily I am very calm and relaxed while participating in group discussions	14.0	57.0	19.3	8.8	0.9
9	I have no fear speaking up in conversations	9.6	51.8	23.7	14.0	0.9
10	I face the prospect of giving a speech with confidence	0.9	41.2	44.7	12.3	0.9

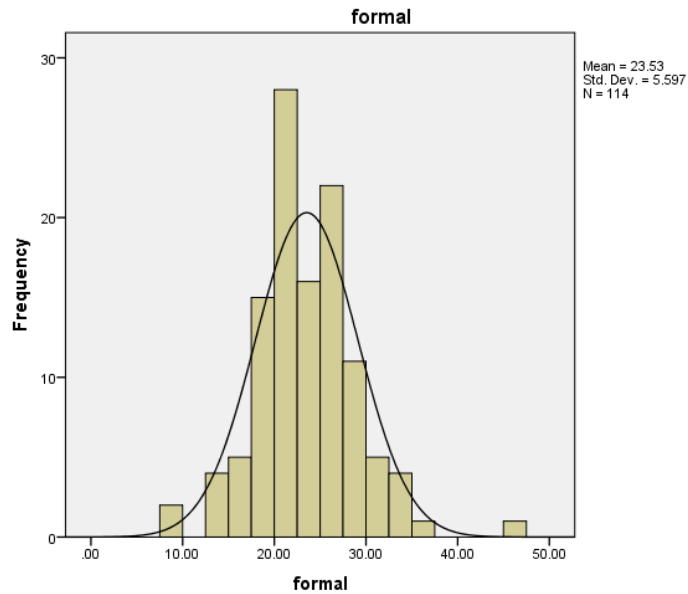


Figure 4.9 : Histogram for dimension Formal Settings

(b) Interpersonal Conversations

The mean for Interpersonal Conversation is $M=13.07$, $SD=3.43$. The minimum score is 6 and maximum 30. A mean of $M=18$ would be the cut-off score for average mean level. Table 4.24 shows the score for the detailed statements of dimension Interpersonal Conversations. The findings in this study showed that final year students have a below average level of anxiety in the Interpersonal Conversation dimension of the communication anxiety construct. The general inference from this study is that the students do not feel much anxiety in interpersonal conversations. During such conversations among people who are acquaintances or friends, 64% feel relaxed, 63.2% are ready to speak up, 55.2% can express themselves, and 51.8% feel comfortable if it is a meeting among others with whom they can have interpersonal conversations and 58.7% have no problem to converse with a new acquaintance in such circumstances.

Table 4.24 : Detailed Statements of Dimension Interpersonal Conversations

No	Statements	SD	D	N	A	SA
1	I'm afraid to speak up in conversations	8.8	54.4	27.2	9.6	0
2	I am afraid to express myself at meetings	10.5	44.7	23.7	20.2	0.9
3	Generally, I am nervous when I have to participate in a meeting	9.6	35.1	31.6	22.8	0.9
4	Ordinarily I am very tense and nervous in conversations	10.5	53.5	20.2	15.8	0
5	Communicating at meetings usually makes me uncomfortable.	8.8	43.0	28.9	18.4	0.9
6	While participating in a conversation with a new acquaintance, I feel very nervous	10.5	48.2	22	19.3	0

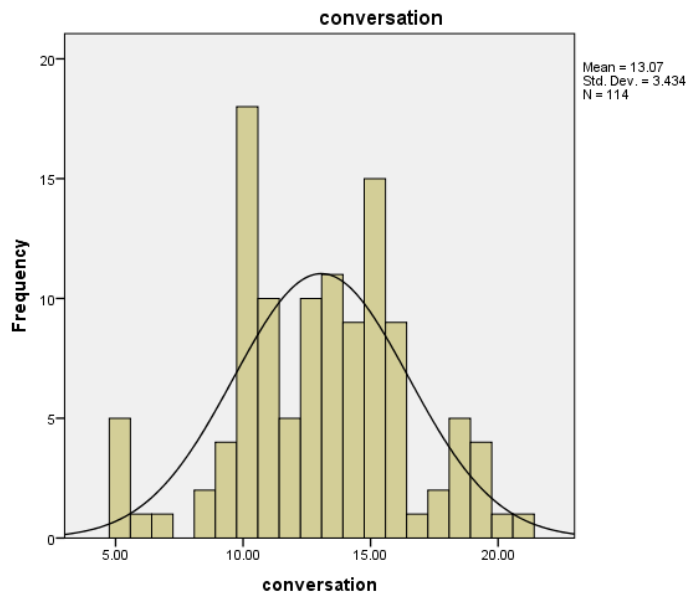


Figure 4.10 : Histogram for Dimension Interpersonal Conversations

(c) Group Discussion

The mean for Group Discussion is $M=5.61$, $SD=2.01$. The minimum score is 3 and maximum 15. A mean of $M=9$ would be the cut-off score for average mean level. Table 4.25 shows the score for the detailed statements of dimension Group Discussion. The findings in this study showed that final year students have a below average level of anxiety in the dimension Group Discussion of the communication anxiety construct. Analysis of the individual items revealed that only a third of the respondents feel anxiety during group discussions . 33.3% do not like to get involved in group discussions while 30.7% do not mind. Similarly, 29.8% feel uncomfortable while 33.3% feel comfortable when participating in group discussions. 29.9% like participating while 31.6% do not.

Table 4.25 : Detailed Statements of Dimension Group Discussion

No	Statements	SD	D	N	A	SA
1	I like to get involved in group discussions	3.5	29.8	36	28.9	1.8
2	Generally, I am comfortable while participating in group discussions	4.4	25.4	36.9	28.9	4.4
3	I dislike participating in group discussions	5.3	24.6	38.5	28.1	3.5

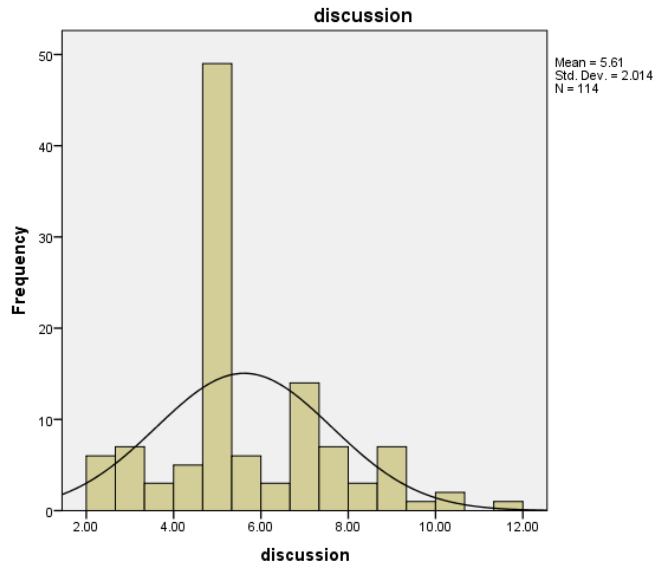


Figure 4 .11 : Histogram for Dimension Group Discussion

(d) Public Speaking

The mean for Public Speaking is $M=6.99$, $SD=1.80$. The minimum score is 3 and maximum 15. A mean of $M=9$ would be the cut-off score for average mean level. Table 4.26 shows the score for the detailed statements of dimension Public Speaking. The findings in this study showed that final year students have a below average level of anxiety in the dimension Public Speaking of communication anxiety. Surprisingly, only a small percent of the respondents feel anxious during public speaking. A mere 15% feel confused and jumbled when giving a speech while 66.% do not. 16.7% feel tense when giving a speech while 65.8% do not, and 19.3% forget facts while giving a speech whereas 60.9% do not.. Since these are undergraduates, the necessity to do public speaking is minimal. Moreover, three of the statements related to public speaking

have loaded into the formal dimension indicating that the perception of students' regarding public speaking is speaking in formal settings or meetings.

Table 4.26 : Detailed Statements of Dimension Public Speaking

No	Statements	SD	D	N	A	SA
1	My thoughts become confused and jumbled when I am giving a speech	10.5	56.1	18.4	13.2	1.8
2	Certain parts of my body feel very tense and rigid while giving a speech	13.2	52.6	17.5	13.2	3.5
3	While giving a speech, I get so nervous I forget facts I really know	15.8	45.1	19.8	15.8	3.5

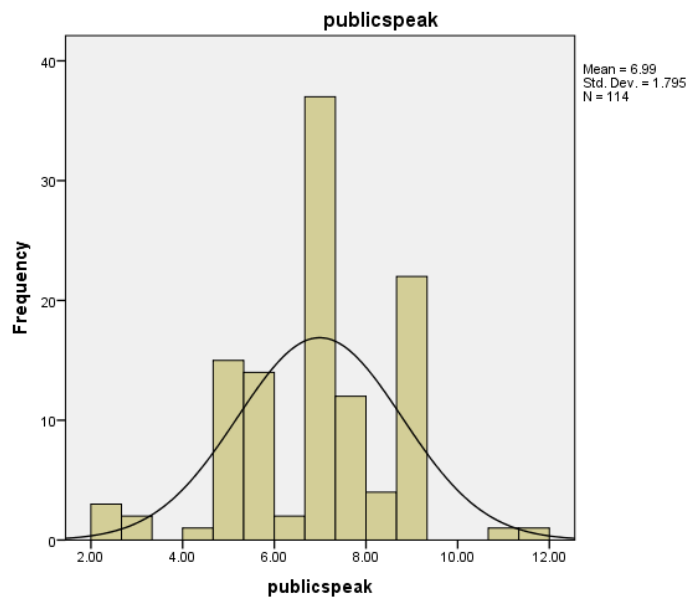


Figure 4.12 : Histogram for Dimension Public Speaking

4.3.3. Research Question 3: Are there statistically significant mean differences in the levels of library, language, and communication anxieties between male and female students?

Normality tests were conducted on each of the above scales to determine whether it was appropriate to conduct a parametric or non-parametric test. The results of running Kolmogorov-Smirnov test and Shapiro-Wilk tests revealed library anxiety scale and its dimensions to be NOT normally distributed. This means that the overall M-LAS as well as its dimensions cannot be used when running parametric inferential tests. Subsequently, only non-parametric tests were used to test the relevant hypotheses.

The results of running normality tests using Kolmogorov-Smirnov and Shapiro-Wilk tests showed that the overall M-PRCA as well as its dimensions cannot be used when running parametric inferential tests. Hence, only non-parametric tests were used to test the relevant hypotheses.

The results of running normality tests using Kolmogorov-Smirnov and Shapiro-Wilk tests showed the M-ELCAS and its dimensions to be normally distributed. Hence, the overall M-ELCAS and its dimensions can be used when running parametric inferential tests.

The normality tests for the above mentioned scales and their dimensions using Kolmogorov-Smirnov and Shapiro-Wilk tests are shown in Table 4.27.

Table 4.27 Normality tests Using Kolmogorov-Smirnov and Shapiro-Wilk tests for the scales M-LAS, M-ECLAS, M-PRCA and their dimensions

	Statistics	P Value
M-LAS Dimensions		
Library Staff Barriers	0.125	0.000
Library Services Barriers	0.108	0.002
Library Resources Barriers	0.105	0.003
Affective Barriers	0.132	0.000
Internet Services Barriers	0.110	0.002
M-ECLAS Dimensions		
Speaking Anxiety	0.079	0.074
Classroom Anxiety	0.076	0.102
Learner Anxiety	0.062	0.200
M-PRCA Dimensions		
Formal Settings	0.074	0.046
Interpersonal Conversations	0.085	0.041
Group Discussion	0.234	0.000
Public Speaking	0.125	0.000

4.3.3.1. Are there statistically significant mean differences in the levels of library, anxiety between male and female students?

Table 4.28 : Mann–Whitney U Test Results for the Effect of Gender on Overall Library Anxiety

Gender	N	Mean Rank	μ	P
Male	42	53.57	1347.00	0.33
Female	72	59.79		

The results of running a Mann-Whitney U test revealed no statistically significant mean rank difference existed in overall library anxiety, $U = 1347.00$, $p > 0.05$ between males (M.R = 53.57) and females (M. R = 59.79).

(a) Are there statistically significant mean differences in the level of Library Staff Barriers of library anxiety between male and female students?

Table 4.29 : Mann–Whitney U Test Results for the Effect of Gender on Dimension Library Staff Barriers

Gender	N	Mean Rank	μ	P
Male	42	57.62	1507.000	0.977
Female	72	57.43		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Library Staff Barriers, $U = 1507.000$, $p > 0.05$, between males (M. R = 57.62) and females (M. R = 57.43).

(b) Are there statistically significant mean differences in the level of Affective Barriers of library anxiety between male and female students?

Table 4.30 : Mann–Whitney U Test Results for the Effect of Gender on Dimension Affective Barriers

Gender	N	Mean Rank	μ	P
Male	42	61.24	1355.000	0.355
Female	72	55.32		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Affective Barriers, $U = 1355.000$, $p > 0.05$, between males (M. R = 61.24) and females (M. R = 55.32).

(c) Are there statistically significant mean differences in the level of Library Resources Barriers of library anxiety between male and female students?

Table 4.31 : Mann–Whitney U Test Results for the Effect of Gender on Dimension Library Resources Barriers

Gender	N	Mean Rank	μ	P
Male	42	63.50	1260.000	0.137
Female	72	54.00		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Library Resources Barriers, $U = 1260.000$, $p > 0.05$, between males (M. R = 63.50) and females (M. R = 54.00).

(d) Are there statistically significant mean differences in the level of Library Services Barriers of library anxiety between male and female students?

Table 4.32 : Mann–Whitney U Test Results for the Effect of Gender on Dimension Library Services Barriers

Gender	N	Mean Rank	μ	P
Male	42	53.04	1324.000	0.267
Female	72	60.10		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Library Services Barriers, $U = 1324.000$, $p > 0.05$, between males (M. R = 53.04) and females (M. R = 60.10).

(e) Are there statistically significant mean differences in the level of Internet Services Barriers of library anxiety between male and female students?

Table 4.33 : Mann–Whitney U Test Results for the Effect of Gender on Dimension Internet Services Barriers

Gender	N	Mean Rank	μ	P
Male	42	54.92	1403.500	0.523
Female	72	59.01		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Internet Services Barriers, $U = 1403.500$, $p > 0.05$, between males (M. R = 54.92) and females (M. R = 59.01).

4.3.3.2. Are there statistically significant mean differences in the dimensions of English language anxiety between male and female students?

Table 4.34 : T-Test Results for the Overall English Language Anxiety Between Male and Female Students

Gender	N	Mean	SD	t	Df	Sig
Male	42	82.98	15.91	- 0.66	112	0.5
Female	72	85.09	16.91			

The results of running an independent sample t-test revealed that no statistically significant mean differences existed [t(112) = - 0.657, p>0.05] between male (M=82.98, SD=15.91) and female (M=85.09, SD=16.91) final year undergraduates scores on overall mean of English language anxiety.

(a) Are there statistically significant mean differences in the level of Speaking Anxiety of English language anxiety between male and female students?

Table 4.35 :T-test Results for the Effect of Gender on Dimension Speaking Anxiety

Gender	N	Mean	SD	t	Df	Sig.
Male	42	47.41	13.01	- 1.39	112	0.46
Female	72	50.83	12.45			

The results of running an independent sample t-test revealed that no statistically significant mean differences existed [t(112) = -1.393, p>0.05] between male (M=47.41, SD=13.01) and female (M=50.83, SD=12.45) final year undergraduates with regard to their scores on dimension Speaking Anxiety of English language anxiety construct.

(b). Are there statistically significant mean differences in the level of Classroom Anxiety of English language anxiety between male and female students?

Table 4.36 : T-test results for the Effect of Gender on Dimension Classroom Anxiety

Gender	N	Mean	SD	t	Df	Sig.
Male	42	11.29	2.50	0.54	96.68	0.04
Female	72	11.01	2.92			

The results of running an independent sample t-test revealed a statistically significant mean differences existed [$t(96.68) = 0.54, p > 0.05$] between male ($M=11.29, SD=2.50$) and female ($M=11.01, SD=2.92$) final year undergraduates with regard to their scores on Classroom Anxiety of English language anxiety construct.

(c). Are there statistically significant mean differences in the level of Learner Anxiety of English language anxiety between male and female students?

Table 4.37 : T-test results for the Effect of Gender on Dimension Learner Anxiety

Gender	N	Mean	SD	t	Df	Sig.
Male	42	8.99	2.55	0.40	112	0.68
Female	72	8.81	2.37			

The results of running an independent sample t-test revealed that no statistically significant mean differences existed [$t(112) = 0.398, p > 0.05$] between male ($M=8.99, SD=2.55$) and female ($M=8.81, SD=2.37$) final year undergraduates with regard to their scores on dimension Learner Anxiety of English language anxiety construct .

4.3.3.3 Are there statistically significant mean differences in the dimensions of communication anxiety between male and female students?

Table 4.38 : Mann–Whitney U Test Results for the Effect of Gender on Overall Communication Anxiety

Gender	N	Mean Rank	μ	P
Male	42	57.35	1505.000	0.970
Female	72	57.59		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in overall communication anxiety, $U = 1505.000$, $p > 0.05$, between males (M. R = 57.35) and females (M. R = 57.59).

(a). Are there statistically significant mean differences in the level of Formal Settings of communication anxiety between male and female students?

Table 4.39 : Mann–Whitney U Test Results for the Effect of Gender on dimension Formal Settings

Gender	N	Mean Rank	μ	P
Male	42	54.62	1391.000	0.477
Female	72	59.18		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Formal settings, $U = 1391.000$, $p > 0.05$, between males (M. R = 54.62) and females (M. R = 59.18).

(b). Are there statistically significant mean differences in the level of Interpersonal Conversations of communication anxiety between male and female students?

Table 4.40 : Mann–Whitney U Test Results for the Effect of Gender on dimension Interpersonal Conversations

Gender	N	Mean Rank	μ	P
Male	42	54.33	1379.000	0.434
Female	72	59.35		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Interpersonal Conversations, $U = 1379.000$, $p > 0.05$, between males (M. R = 54.33) and females (M. R = 59.35).

(c). Are there statistically significant mean differences in the level of Group Discussion of communication anxiety between male and female students?

Table 4.41 : Mann–Whitney U Test Results for the Effect of Gender on dimension Group Discussion

Gender	N	Mean Rank	μ	P
Male	42	61.88	1328.000	0.267
Female	72	54.94		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Group Discussion, $U = 1328.000$, $p > 0.05$, between males (M. R = 61.88) and females (M. R = 54.94).

(d). Are there statistically significant mean differences in the level of Public Speaking of communication anxiety between male and female students?

Table 4.42 : Mann–Whitney U Test Results for the Effect of Gender on dimension Public Speaking

Gender	N	Mean Rank	μ	P
Male	42	52.65	1308.000	0.229
Female	72	60.33		

The results of running a Mann Whitney U test revealed no statistically significant mean difference existed in Public Speaking, $U = 1308.000$, $p > 0.05$, between males (M. R = 52.65) and females (M. R = 60.33).

4.3.4. Research Question 4: Are there differences in the levels of library, language, and communication anxieties among students who use English, Malay, Chinese, Tamil, and Other Languages as their dominant language?

A series of Kruskal-Wallis H tests were employed to investigate if any statistically significant mean difference existed in the various dimensions of library anxiety, English language anxiety, and communication anxiety among students who use different languages commonly used in Malaysia as their dominant language. The languages identified for this study are; English, Malay, Chinese, Tamil, and Other Languages. The following section reports the mean differences in the dimensions of the three student related anxieties and the dominant language used.

4.3.4.1. Are there statistically significant mean differences in the overall level of library anxiety and the dominant language used?

Table 4.43 : Kruskal-Wallis H Test for the Effect of Dominant Language on Overall Library Anxiety

Language	N	MR	χ^2	P value
English	26	34.25	15.73	0.000
Malay	69	67.20		
Chinese	16	62.53		
Tamil	1	1.00		
Other Languages	2	13.00		

The results of running a Krushall-Wallis H test showed a statistically significant mean rank difference existed in overall library anxiety, $\chi^2 = 15.73$, $p < 0.01$, among students whose dominant language is English (M.R = 34.25), Malay (M.R = 67.20), Chinese (M. R = 62.53), Tamil (M.R = 1.00), and Other Languages (M. R = 13.00)

(a). Is there a statistically significant mean difference in the dimension of Library Staff Barriers of library anxiety and the dominant language used?

Table 4.44 : Kruskal-Wallis H test for the Effect of Dominant Language on Dimension Library Staff Barriers

Language	N	MR	χ^2	P value
English	26	51.02	4.116	0.391
Malay	69	59.57		
Chinese	16	61.72		
Tamil	1	5.00		
Other Languages	2	62.75		

The results of running a Krushall-Wallis H test showed no statistically significant mean rank difference existed in dimension Library Staff Barriers, $\chi^2 = 4.116$, $p > 0.05$, among students whose dominant language is English (M.R = 51.02), Malay (M.R = 59.57), Chinese (M. R = 61.72), Tamil (M.R = 5.00), and Other Languages (M. R = 62.75).

(b). Is there a statistically significant mean difference in the dimension of Affective Barriers of library anxiety and the dominant language used?

Table 4.45 : Kruskal-Wallis H test for the Effect of Dominant Language on Dimension Affective Barriers

Language	N	MR	χ^2	P value
English	26	61.10	9.237	0.055
Malay	69	52.79		
Chinese	16	75.69		
Tamil	1	4.00		
Other Languages	2	54.50		

The results of running a Kruskal-Wallis H test showed no statistically significant mean difference existed, in dimension Affective Barriers, $\chi^2 = 9.237$, $p > 0.05$. among students whose dominant language is English (M.R = 61.10), Malay (M.R = 52.79), Chinese (M. R = 75.69), Tamil (M.R = 4.00), and Other Languages (M. R = 54.50).

(c). Is there a statistically significant mean difference in the dimension Library Resources Barriers of library anxiety and the dominant language used?

Table 4.46 : Kruskal-Wallis H test for the Effect of Dominant Language on Dimension Library Resources Barriers

Language	N	MR	χ^2	P value
English	26	52.69	11.162	0.025
Malay	69	57.23		
Chinese	16	75.16		
Tamil	1	4.50		
Other Languages	2	14.50		

The results of running a Kruskal-Wallis H test showed a statistically significant mean rank difference existed in dimension Library Resources Barriers, $\chi^2 = 11.162$, $p < 0.05$, among students whose dominant language is English (M.R = 52.69), Malay (M.R = 57.23), Chinese (M. R = 75.16), Tamil (M.R = 4.50), and Other Languages (M. R = 14.50).

(d). Is there a statistically significant mean difference in the dimension of Library Services Barriers of library anxiety and the dominant language used?

Table 4.47 : Kruskal-Wallis H Test for the Effect of Dominant Language On Dimension Library Services Barriers

Language	N	MR	χ^2	P value
English	26	51.54	5.779	0.216
Malay	69	59.92		
Chinese	16	63.34		
Tamil	1	2.00		
Other Languages	2	32.50		

The results of running a Kruskal-Wallis H test showed no statistically significant mean rank difference existed in dimension Library Services Barriers, $\chi^2 = 5.779$, $p > 0.05$ among students whose dominant language is English (M.R = 51.54), Malay (M.R = 59.92), Chinese (M. R = 63.34), Tamil (M.R = 2.00), and Other Languages (M. R = 32.50).

(e). Is there a statistically significant mean difference in the level of Internet Services of library anxiety and the dominant language used?

Table 4.48 : Kruskal-Wallis H Test for the Effect of Dominant Language on Dimension Internet Services Barriers

Language	N	MR	χ^2	P value
English	26	51.54	6.865	0.143
Malay	69	57.23		
Chinese	16	63.66		
Tamil	1	30.50		
Other Languages	2	108.50		

The results of running a Kruskal-Wallis H test showed no statistically significant mean rank difference existed in dimension Internet Services Barriers, $\chi^2 = 6.865$, $p > 0.05$ among students whose dominant language is English (M.R = 51.54), Malay (M.R = 57.23), Chinese (M. R = 63.66), Tamil (M.R = 30.50), and Other Languages (M. R = 108.50).

4.3.4.2. Are there statistically significant mean differences in the level of English language anxiety and dominant language used?

The findings revealed that there is a statistically significant mean difference between the dominant language used and the level of English language anxiety. Students who use the Malay language as their dominant language, are found to have the highest levels of English language anxiety (M=88.84), followed by Chinese (M=87.23), English (M=73.90), Other Languages (M=60.55), and Tamil (M=44.03). A significant mean difference was also revealed in dimension Speaking Anxiety Classroom Anxiety, and Learner Anxiety. In dimension Speaking Anxiety, students who use Malay as their dominant language show the highest level of anxiety. In dimension Classroom Anxiety, students who use Chinese as their dominant language show the highest level of anxiety, and for dimension Learner Anxiety, students who use Malay, Chinese, and English, show a high level of anxiety.

The results of running a one way ANOVA reveal that a statistically significant mean difference existed [$F(4, 109) = 8.19, p < 0.01$] on the overall English language anxiety among students who use English (M=73.89, SD=14.05), Malay (M=88.83, SD=15.68), Chinese (M=87.23, SD=10.66), Tamil (M=44.03), and Other Languages (M=60.55, SD=17.70).

Table 4.49 : ANOVA Results For The Effect Of Dominant Language Used On The Overall English Language Anxiety

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7123.070	4	1780.768	8.194	0.000
Within Groups	23689.450	109	217.334		
Total	30812.520	113			

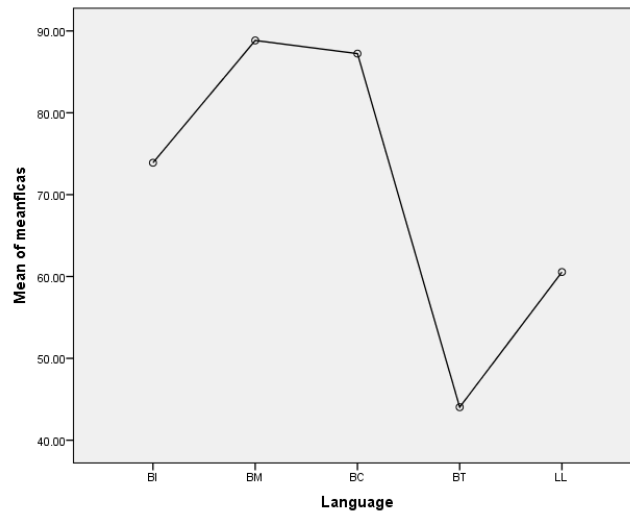


Figure 4.13 : ANOVA Means Plot For Overall Mean Of English Language Anxiety Associated With Dominant Language

*Language: BI – English, BM – Malay, BC – Chinese, BT – Tamil, LL - Others

(a). Is there a significant mean difference in the level of Speaking Anxiety dimension of English language anxiety and dominant language used?

The results of running a one way ANOVA revealed that a statistically significant mean difference existed [$F(4, 109) = 8.93, p < 0.05$] among students who English as their dominant language ($M=40.73, SD=11.43$), than others who use Malay ($M=53.51, SD=11.64$), Chinese ($M=50.79, SD=8.90$), Tamil ($M=20.12$), Other languages ($M=33.65, SD=9.32$) as a result of Speaking Anxiety dimension of language anxiety.

Table 4.50 : ANOVA Results For The Effect Of Dominant Language On Dimension Speaking Anxiety

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4506.36	4	1126.59	8.93	0.00
Within Groups	13747.10	109	126.12		
Total	18253.46	113			

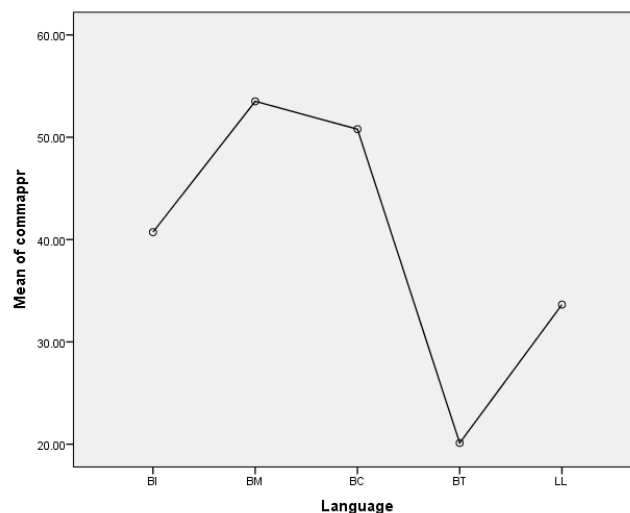


Figure 4.14 : ANOVA Means Plot For Dimension Speaking Anxiety Associated With Dominant Language

*Language: BI – English, BM – Malay, BC – Chinese, BT – Tamil, LL - Others

(b). Is there a significant mean difference in the level of Classroom Anxiety dimension of English language anxiety and dominant language used?

The results of running one way ANOVA revealed that a statistically significant mean difference existed, [F(4, 109)=3.30, p>0.05] among students who English as their dominant language (M=10.29, SD=3.46), than others who use Malay (M=11.30, SD=2.41), Chinese (M=12.39, SD=2.18), Tamil (M=8.20), Other languages (M=6.70, SD=2.40) as a result of dimension Classroom Anxiety of language anxiety.

Table 4.51: ANOVA Results For The Effect Of Dominant Language On Dimension Classroom Anxiety

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	93.31	4	23.33	3.30	0.01
Within Groups	770.69	109	7.07		
Total	863.99	113			

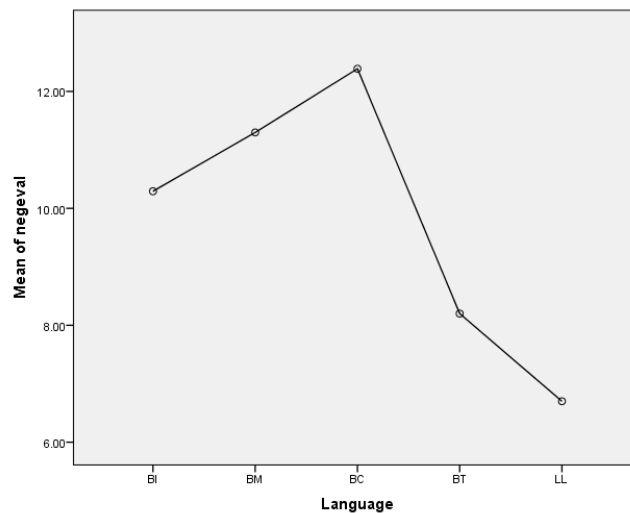


Figure 4.15: ANOVA Means Plot For Dimension Classroom Anxiety Associated With Dominant Language

*Language: BI – English, BM – Malay, BC – Chinese, BT – Tamil, LL - Others

(c). Is there a significant mean difference in the level of Learner Anxiety dimension of English language anxiety and dominant language used?

The results of running a one way ANOVA revealed that a statistically significant mean difference existed, [F (4, 109)=2.71, p<0.05] among students who English as their dominant language (M=8.73, SD=2.50), than others who use Malay (M=9.11, SD=2.34), Chinese (M=8.89, SD=2.15), Tamil (M=3.25), Other languages (M=5.38, SD=3.01) as a result of dimension Learner Anxiety of language anxiety.

Table 4.52 : ANOVA Results For The Effect Of Dominant Language On Dimension Learner Anxiety

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	60.45	4	15.11	2.71	0.03
Within Groups	607.83	109	5.58		
Total	668.28	113			

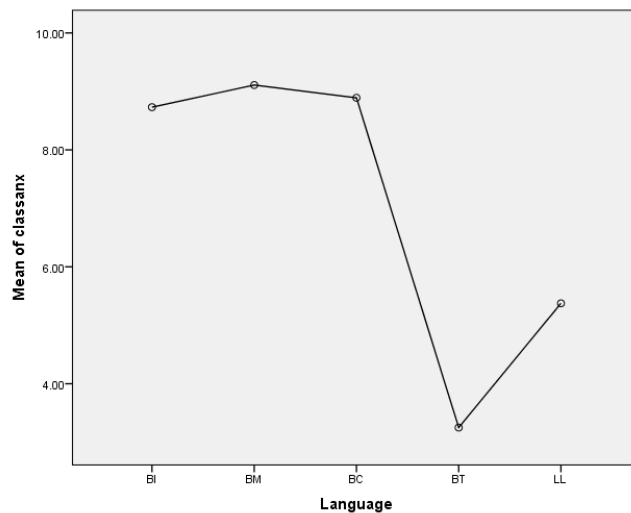


Figure 4.16 : ANOVA Means Plot For Dimension Learner Anxiety Associated With Dominant Language

*Language: BI – English, BM – Malay, BC – Chinese, BT – Tamil, LL - Others

4.3.4.3. Are there statistically significant mean differences in the level of communication anxiety and dominant language used?

Table 4.53 : Kruskal-Wallis H Test for the Effect of Dominant Language on Overall Communication Anxiety

Language	N	MR	χ^2	P value
English	26	54.98	11.439	0.022
Malay	69	54.36		
Chinese	16	80.34		
Tamil	1	4.00		
Other Languages	2	42.75		

The results of running a Kruskal-Wallis H test showed a statistically significant mean rank difference existed in overall communication anxiety, $\chi^2 = 11.439, p < 0.01$ among students whose dominant language is English (M.R = 54.98), Malay (M.R = 54.36), Chinese (M. R = 80.34), Tamil (M.R = 4.00), and Other Languages (M. R = 42.75).

(a). Is there a statistically significant mean difference in the Formal Settings dimension of communication anxiety and dominant language used?

Table 4.54 : Kruskal-Wallis H Test For The Effect Of Dominant Language On Dimension Formal Settings

Language	N	MR	χ^2	P value
English	26	53.54	8.790	0.067
Malay	69	57.07		
Chinese	16	73.41		
Tamil	1	5.50		
Other Languages	2	22.75		

The results of running a Kruskal-Wallis H test showed no statistically significant mean rank difference existed in dimension Formal Settings, $\chi^2 = 8.790$, $p > 0.05$, among students whose dominant language is English (M.R = 53.54), Malay (M.R = 57.07), Chinese (M. R = 73.41), Tamil (M.R = 5.50), and Other Languages (M. R = 22.75).

(b). Is there a statistically significant mean difference in the Interpersonal Conversations dimension of communication anxiety and dominant language used?

Table 4.55 : Kruskal-Wallis H Test For The Effect Of Dominant Language On Dimension Interpersonal Conversations

Language	N	MR	χ^2	P value
English	26	54.75	10.773	0.029
Malay	69	54.49		
Chinese	16	79.53		
Tamil	1	3.00		
Other Languages	2	48.25		

The results of running a Kruskal-Wallis H test showed a statistically significant mean rank difference existed in dimension Interpersonal Conversations, $\chi^2 = 10.773$, $p < 0.01$, among students whose dominant language is English (M.R = 54.75), Malay (M.R = 54.49), Chinese (M. R = 79.53), Tamil (M.R = 3.00), and Other Languages (M. R = 48.25).

(c). Is there a statistically significant mean difference in the Group Discussion dimension of communication anxiety and dominant language used?

Table 4.56 : Kruskal-Wallis H Test For The Effect Of Dominant Language On Dimension Group Discussion

Language	N	MR	χ^2	P value
English	26	60.02	12.876	0.012
Malay	69	51.83		
Chinese	16	77.97		
Tamil	1	3.50		
Other Languages	2	83.50		

The results of running a Kruskal-Wallis H test showed a statistically significant mean rank difference existed in dimension Group Discussion, $\chi^2 = 12.876$, $p < 0.01$, among students whose dominant language is English (M.R = 60.02), Malay (M.R = 51.83), Chinese (M. R = 77.97), Tamil (M.R = 3.50), and Other Languages (M. R = 83.50).

(d). Is there a statistically significant mean difference in the Public Speaking dimension of communication anxiety and dominant language used?

Table 4.57 : Kruskal-Wallis H Test For The Effect Of Dominant Language On Dimension Public Speaking

Language	N	MR	x^2	P value
English	26	55.19	6.025	0.197
Malay	69	55.72		
Chinese	16	73.63		
Tamil	1	24.00		
Other Languages	2	36.75		

The results of running a Kruskal-Wallis H test showed no statistically significant mean rank difference existed in dimension Public Speaking, $x^2 = 6.025$, $p > 0.05$, among students whose dominant language is English (M.R = 55.19), Malay (M.R = 55.72), Chinese (M. R = 73.63), Tamil (M.R = 24.00), and Other Languages (M. R = 36.75).

4.3.5. Research Question 5 : Are there statistically significant relationships among the dimensions of English language anxiety and library anxiety?

Correlation analysis was performed on each of the five dimensions of library anxiety and three dimensions of English language anxiety. The results of running Spearman's Rho among the dimensions of the two anxieties revealed that only dimension Library Services Barriers of Library Anxiety had a correlation with dimension Learner Anxiety of English Language Anxiety.

Table 4.58 : Correlations Among Dimensions Of English Language Anxiety And Library Anxiety

Dimensions of library anxiety	Dimensions of English language anxiety		
	Speaking Anxiety	Classroom Anxiety	Learner Anxiety
Library Staff Barriers	0.063	- 0.019	0.140
Library Services Barriers	0.151	0.087	0.263*
Library Resources Barriers	0.062	0.163	- 0.032
Affective Barriers	- 0.145	0.127	- 0.053
Internet Services Barriers	0.035	- 0.032	- 0.007

* $p < 0.05$,

(a). Are there statistically significant relationships between the dimension of Speaking Anxiety of English language anxiety and the dimensions of library anxiety?

Using a non-parametric test called Spearman's rho, no significant relationships was found to exist between Speaking Anxiety of English language anxiety and dimension Library Staff Barriers ($r_s = 0.63$, $p > 0.05$), Library Services Barriers ($r_s = 0.151$, $p > 0.05$), Library Resources Barriers ($r_s = 0.62$, $p > 0.05$), Affective Barriers ($r_s = 0.145$, $p > 0.05$), and Internet Services Barriers ($r_s = 0.035$, $p > 0.05$) of library anxiety.

(b). Are there statistically significant relationships between the dimensions of Classroom Anxiety of English language anxiety and the dimensions of library anxiety?

Using a non-parametric test called Spearman's rho, no significant relationship was found to exist between Classroom Anxiety of English language anxiety and dimension Library Staff Barriers ($r_s = 0.19$, $p > 0.05$), Library Services Barriers ($r_s = 0.067$, $p > 0.05$), Library Resources Barriers ($r = 0.163$, $p > 0.05$), Affective Barriers ($r_s = 0.127$, $p > 0.05$), and Internet Services Barriers ($r_s = 0.032$, $p > 0.05$) of library anxiety.

(c). Are there statistically significant relationships between the dimension Learner Anxiety of English language anxiety and the dimensions of of library anxiety?

Using a non-parametric test called Spearman's rho, a significant relationship was found to exist between dimension Learner Anxiety of English language anxiety and dimension Library Services Barriers ($r_s = 0.263$, $p < 0.05$) of library anxiety.

No significant relationship was found to exist between dimension Learner Anxiety of English language anxiety and dimensions Library Staff Barriers ($r_s = 0.140$, $p > 0.05$), Library Resources Barriers ($r_s = 0.032$, $p > 0.05$), Affective Barriers ($r_s = 0.053$, $p > 0.05$), and Internet Services Barriers ($r_s = 0.007$, $p > 0.05$) of library anxiety.

4.3.6. Research Question 6 : Are there statistically significant relationships among the dimensions of communication anxiety and library anxiety?

Table 4.59 : Correlations Among The Dimensions Of Communication Anxiety And Library Anxiety

	Dimensions of communication anxiety			
Dimensions of library anxiety	Formal Settings	Interpersonal Conversations	Group Discussion	Public Speaking
Library Staff Barriers	0.213*	0.310**	0.090	0.201*
Library Services Barriers	0.292**	0.330**	0.085	0.269**
Library Resources Barriers	0.220*	0.088	0.211*	0.034
Affective barriers	0.257*	0.182	0.243**	0.013
Internet Services barriers	0.082	0.048	0.214*	- 0.112

** p<0.05, ** p<0.01*

Correlation analysis was performed on each of the five dimensions of library anxiety and the four dimensions of communication anxiety. The results of running a non-parametric test called Spearman's rho among the dimensions of the two anxieties revealed that all the five dimensions of communication anxiety correlated with at least one of the dimensions of library anxiety.

(a). Are there statistically significant relationships between the dimension Formal Settings of communication anxiety and the dimensions of library anxiety?

Using a non-parametric test called Spearman's rho, a significant relationship was found to exist between dimension Formal Settings of communication anxiety and dimensions Library Staff Barriers ($r_s = 0.213$, $p < 0.05$), Library Services Barriers ($r_s = 0.292$, $p < 0.01$), Library Resources Barriers ($r_s = 0.220$, $p < 0.05$), and Affective Barriers ($r_s = 0.257$, $p < 0.05$) of library anxiety.

No significant relationship was found to exist between dimension Formal Settings of communication anxiety and dimension Internet Services Barriers ($r_s = 0.082$, $p > 0.05$) of library anxiety.

(b). Are there statistically significant relationships between the dimension Interpersonal Conversations of communication anxiety and the dimensions of library anxiety?

Using a non-parametric test called Spearman's rho, a significant relationship was found to exist between dimension Interpersonal Conversation of communication anxiety and dimensions Library Staff Barriers ($r_s = 0.310$, $p < 0.01$), and Library Services Barriers ($r_s = 0.330$, $p < 0.01$) of library anxiety.

No significant relationships were found to exist between dimension Interpersonal Conversations of communication anxiety and dimensions Library Resources Barriers

($r_s = 0.088$, $p > 0.05$), Affective Barriers ($r_s = 0.182$, $p > 0.05$), and Internet Services Barriers ($r_s = 0.048$, $p > 0.05$) of library anxiety.

(c). Are there statistically significant relationships between the dimension Group Discussion of communication anxiety and the dimensions of library anxiety?

Using a non-parametric test called Spearman's rho, a significant relationship was found to exist between dimension Group Discussion of communication anxiety and dimensions Library Resources Barriers ($r_s = 0.211$, $p < 0.05$), Affective Barriers ($r_s = 0.243$, $p < 0.01$), and Internet Services Barriers ($r_s = 0.214$, $p < 0.05$) of library anxiety.

No significant relationships was found to exist between dimension Group Discussion of communication anxiety and dimensions Library Staff Barriers ($r_s = 0.090$, $p > 0.05$), and Library Services Barriers ($r_s = 0.085$, $p > 0.05$) of library anxiety.

(d). Are there statistically significant relationships between the dimension Public Speaking of communication anxiety and the dimensions of library anxiety?

Using a non-parametric test called Spearman's rho, a significant relationship was found to exist between dimension Public Speaking of communication anxiety and dimensions Library Staff Barriers ($r_s = 0.201$, $p < 0.05$), and Library Services Barriers ($r_s = 0.269$, $p < 0.01$) of library anxiety.

No significant relationship was found to exist between dimension Public Speaking of communication anxiety and dimensions Library Resources Barriers ($r_s = 0.034$, $p > 0.05$), Affective Barriers ($r_s = 0.013$, $p > 0.05$), and Internet Services Barriers ($r_s = 0.112$, $p > 0.05$) of library anxiety.

4.4 Summary

In this chapter the process of developing and validating the Malay translated LAS, ELCAS, and PRCA were discussed. The mean scores of the various dimensions of library anxiety, English language anxiety, and communication anxiety were identified, tabulated and discussed. The mean differences between the various dimensions and demographic variables associated with gender and dominant language used were obtained from both parametric and non parametric tests. The correlation among the various dimensions of the three anxieties were obtained from Spearman's Rho correlation coefficient tests.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

The current study is undertaken to explore the relationships of other academic related anxieties on library anxiety. For the purpose of this study, two academic related anxieties considered as relevant to the library scenario were selected. The anxieties were; English Language anxiety and communication anxiety. The aim was to explore the anxiety level during the peak period of student's academic performance when they have to prepare for the final year project which is a partial requirement for the completion of the degree. During the crucial period when the final year students embark on their final year project, they are inevitably left on their own and have to tend to their information needs themselves. Investigating their level of the three academic related anxieties would help libraries to be aware of the students' problems and needs. The findings of this study would facilitate librarians to continuously improve on the strategic planning of providing services, resources, and facilities for future needs of students.

The participants of this study consisted of 114 Malaysian final year undergraduates at the University of Malaya. The participants comprised of 42 male and 72 female students. This chapter discusses the findings of the study based on the hypotheses constructed.

5.2. Research Hypotheses

The hypotheses associated with the six research questions are as follows:

Hypothesis 1: Translated versions of the three instruments yield dimensions different from that of the original instruments when tested among students who are non-native speakers of English.

Hypothesis 2: Final year students who are non-native speakers of English experience library, language, and communication anxieties.

Hypothesis 3: There are mean differences in the levels of library, language, and communication anxieties between male and female students.

Hypothesis 4: There are mean differences in the levels of library, language, and communication anxieties when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages.

Hypothesis 5: There are significant relationships among the dimensions of language and library anxieties.

Hypothesis 6: There are significant relationships among the dimensions of communication and library anxieties.

5.2.1. Hypothesis 1: Translated versions of instruments yield dimensions different from that of the original instruments when tested among students who are non-native speakers of English

The factor structure and loadings for the three Malay translated academic related anxieties were similar to the original scales, with some variation. Four observations were made with regards to the variations discovered:

- (i) The first observation made was that, the common factors for the three anxieties do not differ much from the original study (Bostick, 1992) and subsequent studies (Noor Harun & Ansari, 2010). The M-LAS retained dimensions, Library Staff Barriers and Affective Barriers as that of the original scale. The M-ELCAS retained dimensions Speaking Anxiety which was referred to as Communication Apprehension in the original scale. The M-PRCA retained three of the dimensions found in the original scale, Interpersonal Conversations, Group Discussion, and Public Speaking.
- (ii) The second interesting observation is that this study carried out among non-native speakers of English yielded new factor dimensions similar to other studies among non-native speakers of English (Shoham & Mizrachi, 2001; Abusin & Zainab, 2010; and Swigon, 2011). The new dimensions which emerged in M-LAS are related to Library Services Barriers, Library Resources Barriers, and Internet Services Barriers. The two new dimensions which emerged in M-ELCAS are Classroom Anxiety, and Learner Anxiety. The Meeting dimension in M-PRCA is replaced by Formal Settings.
- (iii) The third observation is that, some of the individual items or statements in the scales considered relevant for the English speaking countries were found to be not relevant or suitable for the culture, race, and society of the non-native speakers of

English. The reduced number of items in the studies among non-native speakers of English supports this observation.

(iv) The fourth observation is that, the perception and interpretation of the items from the viewpoint of students differ according to the culture of the nation. Thus the individual item statements which loaded into the factor structure of the translated instruments differed from that of the original instrument. Even within the common factor dimensions of the original and translated instruments, the loading of individual items do not follow the original scales.

(a) Malay translated Library Anxiety Scale [M-LAS]

Skala Kebimbangan Penggunaan Perpustakaan

The Malay translated LAS had been evaluated for psychometric properties among final year undergraduates at the University of Malaya. The results of administering exploratory factor analyses yielded a five factor solution with the following dimensions: Library Staff Barriers with 10 items, which explained 27.5% of total variance; Library Services Barriers with 5 items, which explained 11.5% of total variance; Library Resources Barriers with 5 items, which explained 6.7% of total variance; Affective Barriers with 4 items, which explained 5.8% of total variance; and Internet Services Barriers with 3 items, which explained 5.4% of total variance. The findings from this study was consistent with Bostick's (1992) original LAS which resulted in five dimensions that collectively explained 51.8% of the total variance in library anxiety. The findings from this study also demonstrated a five factor solution which explained 56.81% of total variance. A study to evaluate the psychometric properties of a modified English version of LAS in a Malaysian institute of higher

learning (Noor Harun & Ansari, 2010), also demonstrated a five-factor solution but only explained 39.6% of total variance. Other studies which used the original LAS also reported a five factor solution (Jerabek, Meyer &Kordinak, 2001; Collins & Veal, 2005). Each of the dimensions in this were subsequently examined for internal reliability and was found to have met the criteria of Cronbach's coefficient alpha value of 0.70 as recommended by Nunnally and Bernstein (1994) except for Internet Services Barriers which had a Cronbach's internal reliability coefficient alpha value of 0.63.

An interesting viewpoint is that when LAS is translated into non-English languages, other factor dimensions appear. The Hebrew-LAS (Shoham & Mizrachi, 2001), included two new dimensions; Language, and Library policies/hour. The Sudanese LAS (Abusin & Zainab, 2010), included negative perceptions of library environment, services, collection, and peers. The Polish LAS (Swigon, 2011), included Technological Barriers. The M-LAS, in this study, included Library Services Barriers, and Internet Services Barriers.

In this study, the validated M-LAS only had a total of 27 items after it was twice (pilot and final study) submitted for content and construct validity. The reduced total number of items was also found in other studies when LAS was modified, translated and used among non-native speakers of English (Table 5.1). The Hebrew LAS (H-LAS) by Shoham and Mizrachi (2001) reported only 35 statements, while the Sudanese LAS (SULAS) by Abusin and Zainab (2010) reported 36 statements, and the Polish LAS (P-LAS) by Swigon (2011) retained the original 46 statements. Even when the LAS was not translated, its use among non-native speakers of English also reported a reduced number of statements as was reported in the study by Anwar, Al-Kandari, and

Al-Qallaf (2004) reported only 32 statements and Noor Harun and Ansari (2010) only 35 statements.

The findings from this study were also consistent with Bostick's (1992) in that the dimension Library Staff Barriers explained the highest proportion of total variance, implying students' barriers with library staff remains an important factor of library anxiety. The barriers with library staff can arise from the inherent characteristics of the students or the behavioral characteristics of the library staff, who are obliged to maintain a disciplined, structured, and quiet environment in the library. In various statements in this study, students have indicated library staff as having a role in their anxiety. Students feel they could be bothering the library staff if they ask questions have also emerged even when using the computer facilities and internet services. They wish library staff were available when they need help. Some respondents have remained neutral for items which stated that library staff are so busy and have no time to help students. The fear is that these students are the silent majority.

Affective Barriers seem an important dimension as at least one third of respondents did not know what to do when the book is not on the shelves. If these students are not anxious, they would probably seek out assistance of library staff and librarians on duty. Other studies among native speakers of English also reported barriers with staff as the highest proportion of total variance (Jiao & Onwuegbuzie, 1997, 2002, 2003; Jerabek, Meyer, & Kordinak, 2001; Jiao, Onwuegbuzie, & Bostick, 2004; Noor Harun & Ansari, 2010). The other important factor is knowledge of library resources observed in this study and other studies among non-native speakers of English (Shoham & Mizrachi, 2001; Jiao & Onwuegbuzie, 2002; Anwar, Al-Kandari, & Al-Qallaf, 2004;

Noor Harun & Ansari, 2010; Abusin & Zainab, 2010; Swigon, 2011). At least one third of respondents in this study have indicated that they do not know or did not wish to comment on the know-how of using online resources in the library. There were also a third of them who admitted they are unsure of how to begin a research. Table 5.1 show the factor solutions and number of items in the library anxiety construct among non-native speakers of English.

**Table 5.1: Factor Solution And Number Of Items Of LAS
When Tested Among Non-Native Speakers Of English**

	Statements	Factors	Translated LAS
Shoham & Mizrachi (2001)	35 statements 7 factors	Staff , Knowledge, Language, Physical comfort, Computer comfort, Library Policies/Hour, Resources	Hebrew LAS (H-LAS)
Anwar, Al-Kandari & Al-Qallaf (2004)	32 statements	Barriers to staff, Library comfort, Knowledge, Mechanical barriers, Affective barriers	
Abusin & Zainab (2010)	36 statements 7 Factors	Negative perception toward library environment, Affective barriers, Negative perception towards peers, Negative perception towards library services, Negative perception towards library collection, Negative perception towards library regulation, Cognitive barriers	
Noor Harun & Ansari (2010)	35 statements	Barriers with staff, Comfort with library services, Affective barriers, Cognitive barriers, Comfort with library technology	Sudanese Library Anxiety Construct (SULAS)
Swigon (2011)	6 factors	Barriers with staff, Affective barriers, Technological barriers, Library knowledge barriers, Library comfort barriers, Resources barriers	Polish LAS (P-LAS)
Song (2013)	36 statements 7 factors	Resources, Retrieval, Regulations, Staff Knowledge, Comfort, Affective	Chinese LAS (C-LAS)
Janaki (2014)	27 statements 5 factors	Library Staff Barriers, Library Services Barriers, Affective Barriers, Library Resources Barriers, Internet Services Barriers	Malay LAS (M-LAS)

**(b) Malay translated English Language Classroom Anxiety Scale
(M-ELCAS)**

Skala Kebimbangan Penggunaan Bahasa Inggeris Dalam Kelas

Of the 33 items that were employed to assess the English language anxiety phenomenon, only 27 items were found to load on three interpretable factors. The results of administering exploratory factor analyses yielded a three factor solution with the following dimensions: Speaking Anxiety with 17 items which explained 38.3% total variance, Classroom Anxiety with 5 items which explained 9.1% total variance, and Learner Anxiety with 4 items which explained 5.7% of total variance.

The overall Cronbach's coefficient alpha value for the M-FLCAS was 0.79. The findings are consistent with other studies in non-European countries. The Japanese translated version (Matsuda & Gobel, 2004) yielded coefficient alpha value equal to 0.78, and the English version tested among South Taiwanese studies yielded a coefficient alpha value of 0.61 (Banya & Cheng, 1997). There were other studies which reported a higher coefficient alpha value than the original language anxiety construct. Aida (1994) in a study among Japanese students reported a coefficient alpha value of 0.94, while the Chinese translated version yielded coefficient alpha value of 0.95 (Chen & Chang, 2004). The original scale by Horwitz, Horwitz, and Cope (1986) had an internal reliability coefficient alpha value of 0.93 and 0.83 when it was retested.

Generally, speech anxiety and learner anxiety in the form fear of negative evaluation were reported as important components of foreign language anxiety in this study as well as other studies (Horwitz, Horwitz, & Cope, 1986; Young, 1990; Aida,

1994). MacIntyre and Gardner (1989) have indicated that 'general anxiety' and 'communication anxiety' are the two main anxiety dimensions of the foreign language anxiety construct. MacIntyre and Gardner replicated their study (1991) with new dimensions and reported that a new dimension 'social evaluation anxiety' emerged suggesting that foreign language anxiety can be discriminated reliably from other types of anxieties (p530).

The factor 'test anxiety' found in the original scale however, did not emerge as a factor dimension in this study and also in other studies (MacIntyre & Gardner, 1989), particularly among studies in Asian countries (Aida, 1994; Chen & Chang, 2004; Tok, 2009; Hizwari, et al., 2011; Khairi & Nurul, 2011). One of the suggestions is that 'test anxiety' is a general problem rather than being specific to the foreign language (Tran, 2012). MacIntyre (1989) had also suggested that test anxiety contributed more to the general anxiety. In this study, Classroom Anxiety and Learner Anxiety were identified as the new dimensions which emerged. A new factor 'general feelings of anxiety' emerged as important component factors causing foreign language anxiety in the classroom (Aida, 1994; Matsuda & Gobel, 2004) including 'English class anxiety' (Hizwari et al., 2011, Khairi & Nurul, 2011). Another observation is that although this study also yielded a three factor model as the original FLCAS, the statements in each factor followed a different factor structure reflective of a different cultural setting and differing interpretative perceptions of the statements.

(c) **Malay Translated Personal Report of Communication Apprehension**
[M-PRCA]

Laporan Kendiri Kekhuatiran Komunikasi

The Malay translated PRCA-24 was evaluated for psychometric properties among final year undergraduates at the University of Malaya. The communication anxiety scale PRCA-24 had been validated in various studies of diverse populations and had proven to be a reliable instrument over the years (McCroskey, 1982). Of the 24 items that were employed to assess the communication anxiety phenomenon in this study, 23 items were found to load on four interpretable factors. The results of administering exploratory factor analyses twice (pilot and final study) yielded a four factor solution with the following dimensions: Formal settings with 10 items which explained 31.7% of total variance, Interpersonal Conversations with 6 items which explained 11.6% of total variance, Group Discussion with 4 items which explained 9.3% of total variance, and Public Speaking with 3 items which explained 6.4% of total variance.

Almost all studies using PRCA, including this study, have reported the same four dimensions similar to the original instrument. Each of the dimensions was subsequently examined for internal validity and was found to have met the criteria of Cronbach's coefficient alpha value of 0.70. All the dimensions revealed a Cronbach's internal reliability coefficient alpha value of 0.80. In another study among Malaysians, the internal reliability also revealed a coefficient alpha value of 0.83 (Norshaipah, Natrah, & Junaidah, 2004).

The findings in this study revealed that the item statements loaded into factors according to the interpretation by Malaysian undergraduates. Common communication contexts involving superior-subordinate communication, intercultural encounters, situations involving assertive communication can be the cause of interpretation (Yuan, 2011). The original PRCA-24 factor structure had items 1-6 as dimension Meetings, items 7-12 as Interpersonal Conversations, item 13-18 Group Discussion, and 19-24 as Public Speaking contexts. In this study, the dimension Group Discussion with four items and Public Speaking with three items consisted of the identical statements as in the original scale. The Meeting dimension referred to as Formal Settings in this study however only consisted of one item from the original factor. It included three items from Interpersonal Conversations, three items from Group Discussion and three items from Public Speaking. The implication is that students' interpretation of 'formal' are inclusive of public speaking contexts and during interpersonal conversations and group discussions where the members are not known to them. The dimension Interpersonal Conversations in this study included three items from Group Discussion. Students view interpersonal conversations and group discussion as similar settings.

5.2.2. Hypothesis 2: Final year students who are non-native speakers of English experience library, language, and communication anxieties

The findings showed that the students experienced library anxiety, foreign language anxiety, and communication anxiety, on a moderate level. The overall mean of library anxiety level in this study is $M=72.23$, $SD=12.65$, English Language anxiety level is $M=87.35$, $SD=17.25$ and communication anxiety is $M=59.74$, $SD=11.40$. The anxiety levels are within ± 1 SD from the original scales' value which were obtained from the original studies by Bostick (1992), Horwitz, Horwitz, and Cope (1986), and McCroskey (1984).

Table 5.2: Final Year Undergraduates Mean Levels For The Three Anxieties

Library anxiety	English Language Anxiety	Communication Anxiety
Bostick, 1992 Mean = 118.61 SD = 15.80	Howitz, 1986 Mean = 94.5 SD = 21.4	McCroskey, 1984 Mean = 65.60 SD = 15.30
This study Mean = 72.23 SD = 12.65	This study Mean = 87.35 SD = 17.25	This study Mean = 59.74 SD = 11.40

(a) Library anxiety

The findings of this study supported hypothesis 2 on a moderate level. This is the first time library anxiety is measured among final year students. The level of library anxiety in this study is lower than studies with different populations such as Americans (Jiao & Onwuegbuzie, 2002; African-Americans (Jiao, Onwuegbuzie and Bostick, 2004); and Caucasian Americans (Kwon, Onwuegbuzie, & Alexander, 2007). One of the possible reason could be the students in this study have attended the compulsory Information Skills Course where they have become familiar with the library environment, services, as well as the library staff since this course is conducted by the librarians. In a study among Malaysian undergraduates, (Noor Harun & Ansari, 2012), it was reported that the average mean score for students who did not attend bibliographic instruction was higher than students who had attended. Earlier studies by Abusin (1998), Cleveland (2001), and Jiao and Onwugbuzie (1997) also have reported that attending library instruction programs will significantly lower the level of library anxiety. The final year students in this study have already been exposed to the library resources during the course.

Although, the findings of this study showed a moderate level of library anxiety, the library must be alert to details of item statements where students have indicated that library staff are unfriendly (48.3%) and do not have time to help them (49.1%), do not listen to them (43.8%), students cannot get help at the times they need it (40%), Thus, library staff on the surface are seen as friendly and helpful but the findings of this study indicated that they do not get personal help when they require it. Even after completion of the one credit hour Information Skills Course, at least 40% of the respondents claim

they do not know how to use the library's online resources. On a general note, the students' expectations of internet facilities and services are high. More than half the respondents (57.9%) commented that internet service is very slow. Malaysians generally are less likely to give strong responses and prefer to be neutral although they do not agree with the responses. The fact that some students have responded that they do not get personal help particularly when they need it is indication that this could be the silent opinion of some students. A visual inspection of Figure 5.1 showed that students who responded to this survey were found to have the highest level of anxiety in the dimension with Library Services Barriers (50.5%), and Internet Services Barriers (50.3%), followed by Library Resources Barriers (47.2%), Library Staff Barriers (45%), and the least level of anxiety in Affective Barriers (34.9%). Internet services and facilities are increasingly becoming pertinent for the net generation. Internet anxiety is influenced by the adequacy of resources available and trust in the technology itself (Thatcher, et al., 2007). Library anxiety is seen as a significant determinant of the perceived behavioral control which in turn is a significant determinant of the intention to use electronic library resources (Safahieh, Ngah, & Fadaei, 2011).

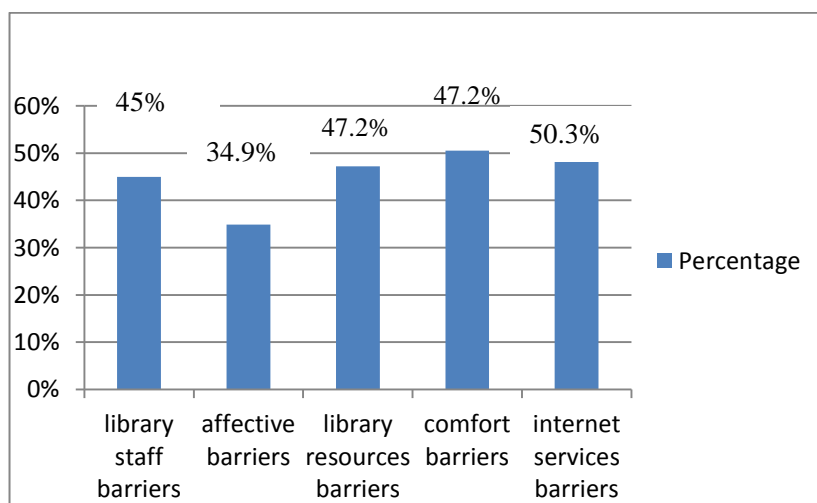


Figure 5.1: Library Anxiety Level In Percentage

When compared with the findings of the Hebrew translated (Shoham & Mizrachi, 2001) and Polish translated (Swigon, 2011), barriers with staff was not the only most important anxiety causing factor. Other factors such as using the library resources, using the appropriate tools for online resources and information, internet services barriers seem equally important for the students. In a very recent study using a Chinese translated LAS (Song, et al., 2013), it was reported that 'resources' and 'retrieval' are among the important factors causing library anxiety. The least important factor seem to be affective barriers implying that the non-native speakers of English are more concerned with the efficient utilization of library resources, services and facilities than their emotional needs. This reiterates the fact that library anxiety is a state anxiety rather than trait anxiety as was reported and accepted by other studies (Jiao & Onwuegbuzie, 1997).

(b) English language anxiety

The findings in this study support hypothesis 2 on a moderate level. A comparison of the mean level of English language anxiety across populations reveal that the overall mean of final year students in this study have relatively lower levels of English language anxiety. The fact that Malaysian students are bilinguals could have made a difference. Aida's study (1994) among Japanese students reported $M=96.7$, $SD=22.1$, while Chen and Chang (2004) and Huang (2008) among Chinese students, $M=94.9$, $SD=20.0$ and $M=93.4$, $SD=17.7$ respectively. The original study by Horwitz, Horwitz and Cope (1986) among Americans had an overall mean of $M=94.5$, $SD=21.4$.

Translated versions of FLCAS (Table 5.3) were similar to this study. Rodriquez (2003) reported $M=85.98$, $SD=21.03$ for the Spanish version and $M=89.50$, $SD=20.11$ for the French translated version. The Japanese version (Pryor, Butler, & Boehringer, 2005) reported $M=83.22$, $SD=14.25$.

Table 5.3: Comparison Of The Mean Level Of English Language Anxiety

Sample	Study	Mean	SD
Original	Horwith, Horwith, & Cope, 1986	94.50	21.4
Malay	Janaki, 2013	87.35	17.25
Spanish	Rodriquez, 2003	85.98	21.03
French	Rodriquez, 2003	89.60	20.11
Japanese	Pryor & Boehringer, 2005	83.22	14.25

A visual inspection of Figure 5.2 show that more than half the students in this study (53.5%) experience English language anxiety. The highest level of anxiety was found to be associated with Speaking Anxiety (58.3%), followed by Learner Anxiety (44.4%), and Classroom Anxiety (44%). This was supported by other studies in Malaysia. Investigation of English language anxiety among Malaysian students in UTM (Technology University) reported that 96.7% experience moderate feelings of apprehension communicating with other people in English (Khairi & Nurul, 2011). It was reported that students felt nervous and very self-conscious when they have to speak without preparation and in front of other students. In another study at UTeM (Malacca University), a linear relationship was reported between self-perceived competence and lecturer's evaluation implying that when students are more confident, their oral presentation and communication improves (Indra Devi & Farah, 2008).

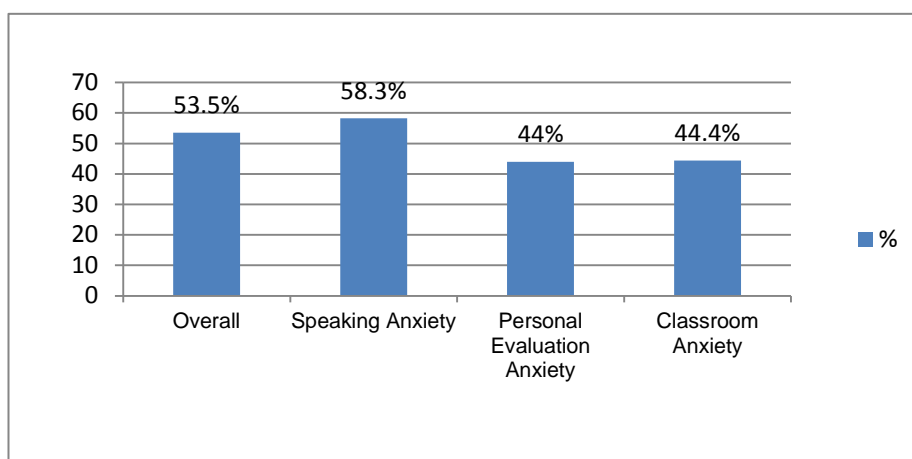


Figure 5.2: English Language Anxiety Level In Percentage

(c) Communication anxiety

The findings of this study support hypothesis 2 on a moderate level. Moderate level of communication anxiety defined by McCroskey (1982) is where scores <51 indicates low level, 51-80 moderate level and >80 indicates a high level. The overall mean of communication anxiety level in this study is $M=59.74$, $SD=11.40$. About 51.65% experienced communication anxiety. Students other local universities such as from University of Science, Penang reported mean $M=71.03$, $SD=12.2$ (Azmi & Gillani, 2011), University of Technology, Malacca, the mean reported was $M=72.20$, $SD=65.37$ (Indra Devi & Farah, 2008). In another study among Malaysian students, the mean was $M=64.57$, $SD=12.19$ (Norshaipah, Natrah, & Junaidah, 2004), while in another study (Indra Devi & Farah, 2008), the mean reported was $M=72.20$. Students pursuing science and technology programs (Nik Hasnaa, 2006), engineering programs (Indra Devi & Farah, 2008; Khairi & Nurul, 2011) pharmacy programs (Azmi & Gillani, 2011), and business/marketing programs (Wan Zumusni, et al., 2010) have all

reported a moderate level of communication anxiety among students. One study (Wan Zumusni, et al., 2010) among accounting students at UiTM, Johore (MARA University) reported that 45% experience high level of communication anxiety, 26% moderate level, while only 29% had low level. Norshaipah, Natrah, and Junaidah's (2004) study across years of study reported that final year students had the lowest level of communication anxiety, the highest level being second year students, followed by freshmen, then the third year students.

The level of communication anxiety in this study is also comparatively lower than studies carried out across populations. Studies have shown that communication anxiety varies from culture to culture (Pryor, Butler & Boehringer, 2005). In their study among Japanese and American undergraduates, the Japanese mean score, $M=83.22$, $SD=14.25$ was significantly higher than the mean of American sample, $M=59.53$, $SD=14.96$. Normative level is $M=65.6$, $SD=15.3$, Formal is $M=16.4$, Interpersonal Conversations $M=14.2$, Group Discussion $M=15.4$, and Public Speaking $M=19.3$ (McCroskey 1982, 1978). Among Chileans (Gregersen & Horwitz, 2002) the mean was very similar to this study with a mean of $M=58.28$, $SD=14.81$.

In Table 5.4, the mean level in the four communication settings among a few studies are compared. It was observed that in almost all studies, the mean level for Group Discussion and Interpersonal Conversations were below the level for Formal Settings or Meetings and in Public Speaking. Most students in normal circumstances would feel anxious communicating in front of others or in formal settings. In this study, the mean level for Formal was higher than the other studies and similarly, the mean level for Public Speaking was lower than the other studies. The explanation could be

the interpretation of the students' understanding of formal settings and public speaking as similar.

Table 5.4: Comparison Of Communication Anxiety Levels

	Sample	Formal	Interpersonal Conversations	Group Discussion	Public Speaking
McCroskey, 1982	Original	16.4	14.2	15.4	19.3
Allen, 1985	Non-natives	17.2	15.8	15.3	17.3
Allen, 1985	Natives	18.4	16.9	16.9	18.8
Trevor, 2007	USA Collegians	16.6	15.4	15.0	20.1
Trevor, 2007	USA Undergraduates	15.8	14.4	15.0	18.3
Dwyer, 1995	USA Undergraduates	16.64	14.6	15.37	19.80
King, Andersen & Carlson, 1988	USA Undergraduates	15.28	13.39	13.85	18.54
Apaibanditkul 2006	Thai	17.80	16.64	16.94	18.56
Apaibanditkul 2006	Thai living in US	15.76	15.67	15.07	17.71
McCroskey, Fayer & Richmond, 1983	Puerto Rico	16.2	13.2	13.1	16.4
Pribyl, Keaton, Sakamoto, Koshikawa, 1998	Japanese	20.08	17.18	19.14	20.39
Azmi & Gillani, 2011	Malaysian	17.97	17.50	17.21	19.34
Muhammad, Ibrahim & Abd Aziz, 2010	Malaysian Chinese	17.25	15.04	15.29	19.71
Muhammad, Ibrahim & Abd Aziz, 2010	Malaysian Malays	17.04	14.15	14.23	18.63
Muhammad, Ibrahim & Abd Aziz, 2010	Malaysian Indians	16.40	14.83	13.98	18.29
Janaki, 2014	Malaysians	25.97	13.06	6.99	5.61

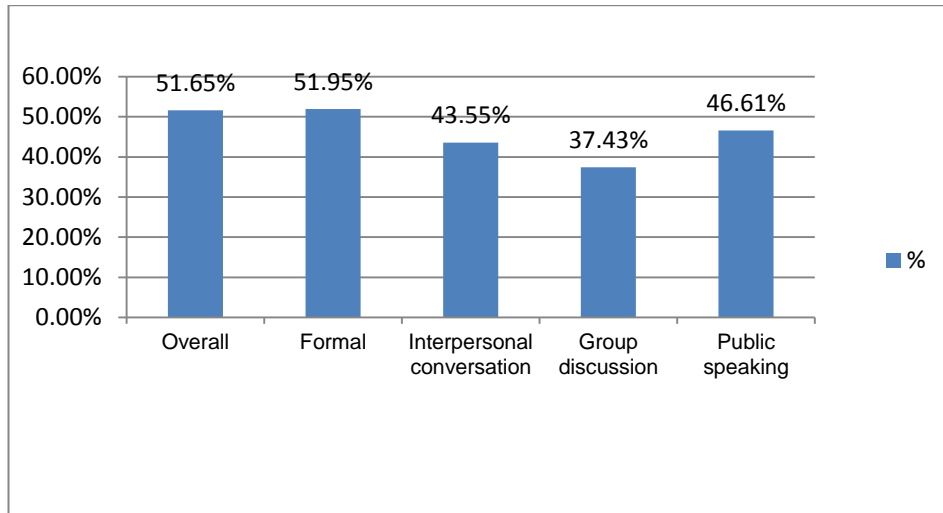


Figure 5.3: Communication Anxiety Level In Percentage

A visual inspection of the Figure 5.3 show that the highest level of anxiety was found in Formal Settings (51.95%), followed by Public Speaking (46.61%), Interpersonal Conversations (43.55%), and the least anxiety setting is Group Discussion (37.43%). The moderate level of anxiety in formal settings indicates that students are affected and become anxious with others whom they are not familiar with (McCroskey, 1984). The least anxiety provoking area reported by Manjit, David, & Choo (2011) also indicated Group Discussion similar to the findings in this study. It is believed that bilinguals generally experience less communication anxiety. Malaysian students are bilinguals which enables them to adapt to communication situations in the country.

5.2.3. Hypothesis 3: There are mean differences in the levels of library, language, and communication anxieties between male and female students

The findings showed that there are no statistically significant mean differences between the male and female students on the overall level of the three academic related anxieties. Only the dimension Classroom Anxiety of ECLAS revealed a significant mean difference between male and female students. Males had a higher mean (M=11.29) than females (M=11.01).

(a) Library anxiety

Overall, the findings of this study do not support the hypothesis that there are mean differences in the level of library anxiety between male and female students as Mann-Whitney U Test results did not show any statistically significant mean differences. This finding is also supported by other studies which have revealed that male and female students have similar levels of library anxiety (Bostick, 1992; Mech & Brooks, 1995; Onwuegbuzie & Jiao, 2000; Anwar, Al-Kandari, & Al-Qallaf, 2004; Battle, 2004; Bowers, 2010; Swigon, 2011; Lee, 2011; Anwar, et al., 2012). This finding however, do contradict with other studies which have reported higher levels of anxiety in males than females (Jacobson, 1991; Anwar, Al-Kandari, & Al-Qallaf, 2004; Jiao, Onwuegbuzie, & Lichenstein, 1996; Jiao & Onwuegbuzie, 1997) and studies which reported higher levels of anxiety in females than males (Shoham & Mizrachi, 2001; Noor Harun & Ansari, 2010; Onwuegbuzie, Jiao, & Bostick, 2004).

It can be inferred that gender has no statistically significant effect on library anxiety construct in this study, although female students had an overall higher mean level ($M. R = 59.79$) than the male students ($M.R. = 53.57$). In the dimension Library Staff Barriers, both male and female students revealed similar levels of anxiety, male $M=57.6$ and female $M=57.4$. Female students in this study showed a higher level of anxiety in the dimensions Library Services Barriers ($M=60.10$) and Internet Services Barriers ($M=59.10$) than the males ($M=53.04$) and ($M=54.90$) respectively. In Bostick's study, the female students had a higher level of anxiety in dealing with affective barriers. Male students in this study showed a higher level of anxiety in the dimensions Affective Barriers ($M=61.24$) and Library Resources Barriers ($M=63.50$) than the female students ($M=55.32$) and ($m=54.00$) respectively. Other studies have reported that male students are susceptible to affective barriers and resources barriers. Jiao and Onwuegbuzie (1997) reported that males, particularly non-native speakers of English, tend not to perceive the library as a safe, welcoming, and non-threatening environment.

(b) English Language Classroom Anxiety

Overall, the findings of this study is impartial to the hypothesis that gender is a significant contributor of English language anxiety, as the independent sample t-test revealed equal statistical significant mean differences [$t(112) = -1.39, p > 0.05$] between the male and female students although the female students had higher overall mean ($M = 85.09$) than the male students ($M = 82.08$). The independent sample t-tests conducted for each of the dimensions of English language anxiety however show a statistically significant mean difference in the dimension Classroom Anxiety where female students were found to be more anxious than the male students, [$t(96.68) = 0.54, p < 0.05$]. There were no statistically significant mean differences between the gender for the dimensions Speaking Anxiety and Learner Anxiety although female students had a higher mean level for Speaking Anxiety ($M = 50.83$) and Learner Anxiety ($M = 8.99$) than the male students ($M = 47.41$) and ($M = 8.81$) respectively. Generally, females have been reported to be more vulnerable to Speaking Anxiety (Williams, 2001; Hassall, et al., 2000; Borzi & Mills, 2001). Self-perception is a critical factor in both language and communication anxiety (Foss & Reitzel, 1988). Self-perception, self-evaluation, low self-esteem, and negative experience associated with language are important attributes which can predict foreign language anxiety (Von Worde, 1998; Kitano, 2001; El-Banna, 1989).

This finding is also supported by other studies which have revealed that there is no significant mean difference in the level of language anxiety for male and female students (Aida, 1994; Matsuda & Gobel, 2004; Phillips, 1989). In contrast, Jiao and

Onwuegbuzie (1997) reported that male students who did not speak English as their native language have higher language anxiety.

(c) Communication anxiety

The findings of this study did not support the hypothesis that there are significant mean differences between male and female students in the level of communication anxiety as the Mann-Whitney U Test results did not show any significant mean difference. This general finding is also supported by other studies which have revealed that there is no difference in the level of communication between male and female students (Azmi & Gillani, 2011; Dewaele, 2007).

Female students however reported a higher mean level for all the dimensions of communication anxiety except for Group Discussion. Nik Hasnaa's study (2006) among diploma students at University Teknologi of Malaysia also showed that the female students had a higher level of communication anxiety ($M=81.22$, $SD=14.25$) than the male students ($M=75.13$, $SD=13.72$) particularly in public speaking communication contexts. Studies across populations (Table 5.5) have also indicated higher levels of communication anxiety among females than males (Williams, 2001; Hassal et al, 2000; Soonthornsawad, 2009; Norshaipah, Natrah, & Junaidah, 2004; Nik Hasnaa, 2006; and Abdul Wahab, Saad & Ahmad, 2004). Females are reported to be more apprehensive in formal situations such as meetings and public speaking, but lower in dyad situations (Ibrahm & Majidul, 2000). Nik Hasnaa (2006) reported that the only demographic variable to have a significant relationship with communication anxiety is gender. Abdul Wahab, Saad, & Ahmad, (2004) reported that females have higher mean particularly in public speaking contexts.

As was found in this study, similar finding was reported by Norshaipah, Natrah, & Junaidah (2004) in a study among accounting students in a northern public university where female students had a lower mean in group discussion than the male students. In Azmi and Gillani's study (2011) among first year pharmacy students at University Science of Malaysia, 23.5% reported high communication anxiety level, 73.1% average and only 3.4% low with the female students showing a lower level of anxiety ($M=70.38$, $SD=10.98$) than the male students ($M=72.02$, $SD=13.93$). Females are often reported to be significantly more frequent use of conversational input reflecting social interaction. Men's influence is in the public sphere, while women's is in the private (Oxford & Nyikos, 1989). University students could have interpreted group discussion as informal communication (Soonthornsawad, 2009).

Some studies in Malaysia have shown female students having lower communication anxiety than males. Asian females have high levels of anxiety during interpersonal conversations as well as meetings and public speaking. Female Thais were more communication apprehensive than males in Meetings, Interpersonal Conversations, and Public Speaking (Soonthornsawad, 2009). This is explained by the Masculine theory where the Thai society practiced a traditional role for females and males who are inevitably dominant. Similarly, female students have been found to be slightly more apprehensive communicating in formal settings such as meetings and public speaking (Ibrahim & Majidul, 2000; Byrne, Flood, & Shanahan, 2012). Nik Hasnaa's study (2006) among diploma students at UTM showed female students had a higher anxiety level for public speaking communication contexts when compared to the males.

Table 5.5: Gender And Mean Level Of Communication Anxiety

	Male	Female	Population
Williams, 2001	66.2	75.1	Physics
Hassal, et al, 2001	61.23	64.30	UK Business
Hassal, et al, 2001	66.34	69.22	UK Accounting
Hassal, et al, 2001	66.10	69.50	Spanish
Apaibanditkul, 2006	66.75	61.0	Thai students in US
Soonthornsawad, 2009	64.5	69.6	Thai
Janaki, 2014	82.08	85.09	Malaysian
Norshaipah, Natrah, & Junaidah, 2004	63.3	65.0	Malaysian
Azmi, & Gillani, 2011	72.02	70.08	Malaysian
Nik Hasnaa, 2006	75.13	81.22	Malaysian
Abdul Wahab, Saad, & Ahmad, 2004	63.30	65.01	Malaysian

5.2.4. Hypothesis 4: There are mean differences in the levels of library, language, communication anxieties when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages.

The findings of this study reveal that a significant mean difference existed in the overall level of all three anxieties; library, language, and communication anxieties when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages. However, no statistically significant mean differences was found to exist in the dimensions Library Staff Barriers, Affective Barriers, and Internet Services Barriers of library anxiety construct; and in the dimension Formal Settings of communication anxiety construct. Statistical significant mean differences were found to exist in all the dimensions of English Language anxiety.

(a) Library anxiety

The findings of this study partially support the hypothesis that there are significant mean differences in the dimensions of library anxiety. A significant mean difference was found to exist in two of the dimensions only; Library Resources and Library Services barriers when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages.

It is revealed that students who use Chinese as their dominant language who are known for their hardworking and perfectionist nature are the most anxious when using library. They had the highest mean level of library anxiety for the dimensions Library

Resources, Library Services, and Affective Barriers. They also revealed a high level of anxiety for dimension Library Staff Barriers and Internet Services Barriers. This supports Onwuegbuzie and Jiao's study (1998b) that perfectionist students who need to maintain a perceived need to live up to standards and expectations prescribed by others tend to have high level of library anxiety particularly associated with affective barriers.

Students who use Other Languages as their dominant language have the highest level of anxiety associated with dimension Library Staff Barriers and Internet Services when compared to the other students. Onwuegbuzie, Bailey, and Daley (1999) have reported that non-native speakers of English who lived furthest from academic libraries have high anxiety level using the mechanical equipment in the library. Students who use Other Languages as their dominant language could have come from the East Coast or Eastern Malaysia and probably are notice in the use of Internet and computers. Students who use Other Languages have a moderately low level of anxiety associated with dimensions Library Resources, Library Services, and Affective Barriers

Students who use Malay as their dominant language are found to be the next group of students after the Chinese who have a high level of anxiety in dimensions Library Resources Barriers and Library Services Barriers. Students who use English as their dominant language are the next group of students after the Chinese who have a high level of anxiety in the dimension Affective Barriers. Students who use the English and Malay as their dominant language are found to have a moderately low level of library anxiety associated with Library Staff Barriers perhaps because all students and staff are bilingual and can converse both in English and Malay. Students who use Tamil as their dominant language are found to have the lowest levels of anxiety on all

the dimensions of Library Anxiety. It could reflect a spill over their individualistic culture or it could be because the number of respondents who use Tamil as the dominant language is very small.

(b) English language anxiety

The findings of this study support the hypothesis that there are significant mean differences in the dimensions of English Language when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages. A significant mean difference was found to exist in all the three dimensions of the English language anxiety construct; Speaking Anxiety, Classroom Anxiety, and Learner Anxiety. Overall, students who use Malay as their dominant language have the highest level of English language anxiety followed students who use Chinese, English, Other Languages, and Tamil as their dominant language.

Students who use Malay as their dominant language have the highest level of English language anxiety in all the dimensions of English language anxiety construct. The next group is those who use Chinese as their dominant language. They were found to have a high level of anxiety in all the dimensions as well. Students who use English as their dominant language are the next group who were found to be moderately anxious in all the dimensions of the English language construct. Students who use Tamil as their dominant language are found to have the lowest levels of anxiety in Speaking and Learner anxieties but moderately low level of anxiety in the dimension Classroom Anxiety. Students who use Other Languages as their dominant language have the

lowest level of anxiety in the dimension Classroom Anxiety but moderately low level of anxiety in Speaking and Learner anxieties.

In a study among Malaysian university students from a public university (Wan Zakaria, et al., 2007), it was reported that 56.7% of the Malay students, 40.8% of Chinese students and 26.7% of the Indian students have high level of English language anxiety.

(c) Communication anxiety

The findings of this study support the hypothesis that there are significant mean differences in the overall level of communication anxiety when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages. A significant mean difference was found to exist in two of the dimensions; Interpersonal Conversations, and Group Discussion. No significant mean difference was found to exist in the dimensions Formal Settings, and Public Speaking.

Students who used Chinese as their dominant were found to have the highest level of communication anxiety associated with the dimensions Formal Settings, Interpersonal Conversations, and Public Speaking. In a study among Malaysian students, the Chinese ethnic group were found to be the most apprehensive (M=67.29), followed by the Malays (M=64.05) and the Indian ethnic group (M=63.50) with the lowest level of apprehensiveness (Abdul Wahab, Saad & Ahmad, 2004). Students who

use Other Languages seem to have the highest level of anxiety in dimension Group Discussion. The reason could be because they are the minority group. Jiao and Onwuegbuzie (2002) reported that there is a relationship between social interdependence and library anxiety. High anxious individuals feel less competent, confident and understood in communication settings than their low anxious counterparts (Onwuegbuzie, 1997). Onwuegbuzie observed that this lack of self-confidence can affect the way student conduct research.

Students who use Malay as their dominant language are the next group of students who have a high level of anxiety in the dimension Formal Settings and Public Speaking. It can also be due to the culture which does not encourage giving opinions or ideas different from the consensus of the group (Soonthornsawad, 2009). They have a moderately low of anxiety in dimension Group Discussion. This could be because the majority of the students use Malay as their dominant language. In Azmi and Gillani's (2011) study among undergraduate pharmacy students at University Science of Malaysia, in the area of formal settings, the Malay ethnic students were more apprehensive compared to the Chinese ethnic students and Indian ethnic students were the least anxious. In Wan Zakaria, et al. (2007) however, the Malay ethnic students form the biggest group with high CA as compared to the Chinese ethnic and Indian ethnic.

Students who use English as the dominant language have a moderately low level of communication anxiety in all the dimensions of communication anxiety. Students who use Tamil as their dominant language have the lowest level of communication anxiety in all the dimensions. In Wan Zakaria et al., (2007), it was reported that the

Indian ethnic students had an unusual low score in Interpersonal Conversations (M=12.0) and Public Speaking (M=13.00). This was also reported in another Malaysian study where the Indian ethnic students had the lowest score in Interpersonal Conversations and Public Speaking (Azmi & Gillani, 2011). Indian ethnic students also were reported to have low communication anxiety (M=63.05) compared to Chinese ethnic (M=64.05) and Malays (M=64.05) (Abdul Wahab, Saad, & Ahmad, 2004).

Table 5.6: Comparison Of Communication Anxiety Levels Among Malaysians

Language/ Dimensions	Malay	Chinese	Tamil	Study
Formal	17.0	17.3	16.4	Norshaipah, 2004
	19.1	17.1	16.0	Azmi, 2011
Interpersonal Conversations	14.2	15.0	14.8	Norshaipah, 2004
	18.4	16.8	12.0	Azmi, 2011
Group Discussions	14.2	15.3	13.9	Norshaipah, 2004
	17.6	16.8	20.0	Azmi, 2011
Public Speaking	18.6	19.7	18.3	Norshaipah, 2004
	19.1	17.8	13.0	Azmi, 2011

In this study, Malaysian students who use Chinese as the dominant language seem to face the torment of having a high level anxiety associated with library anxiety and communication anxiety while students who use Malay as the dominant language have the highest level for English language anxiety. Interestingly students who use Tamil have the lowest level of anxiety in almost all the anxiety constructs. Students who use Other Languages are relatively low anxious students except for dimension Internet Services Barriers of library anxiety and dimension Group Discussion of communication anxiety. While the reasons are not apparent, it confirms the view that level of student related anxieties are a function of either the individual's native language or of his or her dominant language (Allen, et al., 1985).

5.2.5. Hypothesis 5: There are significant relationships among the dimensions of English Language and library anxiety?

The results of this study revealed a weak but significant relationship among the dimensions of English Language and library anxiety. Only dimension Library Services Barriers of library anxiety showed that a significant relationship existed between the dimensions, Learner Anxiety of English language anxiety. Nevertheless, the findings provided empirical evidence that students' inherent anxiety as learners can pose as barriers when using the library services.

This is a significant finding because most times libraries and librarians provide the state-of-art services benchmarking with high ranking universities worldwide. It has to be realized that in countries where English is not the native language, students who are naturally non-native speakers of English, have learner anxieties which may not be prevalent in countries where English is the native language. There is a high probability that students' own anxieties hindered them and prevented them from making optimal use of the library services. Previous studies have indicated that anxious students may overlook signs and directions put up in the library (Keefer, 1993). When students' have perceived feelings of incompetency when compared to others, it can spill over when using the library services.

The correlation value between dimension Learner Anxiety of English language anxiety and dimension Library Services Anxiety of library value is $r_s = 0.263$, $p < 0.05$. Although it is a weak correlation ($r^2 = 9\%$), it is an indication that libraries and librarians cannot assume that all students will benefit equally from the library services.

Students' own negative learner anxieties do interfere when using the library services. It has been reported that non-native speakers of English get nervous whenever they feel the need to use English in and outside the classroom indicating that strict and formal classroom environment maybe one of the reasons for students' anxiety (Khattak, et al, 2011).

The findings of this study surprisingly revealed that the other two dimensions, Speaking Anxiety and Classroom Anxiety of English language anxiety did not correlate significantly at all with any of the five dimensions of library anxiety. There could be three possible reasons for the non significant findings in this study. Firstly, the original FLCAS by Horwitz, Horwith, and Cope (1986) was designed to assess the anxiety faced when having to communicate using a foreign language or a language the students are not competent with. As both the student and library staff population in Malaysia are bilingual, students have a choice of language to communicate. Hence, the anxious feelings of having to communicate in English Language may not be that crucial enough to create any form of anxiety when having to use the library services and facilities. Secondly, as the original FLCAS was not designed to read nor understand resources written in the English language, it may not be very relevant to investigate the relationship with dimensions such as Library Resources Barriers and Affective Barriers of library anxiety.

Thirdly, using the computers in the library for Internet searching and retrieval are almost all the time carried out in privacy whereby the FLCAS is not suitable to measure any form of anxiety faced in private. Moreover from the findings of this survey, the students' concern with Internet Services in the library is only when Internet is down or

slow. The findings of this study did not support Mizrachi and Shoham's (2004) findings that the language factor in library anxiety is influenced by the factors of computer confidence and computer anxiety. Although the computer system, open access catalogues, repositories, locating books, searching in electronic databases are mainly in English, most probably students relate Internet with browsing search engines only rather than for scholarly use. Perhaps other instruments related to reading such as Foreign Language Reading Anxiety could be used for further research.

5.2.6. Hypothesis 6: There are significant relationships among the dimensions of communication and library anxiety.

The results of this study had provided empirical evidence that there is a correlation between the dimensions of library anxiety and communication anxiety. The most significant relationship is between the dimension Library Services Barriers with dimensions Formal Settings, Interpersonal Conversations, and Public Speaking, of English language anxiety. The other significant relationships are found between Library Staff Barriers and Interpersonal Conversations. Also between Affective Barriers of library anxiety with dimension Formal Settings and Group Discussion of communication anxiety. The results of this study also revealed a weak but significant relationship between the dimension Formal Settings and Group Discussion with Library Staff Barriers and Library Resources Barriers.

No significant relationship was found to exist between Library Staff Barriers and Group Discussion; Library Services Barriers and Group Discussion; Library Resources Barriers as well as Affective Barriers of library anxiety with Interpersonal Conversations and Public Speaking. Lastly Internet Services Barriers did not show any significant relationship with Formal Settings, Interpersonal Conversations, and Public Speaking dimensions of communication anxiety.

Communication anxiety is associated with social contexts. Gecer and Gumus (2010) have indicated that students who experience communication anxiety feel tense and uncomfortable and have little enthusiasm to communicate with their peers or teachers. Due to this, they may hesitate to talk, forget what they intended to say, or

make incessant mistakes as they talk. Barriers to using library services have a relationship with the students' perspective of viewing the library settings as serious and formal situation. Students' real encounter with library staff, services and resources can result in social communicative anxiety (Daly and Stafford, 1984) if the students encounter unpleasant experiences at the library. Onwuegbuzie, Jiao, and Daley (1997) have also reported that students' perceptions of librarians increased their level of anxiety. Students who have inherent anxiety communicating with other personal and students who view library staff as authoritative feel anxious when having to seek assistance from library staff. Of course, students view librarians as people who are different and holding higher status since they are working adults who know about the library unlike them. Students can also feel uncomfortable and worried that they may not be able to present themselves as capable of getting the message across especially if librarians are seen to be serious and distant in dealing with them.

Students' innate self conscious, and lack of confidence in participating in discussion do contribute when using the library resources. The dimension Group Discussion showed correlation with dimensions Library Resources Barriers, Affective Barriers, and Internet Services Barriers of library anxiety. Horwitz, Horwitz, and Cope (1986) indicated that anxious students feel a deep self-consciousness when asked to risk revealing themselves in the presence of others. Malaysian students have been reported to feel nervous and very self-conscious when they have to speak in front of other students (Khairi & Nurul, 2011). Students with high reading scores represented the highest levels of library anxiety (Onwuegbuzie & Jiao, 2000). Mellon's (1986) theory of library anxiety posited that students are afraid to ask questions because by doing so they would reveal their inadequacies and consequently be negatively appraised by their

peers and others. During schooldays, some of these students have only communicated in their own dialect (Malay language variety which differs according to the different states in Malaysia) with family members, friends, and even teachers. At the university, when these students realized others do not share their communication style and language, they often experience uncomfortable feelings and encounter difficulties when code switching to the proper Malay or the English language. Onwuegbuzie, Bailey, and Daley (1997) have suggested that non-native speakers of English are susceptible to be affected by affective barriers in the library.

The anxieties that students experience when using the library's collections and services are influenced by the students' self-perception of their abilities. For some students, the transition from rural schools to universities may have an influence on their affective behavior towards the university and library environment. Some students come from states where there are no public or school libraries. On the other hand, there are students who have been members of public libraries ever since they are children. Students from well to do families have parents buying books for them and inculcating reading habit amongst them as when compared to students who have only read school textbooks and may find the library, books and the environment intimidating. This was also observed and reported by Mellon (1986) that students felt scared and inhibited to use library resources because they feel inferior and thought the other students were smarter and also were afraid of how others perceive them. Generally students with affective barriers would be afraid of being negatively appraised and may face barriers when required to make use of library services. Even if relevant library services were provided and librarians were to facilitate well, how much anxiety students feel upon

using the library and its resources varies with the inherent anxieties faced by the students.

5.3. Summary

Students who are not well versed in the use of English language for strategic searching of the online resources can feel anxious using library services and resources. If English is not the dominant language used, the degree of anxiousness using the services particularly online services would be higher as it was observed in this study that students using Chinese, Malay, and Other languages as their dominant language experience higher levels of anxiety than students who use English. Students could be influenced by their mother tongue languages that do not dominant world-wide communication (Henderson, 2009). The implication is that when students complain about the level of comfort in the library or the mechanics of using equipment, it can stem from their own anxiety of being evaluated by their peers. High anxious students may feel that other students are adept at using the library while they are inept resulting in affective barriers.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1. Introduction

In conclusion, the findings of this study provided evidence of the relationship between student anxieties and library use. Student inherent anxieties in the form of learner anxieties and interpersonal conversation do correlate when using the library services and seeking assistance from library staff. Students' perceptions of the library as a formal, serious, and scholarly enterprise instill in them fear which could be brought over from their own anxieties with formal situations and public speaking contexts. This means that there is a hidden disconnect between library services and the optimal use by students. The cause does not lie with the library but within the students. While librarians view the collection, services, and facilities as a resource to support university learning, research, and teaching, students might not be able to make full use of this support due to own underlying anxieties.

Although the library anxiety among the final year students in this Malaysian public university, is not at an alarming level, nevertheless library anxiety exists as a phenomenon among them. Analysis of the individual item statements and the correlation among the anxieties revealed that the library anxiety level maybe due to the inherent anxieties among students themselves. Students in Malaysia come from different parts of the country which are marginally divided economically, digitally, and in some instances by language. The students may not even comprehend fully an academic library's policies, rules, and regulations and what the librarians say during

orientation tours. Using academic libraries can be a bewildering experience (Liu, 1993), since school libraries have closed stacks and are used mainly for studying only. While it is difficult to extricate the multifarious dimensions, to be aware of other anxieties manifesting as library anxiety must be acknowledged and acted upon by librarians. It has been observed that private university students have lower levels of communication anxiety particularly with lecturers (Gecer & Gumus, 2010). There are opportunities to communicate in private universities and students are encouraged to communicate resulting in willingness of students to participate. Another reason given is that students in private universities have a high socioeconomic status since they can afford to pay high fees in private institutions. As library anxiety is a state anxiety and has a social context, any form of anxiety using the library resources, facilities and services cannot be eliminated by taking steps within the library alone. Efforts should be made with the students feelings and behavior in mind.

6.2. Findings

(a) The findings of this study can be summarized as follows:

(i) Internationally used instruments originally developed in English speaking countries may not be totally applicable and have to be modified when having to test among non-native speakers of English.

(ii) The experience of library anxiety seem more of the perception of individual students arising from their own anxious feelings of students spilling over when using the valuable services in the library. This somehow reiterates the findings of Jiao and Onwuegbuzie (1997) and Van Kampen (2003) when they reported that library anxiety factors are perceptions of students towards the library, library staff, and library services.

(iii) The dimensions of communication anxiety seem to play a crucial role in the confidence level of students to enable them to build up their competency in using library resources and services. Students' inherent learner anxieties and their fear of communicating with other people and in public or formal situations are also brought into the library scenario. Students who have inherent communication problems and who have difficulty communicating with others will be unlikely to make full use or demand services from the library.

(iv) The findings showed that there are no statistically significant mean differences between the male and female students on the overall level of the three academic related anxieties.

(v) The findings of this study reveal that a significant mean difference existed in the overall level of all three anxieties when the dominant language used is English, Malay, Chinese, Tamil, and Other Languages. The dominant language used revealed statistical significant mean differences in all the dimensions of English Language anxiety; in Library Resources Barriers and Library Services Barriers dimensions of library anxiety; and in Interpersonal Conversations, Group Discussion, and Public Speaking dimensions of communication anxiety.

The hidden anxieties of students are expressed in the factor loadings which emerged in this study. One of the findings from this study indicated that the Internet availability and speed can cause anxiety among students. Internet is needed to access the resources and the digital collection. The factor Library Resources Barriers which seem to appear in this study and other studies among non-native speakers of English indicate that it is not just having knowledge of what the library has but knowing how to search, retrieve and use these resources. The latest study on library anxiety in China

by Song, et al., (2013) indicated Retrieval as one of the factors for library anxiety. Interesting though, is the fact that the factor Library Staff Barriers emerge as an important dimension with a high percentage of variance and high number of items, not only in this study but also many other studies as well. The Affective Barriers is also found to correlate negatively with Library Staff Barriers. The optimal use of Library Services are hindered by Affective Barriers of students which has its root cause within the students and outside the scope of the library. The inference from this study is that the anxious feelings in dimensions Formal Settings, and Public Speaking of communication anxiety act as distal antecedents and mediate through the Learner Anxiety to cause Affective Barriers which has a negative relationship with the dimensions, Library Services Barriers and Library Staff Barriers of library anxiety (Figure 6.1).

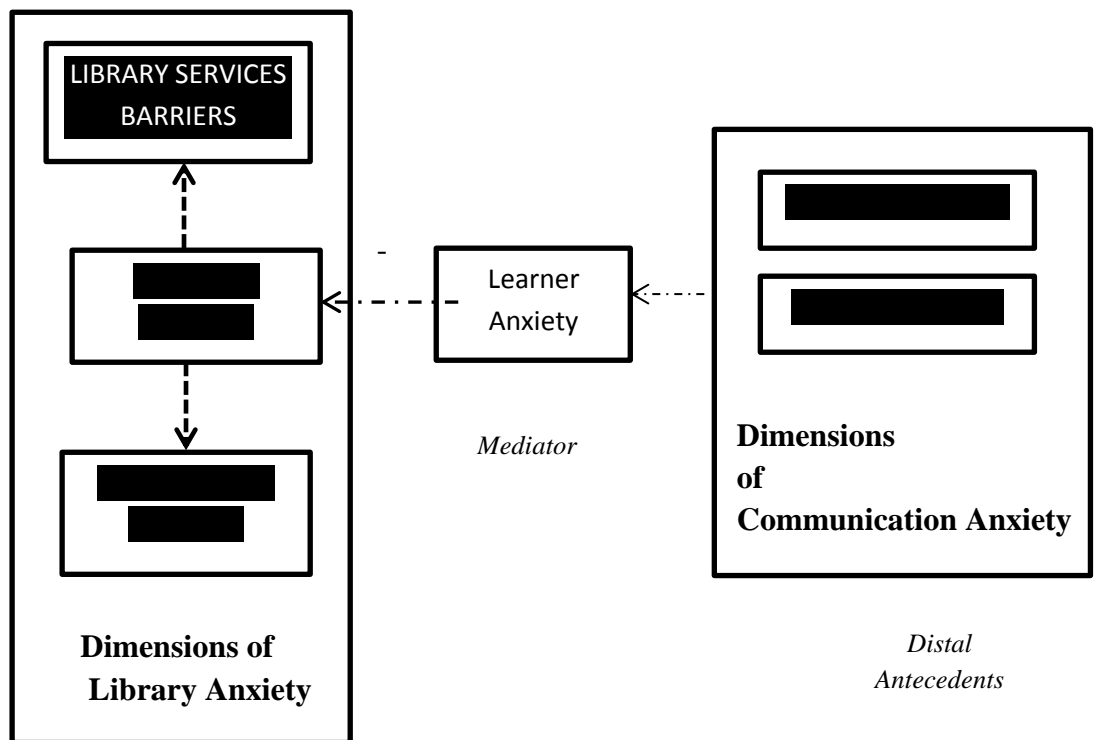


Figure 6.1: Correlation Between Communication Anxiety And Library Anxiety

Figure 6.1. is a diagram summarizing the inference from the findings of this study. Students' arousal of anxiety in formal situations and public speaking contexts are brought to surface during library use as libraries are also perceived to be a formal and serious environment. The resultant negative affective feel becomes a barrier when using the library services and seeking assistance from the library staff.

(b) The relationships among the three academic related anxieties can be summed up as follows:

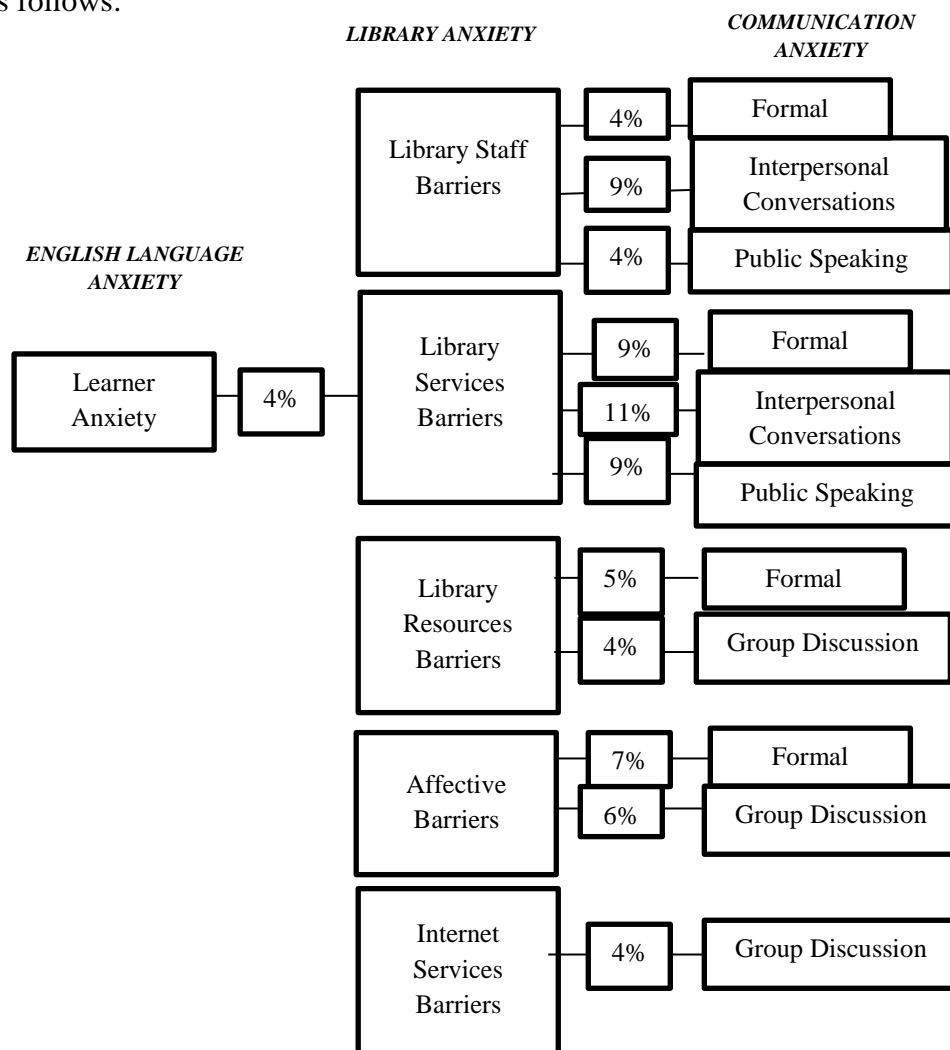


Figure 6.2: Relationship Among the Dimensions of Library Anxiety, English Language Anxiety, and Communication Anxiety
(The percentage value is calculated as r square (r²))

- (i) The dimension Library Staff Barriers has a significant relationship with dimensions Formal Settings ($r_s = 0.21, p < 0.01$), Interpersonal Conversations ($r_s = 0.31, p < 0.05$), and Public Speaking ($r_s = 0.20, p < 0.01$) of communication anxiety.
- (ii) A similar relationship was found to exist in the dimension Library Services Barriers which also has a significant relationship with dimensions Formal Settings ($r_s = 0.26, p < 0.05$), Interpersonal Conversations ($r_s = 0.33, p < 0.05$), and Public Speaking ($r_s = 0.27, p < 0.05$) of communication anxiety.

Library Services Barriers is the only dimension of library anxiety which has a significant relationship with the dimensions of English Language Anxiety; Learner Anxiety ($r_s = 0.26, p < 0.01$).
- (iii) The dimension Library Resources Barriers has significant relationship with dimensions Formal Settings ($r_s = 0.22, p < 0.01$), and Group Discussion ($r_s = 0.21, p < 0.01$) of communication anxiety.
- (iv) A similar relationship was found to exist in the dimension Affective Barriers which also has a significant relationship with dimensions Formal Settings ($r_s = 0.26, p < 0.01$) and Group Discussion ($r_s = 0.24, p < 0.05$) of communication anxiety.
- (v) The dimension Internet Services Barriers has significant relationship with dimension Group Discussion ($r_s = 0.21, p < 0.01$) of communication anxiety.

In conclusion, from the findings of this study, it can be reported that:

- (a) The dimension Library Staff Barriers is influenced by at least 17% of the dimensions of communication anxiety.
- (b) The dimension Library Services Barriers is influenced by at least 29% of the dimensions of communication anxiety and 4% of the dimension of English Language anxiety.
- (c) The dimension Library Resources Barriers is influenced by at least 9% of the dimensions of communication anxiety.
- (d) The dimension Affective Barriers of library anxiety is influenced by at least 13% of the dimensions of communication anxiety.
- (e) The dimension Internet Services Barriers is influenced by at least 4% of the dimensions of communication anxiety.

6.3. Implications Of Findings For Library Practice

Libraries have to take essential actions to include student anxieties in their implementation plans. The Association of College and Research Libraries suggests that the culture of libraries and their staff must proceed beyond a mindset primarily of ownership and control to one that seeks to provide service and guidance in more useful ways, helping users find and use information (Changing, 2006, p4). Based on the findings and data analyses of this study, the following recommendations can be made to embark on an 'anxiety-free' environment in the library:

(a) Computer Medicated Communication (CMC) Tools

Libraries and librarians should acknowledge that students are anxious to seek assistance from librarians. Students who intend to seek help must be brought out of their shells. In an era of sophisticated technology combined with the presence of the Net generation, the library must enhance more use of CMC tools as a means to assist students who are experiencing student related anxieties. Some examples of CMC in the library which would be highly valuable are:

- (i) Interactive virtual map of locating books and other library materials.
- (ii) Signage and directions on every shelf area on every floor and on special collections. This would take care of students who claim that they *'do not know what to do when items are not on the shelf'* and also when students' perception of the library environment and staff deters them from approaching anyone in the library for assistance. Jiao and Onwuegbuzie (1999c) had indicated that students whose perception of librarians heightened their anxiety level like to receive information via visual mode.

(b) Empathy

A library with a big collection is considered to provide poor service if the library staff are unavailable when students need help, or if the library staff have unprofessional behavior and indifferent attitude (Miao & Bassham, 2007); students still need human interaction despite the convenience of digital access (p54). Librarians on duty should use gentle or non-authoritative methods of answering any queries, whether the query is face-to-face or via email/online. The challenge for libraries, their leadership and staff,

is to recast their identities to the changing modes of knowledge creation and dissemination, and in relation to the academic communities they serve (Changing, 2006, p3). Staff can be provided training in interpersonal skills to equip them with people skills so as to be polite, courteous, with positive attitude. Library staff should be more sensitive to students' lack of composure in posing questions and should not be agitated and tense for questions which are too easy and obvious for the librarians. The highest point of anxiety in an interaction is during the greeting and opening line (Von Worde, 1988). The individual's impression of the communication event will influence future events. Interaction with a librarian helps to allay students' fears and to build confidence through reassurance and an awareness of the negative perceptors many students have about the library, even before they enter the building or log on to the library web page (Carlile, 2007).

(c) Understanding cultural diversity

Familiarity with culture and ethnic background can be helpful in reducing anxiety. The findings of this study revealed that students who use Chinese as their dominant language have the highest level of library anxiety, foreign language anxiety, and communication anxiety. This could be due to their perfectionist nature. Perfectionism as described by Onwuegbuzie and Jiao (1998b) is important for some students as they have to maintain a perceived need to attain standards and expectations by their friends, families, and teachers. Such people because of their anxiety refrain from asking for help (Keefer, 1993). This could explain their need to use Internet resources and seeking friends help rather than the librarians as reported by Nor Edzan (2007) and Mohd Shariff and Zainab (2007). The students who use Tamil as their

dominant language have the lowest levels of anxiety in almost all the dimensions. This could be because of their individualistic nature as ascertained by Jiao and Onwuegbuzie (2002) that individualistic culture have the lowest level of anxiety. Students who use Other Languages as their dominant language have high levels of anxiety using the Internet and speaking with library staff. Students who use Malay as their dominant language have less anxiety communicating with library staff most probably because almost all the library staff are of Malay ethnic group.

(d) Interactive Information Skills Sessions

In this study, male students seem susceptible to Library Resources Barriers compared to the female students. Such lack of knowledge of library resources can further increase their anxiety and attending information skills sessions do not seem to have any change in their anxiety levels. Female students on the other hand are reported to become less anxiety after receiving bibliographic instruction (Battle, 2004). Bibliographic instruction librarians have to be alert and sensitive to individual students' needs. It must be remembered that high anxious students are reluctant to share their feelings of anxiety which can lead instructors to overestimate their library skills (Jacobson, 1991). Some students may find it difficult to follow the spoken lesson due to language, learning styles or communication differences. As the time frame of library instruction programmes is limited, the focus is on the key matters sufficient enough to enable students to retrieve information.

A user friendly library environment would be beneficial for all. Glossaries of library terminology and handouts on the library's basic rules and procedures to be

written in the local language (Malay) as well as in English. This would facilitate students to be acquainted with the library system thereby increasing their confidence and willingness to ask questions (Liu, 1993). Library orientation tours should avoid library jargon as librarians are so familiar with the terminology not realising that they could be a new term for the students. As such, small matters but highly important for students such as library facilities, services, photocopying, printing, fine system, core collection borrowing procedures are neglected during library instruction programmes. Special hands-on workshops, carnivals, open days are effective ways to overcome communication barriers and create a friendly rapport between students and staff. While some libraries in Malaysia do practice these, they are not seen as priority areas of library services.

More use of web pages, PowerPoint, flip chart, printed exercises will be useful for students with such difficulties. Encouraging students to be more confident would encourage them to search and use the vast available information resources in the library. Bibliographic instruction librarians can help to alleviate students' feelings of fear and insecure by being aware of their problems and adopting differing methods on instruction accordingly. Letting the students know that we understand their anxiousness and that they are not alone can go a long way to make them feel less stressful using the library. However, most of the time bibliographic instruction classes are in groups and students seldom will admit their feelings of anxiety in front of their peers.

“Learners may opt out of discussions due to past unpleasant experiences in the academic setting because they lack confidence in their language skills or because they are reflective types who need to think about a topic for longer than is allowed in a quick-paced, interactive discussion.” (Grassian, 2001) p331.

6.4. Future Research

Top researchers in foreign language anxiety such as McIntyre and Gardner have reiterated that non-native speakers of a language are disadvantaged from the outset because of the apprehension they experience (MacIntry & Gardner, 1991). There is a necessity to study non-native speakers of English who have begun to use more and more English as a result of globalization and internationalization. They are often referred to as the '1.5' generation (Asher, Case, & Zhong, 2009). They are not part of the first generation of their parents who had made the fateful decision to leave their homeland (Rumbaut & Ima, 1988). These youth are part of the 'second generation' of children for whom the 'homeland' mainly exists as a representation consisting of parental memories and memorabilia, even though their ethnicity may remain well defined. For these youth, 'language and its implied cognitive requirements pose a barrier and their future prospects for self-sufficiency' (p173).

It would be beneficial if further confirmatory analyses are undertaken to show further evidence of the correlation of academic related anxieties on library anxiety particularly among non-native speakers of English. Information literacy and benchmark standards from English speaking countries may not accomodate issues and challenges of non-native speakers of English pursuing tertiary education. Thus, further studies can help libraries and librarians to review library instruction, services, collections, and facilities. This study also limited the sample to final year students in one institution of higher learning.

A nation wide sample/population and across year of study are recommended for future research. The Malay translated Library Anxiety Scale will prove useful for further investigation of the level of library anxiety and its dimensions instruments in the Malaysian institutions of higher education. This is particularly so because there are 22 government funded and sponsored universities in the country. Much public funds are allocated and it is necessary that the resources, services, and facilities meet the return of investment ration. This will ascertain the continual funding in future. Understanding student level of anxiety and the dimensions which emerge from these studies can guide the library to focus on problem areas of students and prioritise them. A nationwide study of library anxiety among undergraduates would facilitate the planning and implementation of library services and facilities, as well as the procurement of library resources accordingly.

6.5. Conclusion

In conclusion, this study has discovered the important aspects of relationship between student anxieties and library anxiety. Firstly, lack of understanding of the affective behaviour of students can affect the outcome of the library's goals and aims to attract and engage students in activities pertaining to library services. This study's findings indicate that distal antecedents in the form of communication anxiety, which are not obvious, play a role in the affective behaviour of students consequently affecting their behaviour when using the library services. Secondly, the dominant language used by students in a multilingual country like Malaysia do have an influence on the optimal use of library resources and seeking assistance from librarians and library staff. The

dominant language used is most times determined by the students' ethnic background. Almost all the time, librarians perceive students who require assistance will approach them. Earlier research by Mellon (1986) and Karabenick and Knapp (1988) have repeatedly reported that students are categorised as not interested in getting information may in fact be experiencing some kind of fear and anxiety and are actually afraid of approaching library staff for assistance. Some students are full of self confidence. Some find the library system complicated like a maze. Some are organized while some are not. Negative attitudes and mistrust about their thinking abilities and skills could cause illogical fear and inadequacy while using the library. This study has provided evidence that students carry their own baggage of anxieties. For optimal library use, the perception and efforts of librarians should also be more alert, sensitive, and proactive.

This study support Onwuegbuzie, Jiao, and Bostick's (2004) findings that besides the usual demographic variables such as race, gender, age, year of study, other factors can influence the level of library anxiety (Onwuegbuzie, Jiao, & Bostick, 2004). At any particular time, other pre-existing anxieties in a student can arise. Other academic related anxieties research have reported that anxiety in the form of apathy and disinterest on the part of the students maybe because of inappropriate course content (Casado & Dereshiwsky, 2012). Anxious students require more time for word production leading to the impression that anxious students are not capable communicating particularly related to their second language (MacIntyre & Gardner, 1991).

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