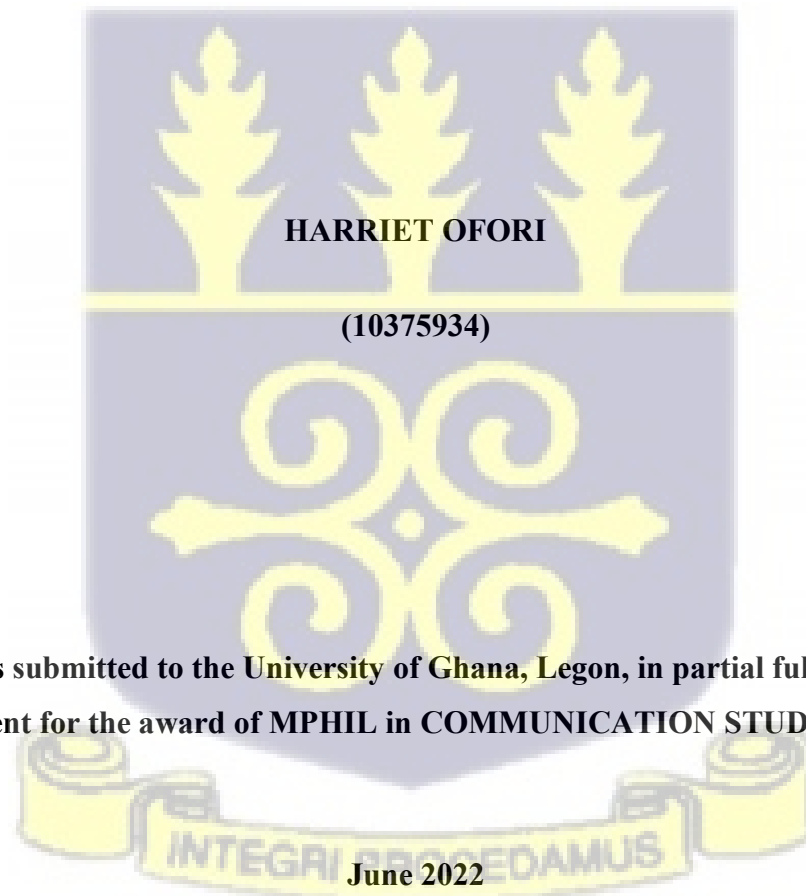


**ACCEPTANCE AND USE OF LANGUAGE TRANSLATION TOOLS IN THE
LEARNING ENVIRONMENT: A TAM-BASED STUDY OF FRANCOPHONE
STUDENTS STUDYING IN GHANA**

BY



This thesis is submitted to the University of Ghana, Legon, in partial fulfillment of the requirement for the award of MPHIL in COMMUNICATION STUDIES Degree.

DECLARATION

I hereby declare that except for the references to other people's work, which have been duly cited, this thesis is the result of my own research undertaken at the Department of Communication Studies, University of Ghana, Legon. The work was under the supervision of Dr. Gilbert Tietaah.



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Harriet Ofori
(Student)

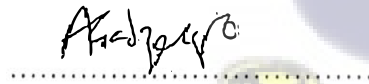
DATE: 13/06/2022



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DATE: 13/06/2022



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Professor Audrey Gadzekpo
(Secondary Supervisor)

DATE: 13/06/2022



DEDICATION

This research is dedicated to the Almighty God, whose faithfulness has brought me this far in my academic pursuit.



ACKNOWLEDGEMENT

I would first of all like to express my profound gratitude to God Almighty. I would not have made it this far without His grace, mercy and faithfulness.

I would also like to thank my supervisor, Dr. Gilbert Tietaah. His time, critique, academic counsel and patience greatly helped in giving the needed focus and quality to my work.

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Many thanks also go to my Assistant lecturer, Fidelis. In many ways that you may not be aware of, you were helpful, especially in helping me believe in myself and in streamlining my work.

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ABSTRACT

This study is a qualitative exploration of the experiences of francophone students with the use and utility of language translation tools for navigating the communication challenges they face in a foreign language learning environment. The Technology Acceptance Model (TAM) underpinned this study.

A total of 20 francophone students from the Ghana Institute of Languages (GIL) were interviewed. There were similarities between the findings of this study and those of many previous studies, in the revelation that while translation tools do have some functional utility, their inability to reflect the imperatives of context in meaning making impose limitations on their reliability in enabling competent communication. However, while the threshold for error may be low in fields such as medicine and healthcare, the lack of complete accuracy of language translation tools was perceived to be less of a barrier to students in the foreign language learning environment.

Furthermore, the findings show that perceptions of the usefulness and ease of use of different translation tools informed the preferences of francophone students for particular types of language translation tools.

Finally, similar to conclusions by Tabiri and Budu (2017), notwithstanding individual testimonies about experiences of foreign language anxiety (FLA), a shared opinion among the informants was that immersing into the language and culture of the target language gives them the opportunity to interact with Ghanaian English speakers, which would in turn, increase their English language proficiency.

Future studies may consider including a quantitative dimension that would pick on the indicators identified in the present study, in order to increase breadth as well as generalisability of findings.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

In what has been referred to as the age of globalization (Sparks, 2007; Sreberny-Mohammadi, 1991), effective communication, together with the enabling technologies, has been metaphorically described as the oxygen and lifeblood of interpersonal, social and organizational functioning (Keranen & Sanprie, 2008; Nwabueze & Mileski 2018; Sethi & Seth, 2009); without which very little meaning can be shared among people.

Foreigners living in countries where they do not share any linguistic commonalities with the citizens however find it difficult to communicate meaningfully, resulting, in most cases, in a phenomenon known as the Foreign Language Anxiety (FLA), in their attempt to speak the target language. FLA is also believed to negatively affect the academic performance of foreign students in countries whose national language they do not speak fluently (Kiya, 2015).

According to Ezzi (2012), university students in foreign countries have to communicate using foreign language (FL) in the classroom, which causes some level of communication anxiety among them. Some, in an effort to mitigate the challenges, resort to such technologies as language translation tools, an example of which is Google Translate.

The possible expediency, if not efficiency, of these tools notwithstanding, users hold different views on their usefulness in terms of how effective they are in helping them communicate with people with whom they do not share the same linguistic backgrounds.

The research evidence reflects an equivocal verdict on language barriers and the factors that influence the adoption of these tools by users. Whereas some base the acceptance and use of

translation tools on their perceived usefulness and perceived ease of use, evidence from other studies suggest that the acceptance and use of these technologies vary from one person to the other, as determined by various other factors, which also depend on the individual (Baturay et al., 2017; Faqih & Jaradat, 2014; Hussein, 2017).

1.1.1 Mediated Communication Age; Global Educational Experience and Internationalization of Universities

Learning a foreign language (FL) in this era of globalization has become a necessary tool to broaden one's horizons, gain a better understanding of foreign people and their cultures and communicate with them (Hwa & Peck, 2017). According to Rajanathan et al. (2013), communication is an essential element in human interaction, which is connected to the oral and listening aspects of a language. Different languages all over the world have become a means of communication for many. Of these languages, English is considered as one of the dominant few and has thus acquired an important communication role in the world. In countries such as Australia, Canada, England, New Zealand and the United States of America, which Kachru (1985, as cited in Roy-Campbell, 2014) refers to as the inner circle, it is spoken as a native language. It is also used in other countries, including former British colonies in Asia and Africa, also referred to as the outer circle (Kachru, as cited in Roy-Campbell, 2014). As English is used together with several indigenous languages in the outer circle, its role differs from that of the countries in the inner circle (Crystal, 1997 as cited in Roy-Campbell, 2014). Among the many different social spheres where evidence of this is easily observable are the educational systems worldwide both at pre-university (Dalton-Puffer, 2011) and university levels (Doiz et al., Lasagabaster & Sierra, 2013a; Smit & Dafouz, 2012).

In an effort to design efficient language learning programmes and due to the hegemony of English, governments and education systems have been forced to implement English-medium instruction (EMI) programmes, with the hopes of accomplishing two objectives simultaneously – content learning and language acquisition – (Dafouz et al., 2014; Doiz et al., 2013a; Smit & Dafouz, 2012).

What is more, there is currently an active engagement of higher education institutions in an internationalisation process now more than ever (Lasagabaster, 2015). Moreover, universities have become a place of convergence for people of different racial, cultural and linguistic backgrounds, where they come together for the common goal of learning and sharing knowledge. The English language, considered to be one of the main instruments of internationalising universities all over the world according to Lasagabaster (2016), has become a particularly important medium of communication.

According to the Times Higher Education World University Rankings, the international profile of universities is one criterion by which they are ranked in terms of performance. Therefore, the more foreign students a university enrolls, the better it is deemed to perform. Implicit in this is the idea that universities have an interest in reflecting an internationalised operating profile. This ‘competition’ has boosted the already privileged position of English, which constitutes ‘a covert form of language policy’ as it strongly favours EMI (Piller & Cho, 2013, p. 23).

Higher Education Institutions in Ghana for example, in an effort to establish an internationalised profile, admit foreign students. According to the National Accreditation Board of Ghana, as at June 2018, there were 212 tertiary institutions in the country, some of which admit foreign students.

The problem with internationalising tertiary institutions vis-à-vis the English language however is that, it may result in unexpected side effects (Piller & Cho, 2013; Shohamy, 2013; van der Walt,

2013). Examples of these side effects are students' communication challenges and disinterest in academic material due to their lack of English proficiency, resulting in limited participation and interaction in classes, which according to Kiya (2015), negatively affects their academic performance.

Another effect of internationalising tertiary institutions through the English language, foreign language anxiety, has become a matter of considerable interest in the context of language education since it is considered a major obstacle to learning in foreign language environments (Wu, 2011). According to Horwitz (2001), one-third of all foreign language learners experience language anxiety to some extent, hence, the scholarly interest in the topic in recent years (Ellis, 2008).

It is in view of this communication challenge that the importance of mediated communication tools is highlighted. For years, mediated communication tools such as e-learning platforms have played an immense role in teaching and learning. This has stirred scholarly interest in the study of cross-cultural communication as well as mediated communication in the learning environment.

There has been tremendous growth in research related to mediated communication vis-à-vis mobile-based technologies in the past decade; specifically, in the fields of mobile commerce, mobile banking, and mobile learning (Chung, Chen, & Kuo, 2015; Shaikh & Karjaluoto, 2015; Turban et al., 2015). In addition, Granić and Marangunić (2019) assert that educational settings involve a wide range of potential users of technologies, which support the process of knowledge transfer and acquisition. Examples of such technologies are language translation tools, such as Google Translate, which some people especially in cross-cultural settings resort to in an effort to mitigate communication challenges caused by language barriers.

In foreign learning environments, language translation tools are not being proposed as absolute remedies, but as facilities to provide an expedient shortcut, to help foreign students negotiate meaning and understanding in the foreign learning environment.

1.1.2 Scholarly Appeal of Translation Technologies

In professional contexts such as healthcare, language barriers threaten the quality of hospital care received by patients whose linguistic backgrounds are different from that of their caregivers (van Rosse et al., 2016). Hospital procedures such as medication administration, pain management, interaction between patient and physician as well as risk communication are at the risk of being unsuccessful due to language barriers. To mitigate these communication challenges, health care professionals rely on language translation tools to facilitate communication between them and their patients.

In spite of the possible convenience and/or efficiency provided by these tools, practitioners hold their reservations on their usefulness in terms of how effective they are in helping them communicate with their patients with limited English Proficiency (LEP). For example, Turner et al. (2019) found that although Emergency Medical Service (EMS) personnel and patients with LEP appreciate the flexibility of translation tools, multiple translation errors and difficulty responding to questions limit their usefulness in facilitating communication between them and their patients with LEP.



In addition, Vasconcellos and Bostad (1992) noted that, sometimes, in addition to using approved terminology, translations call for special phraseology, which may not be in the technology's ability.

Patil and Davies' (2014) in their study also found limited usefulness for the tools for medical phrases used in communications between patients and doctor, largely because many of the translations were "completely wrong."

These results can be explained from the findings of a study conducted by Weissbort and Eysteinnsson (2006, p. 347), who said:

Since no two languages are identical, it stands to reason that there can be no absolute correspondence between languages. Hence, there can be no fully exact translations. The total impact of a translation may be reasonably close to the original, but there can be no identity in detail.

Language translation tools can, therefore, facilitate some level of understanding and meaning negotiation to some extent. There is however always a possibility that meaning may be distorted and lost in translation.

Language translation tools, according to the literature, have limitations in terms of efficiency and accordingly, may not be the most useful in certain fields of enquiry such as medicine (Bundgaard et al., 2016; Chen et al., 2016; Patil & Davis, 2014; Turner et al., 2019). However, whether they are useful in other contexts such as the foreign language learning environment in which they may just be considered as aids, is still open to research.

Evidently, observations made by scholars in related studies that have tended to repudiate the value of machine translations have generally been examined in the context where errors are understandably not entertained.

To what extent therefore are the conclusions from said studies universally generalisable to all contexts? Are there contexts in which they provide sufficient understanding to facilitate negotiation of some meaning such as in the context of the foreign learning environment where foreign language students have the need to learn and may find it as a tool for learning the normative language – English? Questions such as these were raised and addressed in the present study.

1.2 Problem Statement

Multiple studies on the challenges posed by language barriers and the translation tools to attenuate them have tended to focus on the medical context understandably because such studies have been interested in the far-reaching consequences that may arise from errors in the translation of medical presentations, terminologies and prescriptions (Chen et al., 2016; Patil & Davies, 2014; Turner et al., 2019).

Désilets et al. (2009), for example, conducted an ethnographic study to determine the types of translation problems faced by human translators and the types of resources they used to solve translation difficulties and found that human translators 41 per cent of the time consulted translation tools and resources in the practice of their profession.

Scholars however have differing views on the utility of language translation tools. Whereas some find them very useful, others think otherwise. After an evaluation of the general performance of freely available machine translation (MT) tools in the translation of metadata records, Chen et al. (2012) concluded that language translation tools are useful and dependable. On the contrary, other scholars posit that translation technologies are limited in usefulness, and point to the significant limitations of translation technologies in the medical context (Bundgaard et al., 2016; Chen et al.,

2016; Patil & Davies, 2014; Turner et al., 2019). They argue that although translation tools provide a level of assistance in negotiating meaning and understanding, multiple translation errors and difficulty responding to questions limit their utility, especially since they are set in the medical context.

In the context of the foreign learning environment however, the usefulness of language translation tools is still unclear, as there remains a scarcity of studies on the subject. The verdict is therefore out, as to how language translation tools can be used by foreign students in the foreign learning environment. Studies on communication challenges faced by foreign students with language barriers have only focused on the challenges they face, with particular reference to foreign language anxiety and few solutions or suggestions have been sought on how to overcome them (Gopang et al., 2015; Javid, 2014; van Rosse et al., 2016). In fact, Yasuoka and Bjorn (2011) have argued that little is known, as regards the practice of machine-translation mediated communication and have made a call for more scholarship into the area.

Indeed, translation technology has in recent times become an integrated part of human life (Christensen et al., 2017). In 2016 alone, Google Translate (an online language translation tool), translated an average of 143 billion words a day in 100 language combinations (Christensen et al., 2017). Across various contexts and multi-lingual communication situations such as hospitals, churches, businesses and universities, many people are beginning to leverage language translation tools to communicate with people they share little to no linguistic commonalities with. These language translation tools, such as Google Translate, have become especially salient, as universities are internationalising, for which reason non-Anglophones enrol in institutions in Anglophone countries and vice-versa.

The proximity of francophone countries such as Burkina Faso, Cote d'Ivoire and Togo to Ghana has increased the number of francophone students in the country for educational purposes (World Education News & Reviews [WENR], 2019). A 2019 report by the WENR has described the educational system in Ghana as being generally better than that of other countries in sub-Saharan Africa. This means that after enrolment, they, being francophone, would face communication challenges, especially in the learning environment (Tabiri & Budu, 2017). For example, Tabiri and Budu (2017) conducted a study on the difficulties francophone students in the Ghana Technology University College (GTUC) face. They found that in addition to the academic contexts, francophone students face difficulties in social spheres as well, and therefore concluded that finding a solution to the academic challenges could be a stepping-stone to resolving all other communication challenges of francophone students in the English learning environment.

Isabelli-Garcia (2017), Pinar (2016) and Wang (2010) have argued that if it were only for the purpose of learning grammar and acquiring classroom knowledge of the English language, francophone students would remain in their countries and employ other ways of learning. They are however motivated or encouraged to actually move to Ghana or other English-speaking countries because they know that language is also learnt more efficiently in a social setting. In fact, majority of studies on language immersion academic programmes have come to a consensus that studying in the target language country helps to improve communicative competence, fluency and pronunciation, mainly owing to the numerous opportunities presented to participate in interactions with the native speakers of the target language in a social out-of-the-classroom setting (Isabelli Garcia, 2017; Pinar, 2016; Wang, 2010). Thus, for example, when francophone students come into a new foreign learning environment, they rely on language translation tools to negotiate communicative meaning and understanding within and outside the academic environment on an

everyday basis. However, how useful are these tools to them? There is a scarcity of studies to answer this question.

The present study was therefore designed to extend existing scholarship on translation challenges beyond the context of health and into the context of education. The study looks at the experiences relative to the learning environment of francophone students with limited English proficiency (LEP) studying in Ghana. Furthermore, the study explored the remedies available in the form of translation technologies in the context of the foreign learning environment. The study called on the constructs of the Technology Acceptance Model (TAM), which, although has been studied, has been limited in scope to fields such as business/economics, agriculture/environment, and corporate/organisational contexts. The study thus explored how francophone students with LEP studying in Ghana reconcile the opportunities presented by translation tools with the challenges caused by language barriers. The study also explored whether, and in what ways, the tenets of the TAM plays a role in users' adoption of translation technologies.

1.3 Research Objectives

The overall purpose of this research was to find out the use of language translation tools among Francophones studying in Ghana and the factors that influence their acceptance and use. To achieve this, the study pursued the following specific objectives:

1. To explore the language translation tool preferences of Francophones studying in Ghana and the reason(s) for their choices;
2. To explore francophone students' perceptions on the usefulness of language translation tools for overcoming communication challenges;

3. To explore francophone students' perceptions on the ease of use of language translation tools;
4. To explore the contexts within which Francophones studying in Ghana find the language translation tools most helpful and least helpful;
5. To explore experiences of Francophones studying in Ghana vis-à-vis their communication challenges and their use of translation tools to mitigate them;
6. To explore what other factors influence francophone students' acceptance and use of language translation tools in the foreign learning environment.

1.4 Research Questions

To meet the objectives of the study, the following research questions were considered pertinent:

1. What language translation tools do Francophones studying in Ghana prefer and what are the reasons for their choices?
2. What perceptions do francophone students hold on the usefulness of language translation tools for overcoming communication challenges?
3. What are francophone students' perceptions on the ease of use of language translation tools?
4. Within what contexts do francophone students in Ghana find the language translation tools most helpful and least helpful?
5. What are the experiences of Francophones studying in Ghana in terms of communication challenges and what roles have translation tools played in mitigating them;
6. What other factors influence francophone students' acceptance and use of language

translation tools in the foreign (English) learning environment?

1.5 Significance of Study

This study, which sought to explore the acceptance and use of language translation tools from the perspective of the TAM, has an import for both scholarship and practice. As Yasuoka and Bjorn (2011) argue, there is a lull in scholarship with regard to the practice of machine-translation mediated communication, creating a scholarly gap, which this study attempted to fill, to an extent.

First, the study is important in contributing to empirical understanding of the ways in which the assumptions of TAM are sustainable in the context of language translation tools. The study sought to extend the heuristics of TAM beyond the traditional subjects of education (in terms of learning management systems such as Sakai, Moodle and Canvas), banking and social media and into the domain of language translation within the educational sector.

Second, the findings of the study add to scholarship around the issues of language barriers in the foreign learning environment, which have tended to focus on challenges, rather than remedies or suggestions for improving communication and negotiating meaning between Francophones with LEP and the rest of the English community.

Finally, the findings of this study suggest a functional corpus of situations that are encountered within and outside the academic context, and the development of reference resources appropriate to the particular needs of students with LEP. In addition, the findings provide possible feedback for tool developers to include in their corpus of terms.

1.6 Operational Definition of Key Terms

The key terms used in this study are language translation tools, learning environment, acceptance, use, language barriers, opportunities, experiences, challenges, anxiety, perceptions, influence, usage behaviour, usefulness and ease of use. These are operationally defined as follows:

Language translation tools: These are software applications that translate text from a source language into a target language to facilitate communication between people who do not share a common language.

Francophones: This term was used in the study to denote French speakers. It was used interchangeably with “francophone students” throughout the study.

Learning environment: This was used throughout the present study to represent contexts of conversation or communication within and outside the formal structures of the classroom or an examination. This was used interchangeably with “foreign learning environment”, “English learning environment”, “foreign language learning environment” and “academic setting/context” in the study.

Acceptance: This construct was used in the study to denote the act of accepting technological tools such as language translation tools.

Use: This was used to denote the act of actually using the language translation tools to facilitate communication and negotiate meaning and understanding between francophone students with LEP studying in Ghana and the rest of the English learning environment.

Language barriers: This construct was used to denote conceptual setbacks to effective communication, occurring when people who speak different languages attempt to communicate with each other.

Usefulness: “Usefulness” in the study denotes the practical and beneficial use of technological tools as well as their ability to enhance users’ performance.

Ease of use: This construct was used in the study to represent the quality of a particular technological tool in terms of how its use is free from physical and mental effort.

Opportunities: This construct was used throughout the study to represent possibilities language translation tools could present to francophone students in Ghana to remedy their language barrier.

Experiences: This term is used in the study to indicate events and/or activities which francophone students in Ghana go through and from which they have gathered knowledge, opinions, and skills. The construct, “communication challenges” is an example of the experiences of Francophones studying in Ghana.

Challenges: In the study, this concept was used to signify communication difficulties Francophones studying in Ghana face due to their limited English proficiency.

Anxiety: “Anxiety” was used in the study to denote the constant state of worry and nervousness of foreign language speakers, especially when they have to communicate in languages that they are not sufficiently proficient in.

Perceptions: This was used in the study to represent Francophone students in Ghana’s conscious understanding of as well as their opinions on the usefulness and ease of use of language translation tools.

Influence: In the study, this construct was used to represent the process of and the ability of one entity to have an effect on another’s behavioural intentions.

Usage behaviour: This term was used in the study to signify the decisions users make in terms of their adoption of technological tools such as language translation tools.

1.7 Organisation of Study

This study is organised into seven chapters. Chapter one is an introduction to the study, which provides the study's background and contextual lay-out. The chapter further presents the research problem, research objectives, research questions, significance of the study, and operational definition of key research constructs and terms.

The second chapter discusses the theoretical framework used for the study – the Technology Acceptance Model (TAM).

Chapter three focuses on literature related to the study. The research approaches and relevant findings of previous studies on study abroad programmes, communication challenges and utility of language translation tools are reviewed and presented.

Chapter four explains the methodology used in the study. The method, population, sample and sampling process, unit of analysis, data collection and analysis procedures are all discussed in this chapter.

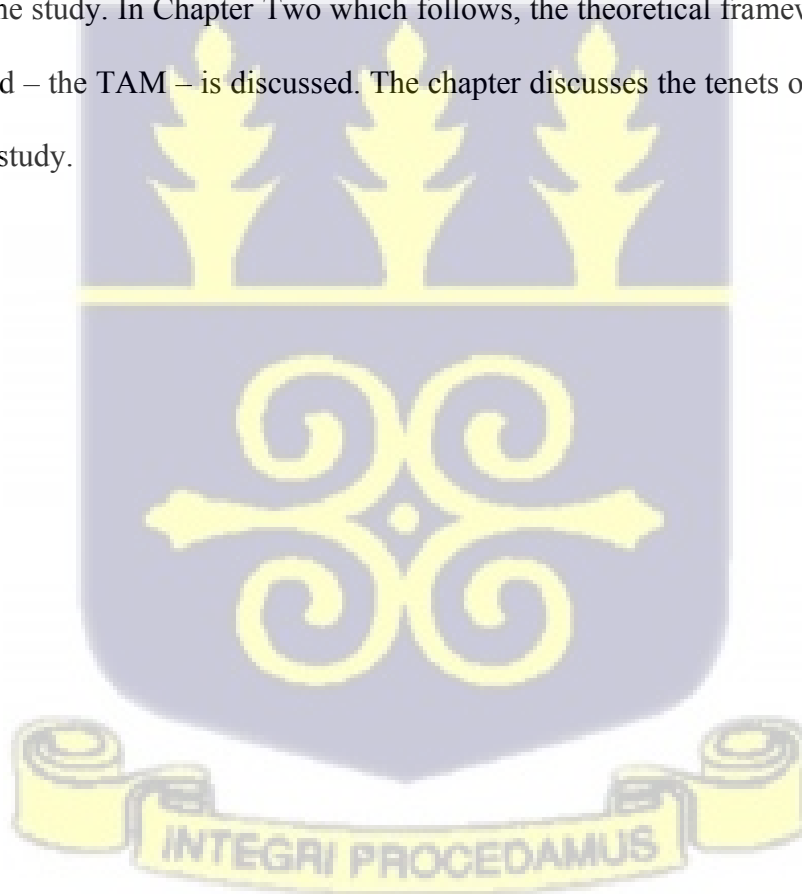
In chapter five, the findings of the study as pertained to the themes derived from the research questions posed are presented.

Chapter six presents a discussion of the findings from the study in light of the theory and related literature.

Chapter seven concludes the study by summarizing the findings and discussions presented in previous chapters and drawing out practical implications. Limitations of the study as well as recommendations for future studies are also presented.

1.8 Chapter Summary

This chapter has provided an introduction to the research topic, including a background to the study and the problem statement. It has also expressed the research objectives and research questions, operational definitions of key terms as used in the context of the study, and an explanation of the significance of the study. In Chapter Two which follows, the theoretical framework on which the study is grounded – the TAM – is discussed. The chapter discusses the tenets of the TAM and its relevance to the study.



CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 Introduction

This study, which was interested in exploring the acceptance and use of language translation tools among francophone students in Ghana, relied on the Technology Acceptance Model (TAM) as the theoretical framework. The theory provided the logic for the problem statement and research questions flowing therefrom. It also guided the nature of interview questions and helped in discussing the findings deriving from the interviews. This chapter discusses the tenets of the TAM and its relevance to the study.

2.2 Technology Acceptance Model (TAM)

According to Watson (2003), the media and communications research prism anticipates four possible approaches to studying communication and media. These approaches include the output theory, content theory, response theory and the medium theory. The medium theory involves communication vis-à-vis technology and is also the focus of this study.

TAM, which was introduced by Davis in 1989, is an adaptation of the Theory of Reasoned Action (TRA). It identifies factors that enable integration of technologies into an organization as well as to determine motives behind acceptance or rejection of a technology. Davis' (1989) TAM suggests two yardsticks for evaluating the probable factors that could influence the adoption of a new technology. These measures are the potential user's perceptions of usefulness and perceptions of ease of use of the technology. While perceived usefulness describes the degree to which a person

believes that using a particular technology would enhance his or her job performance, perceived ease of use focuses on the degree to which a person believes that using a particular system or technology would be free from effort (Davis, 1989). According to Davis, Bagozzi and Warshaw (1989), about 50 per cent of the variance in the levels of technology acceptance among users can be explained using the TAM.

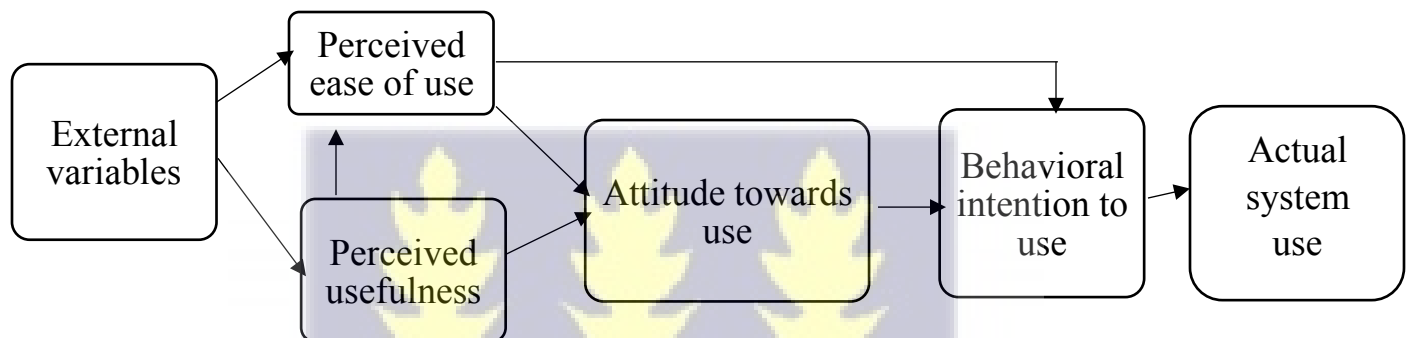


Figure 1: Davis (1989) Technology Acceptance Model (TAM)

With regard to the present study, the TAM was useful for determining the utility language translation tools have for the informants, in terms of their (language translation tools’) capacity to enable francophone students negotiate meaning and understanding in the foreign (English) learning environment. As mentioned earlier, the two yardsticks by which the factors influencing technology adoption could be measured, according to the TAM are the users’ perceived usefulness and perceived ease of use of the technology.

2.2.1 Perceived Usefulness (PU)

Robey (1979) theorises that a system that does not help people perform their tasks is not likely to be favourably received in spite of careful implementation efforts. For instance, it was observed in a study conducted by Portz et al. (2019) that perceived usefulness played a key role in participants' intention to use *My Health Manager* – a health management application – resulting from how useful they found it for managing their health.

Due to the tendency of people to accept a technology based on their perception of the usefulness of the technology as suggested by Davis (1989), it is important to understand the ways in which the perceived usefulness of language translation technologies might inform learners' disposition towards, or tendency to, employ them as handy means of overcoming their language barriers.

In the specific case of physician-patient communication, however, Patil and Davies (2014) found that language translation tools are limited in utility. This is understandable, given that the medical context is a setting that gives very little room for error. Specifically, Patil and Davies (2014) explained that they had found limited usefulness for medical phrases used in communications between patients and doctor.

Clearly, language translation tools have limitations in terms of the fact that they are not sufficiently sensitive to the variable contexts in which meaning is derived from specific concepts, phraseologies, and usages. When an individual uses a particular language translation tool to convert texts into a target language, the translated text produced by these mechanical tools may fail to fully convey and communicate the intended meaning and understanding (Vasconcellos & Bostad, 1992). This, according to scholars, leads to a degree of loss of meaning. Turner et al.

(2019) described language translation tools as limited in usefulness as despite their flexibility, they proved to produce multiple translation errors and difficulty responding to questions.

Interestingly, the studies noted above (Patil & Davis, 2014; Turner et al., 2019) were conducted in the medical context, where, as stated earlier, errors are justifiably not tolerated. This is unlike the context of the present study – the foreign learning environment – where the value of the language translation tool may lie more in its facility or functional utility in helping the user gain a general sense, rather than the technically accurate meaning, intended by the interlocutor – whether as fellow students or instructors.

The technology acceptance model suggests that individuals would generally accept and eventually use a technology (in this case language translation tools) when they believe that using them would enhance their performance in any task assigned (Davis, 1989). In the analysis of computer mediated communication, acceptance is regarded as the act of embracing, entertaining and employing the use of language translation tools in the learning environment. As far as language learners are concerned, accepting to use a particular language translation tool may only reflect its ability to improve, rather than perfect, or even fully resolve, their communication competences.

2.2.2 Perceived Ease of Use (PEU)

This study, aside from exploring users' acceptance and use of language translation tools based on their perceived usefulness of the tools, also explored their (users') acceptance of language translation tools based on their (users') perceptions of the ease of use of the tools. Davis' (1989) TAM suggests that perceived ease of use may be a factor that influences users' decisions to accept and use a new technology to which they are introduced. A considerable number of studies have

been conducted to ascertain the accuracy of this assertion. For instance, Baturay et al. (2017) investigated pre-service teachers' intentions towards technology acceptance and found that perceived ease of use sometimes played a role in users' decisions to accept and use a new technology to which they are introduced. Similar results were also revealed by other relevant scholarly works (Bakhsh et al., 2017; Dumpit & Fernandez, 2017; Faqih & Jaradat, 2014).

This study sought to explore whether perceived usefulness and perceived ease of use of a language translation tool influenced francophone students' decisions to accept and use specific language translation tools. In addition to these, however, there are other equally important variables worthy of discussion within the TAM – external variables, behavioural intention to use and actual system use.

2.2.3 External Variable(s)

In the model (Davis, 1989), external variables are the first elements projected to influence prospective users' perceived usefulness and their perceived ease of use of a new technology. What this suggests is that perceived usefulness and perceived ease of use of a new technology do not happen in a vacuum, but can however be determined by some external factors which may vary from context to context. With regard to the present study, the external variables are the foreign learning environment, users' level of proficiency in the English language as well as their experience in the use of the language translation tools.

In the present study, external variables were as crucial as in any other context, as francophone students' presence in the foreign learning environment, level of their English proficiency, and their

experience in the use of language translation tools played important roles in their respective perceptions of usefulness and ease of use of their language translation tool choices.

2.2.4 Attitude toward Acceptance and Use

Davis et al. (1989) defined attitude toward acceptance and use as a cognitive appraisal of how a computer system or technology can help a prospective user improve (upon) their performance. They also suggested that there could be cases in which an individual might form a strong behavioural intention towards a new technology without first forming an attitude towards the technology. They conducted a study to ascertain this and found that perceived usefulness and perceived ease of use in many cases directly influenced behavioural intentions towards a new technology.

What this means in the context of this study is that francophone students are not necessarily expected to form attitudes towards language translation tools before they make their choices. In view of this, the study did not engage the variable of attitude in the quest to explore the acceptance and use of language translation tools among francophone students in Ghana, but only focused on their behavioural intentions to use new language translation tools to which they were presented.

2.2.5 Behavioural Intention to Use

Davis (1989) and Davis et al. (1989) emphasise by way of the TAM that the behavioural intention of a prospective user towards a new technology is usually directly influenced by their perceptions of the usefulness and ease of use of the technology or system. Therefore, when francophone

students form positive behavioural intentions to use a particular language translation tool, it is expected that it would usually result in the actual use of the tool.

2.2.6 Actual System Use

This is the final stage in the technology acceptance spectrum and is usually the end-goal. Davis (1989) and Davis et al. (1989) aver that when an individual perceives a new technology to be useful in terms of the fact that it has the potential to enhance his performance and is relatively easy to use, coupled with other factors relative to the individual, he would usually accept and use the technology. Indeed, informants in the present study do not make their language translation tool choices in a vacuum, but rather have different preferences, for different reasons. In fact, one of the benchmarks by which this variable was measured in the present study was users' average daily use of language translation tools, to which it was found that the tools are often used, often, for different purposes.

2.3 Application of TAM in Related Studies

Numerous studies have used the TAM to understand how potential users of a new system or technology react to new technologies. For instance, Baturay et al. 2017 conducted a study to investigate the intention of pre-service teachers towards technology acceptance. Similarly, Iqbal and Bhatti (2015) conducted a study to investigate the readiness of university students towards MLearning. In fact, the process of technology acceptance and use varies from person to person and has been studied widely (Bakhsh et al., 2017; Dumpit & Fernandez, 2017; Granić & Marangunić, 2019; Hussein, 2017). In all, these studies prove that the TAM is useful for the current study, which

among other things, sought to explore the acceptance and use of language translation tools among francophone students in the foreign learning environment.

2.4 Relevance of TAM to Study

Language translation tools are products of technology. As has been stated earlier, TAM suggests that when users are presented with a new technology, a number of factors, such as the perceived usefulness and the perceived ease of use of the technology influence their behavioural intentions towards the technology. If francophone students perceive language translation tools to be useful and with potential to enhance their performance, they would accept them and subsequently use them, as suggested by the TAM. Further, if they (francophone students) find the language translation tools easy to use, they would also use them, as suggested by the TAM. As this study explored the acceptance and use of language translation tools among francophone students in the foreign learning environment, it was expected that prospective users of language translation tools would make their choices as determined by their respective perceived usefulness and ease of use of the tools, among other subjective factors.

2.5 Summary

This chapter discussed the assumptions and tenets of the TAM, particularly as the theoretical lens of the present study. Chapter three, which follows, presents a thematically organised discussion on significant scholarly works relevant to the present study.

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

Quite a number of studies have examined the phenomenon of technology acceptance, second language acquisition, multi-lingual communication and associated issues. Many of these studies have been conducted in other parts of the world and in different contexts. Such studies have provided useful lessons in various aspects of the research process, particularly in the discussion and comparison of key findings. This chapter presents a review of the most significant of these studies. The literature is organized thematically under five subheadings to generally reflect the key objectives and core constructs of research interest to this study.

3.2 [Related Studies]

3.2.1 Second Language Acquisition (SLA) in a Study Abroad (SA) Socialisation Context

A review of literature on study abroad (SA) indicates general inconsistencies and inconclusiveness on SA outcomes. In a study of second language acquisition (SLA) from a socialisation perspective, Wang (2010) discussed inconsistencies of this nature with regard to the different contexts and the unstable nature of SLA. Wang (2010) found that interactional encounters with native speakers of the target language play an important role in the acquisition of language in the SA context.

Studying in target language countries helps to improve fluency and pronunciation in the target foreign language, especially because numerous opportunities are presented for foreign students to engage with native speakers (Isabelli-García, 2017). This may explain why it has become common

knowledge that studying or immersing into the target language country is vital if one wants to improve upon their linguistic knowledge and communication competence in the target language (Pinar, 2016). This has positively influenced the participation of students in study abroad programs.

In a study to explore second language acquisition in a study abroad (SA) context, Pinar (2016) conducted a review and synthesis of earlier research projects in which he highlighted recent and diverse research in this area. The findings of the study revealed that students who studied abroad in the country of the target language become more fluent than their counterparts in their home country especially because of the opportunity they are given to interact with native speakers of the target language in a more social context outside of the classroom.

In a similar study, Isabelli-García (2017) asserted that much focus in the field of SLA has been placed on university language learners, where numerous opportunities are presented for foreign students to engage with native speakers in different contexts, which consequently helps improve upon their communicative competence. This agenda is further facilitated by several universities' efforts to internationalize their curricula, which results in the high number of students traveling abroad each year to acquire a second language. The findings of Isabelli-García's (2017) study revealed that constant interaction with native speakers allows language learners the benefit of the development of second language knowledge and communicative competence, thus corroborating the findings of Pinar (2016).

In terms of the present study, one possible reason for which francophone students would immerse into a foreign learning environment such as Ghana could be their effort to learn the English language in the target language country as learning only grammatical rules of the English language, which could be done in their home countries, would not suffice. An actual immersion into the

English-speaking environment to socialise with the native speakers could be more reason to move into the Ghanaian learning context. The present study was therefore designed to extend existing scholarship to answer the questions of whether and how in this social context of learning the English language, language translation tools play any roles to aid francophone students in Ghana's communication with Ghanaian English speakers.

3.2.2 Language Barriers and Related Issues in Foreign Language Environments

Studies that have examined how language barriers threaten effective communication have sought to explore the challenges as well as the risks associated with language barriers in various domains, principal among which are the contexts of the learning environment and healthcare delivery.

Communication competence in a foreign language is the common currency for negotiating and navigating membership and participation in the global knowledge commons (American Council on the Teaching of Foreign Languages [ACTFL], 2011; Duncan, 2010). Without the ability to negotiate meaning with people of different linguistic backgrounds, communication on a global level becomes difficult and tends to breed communication challenges (Bollinger, 2017).

In a study on anxiety differentials among English language learners in Malaysia, Hwa and Peck (2017) found that foreign language anxiety (FLA) was an important barrier to effective communication across different learning environments. These barriers made it difficult for interlocutors to effectively meet the social and pedagogical needs of non-English speaking students in the learning environment. The present study sought to find out if, or the extent to which, optimism, especially among technophiles, about the prospect of translation technologies to mediate and mitigate such barriers, is borne out by the personal experiences of Francophone students in the

English learning environment of tertiary institutions in Ghana.

Some 10 years prior to the study by Hwa and Peck (2017), Marwan (2007) conducted a study similar to Hwa and Peck's (2017), to investigate levels of FLA among Indonesian students, to explore the nature and types of anxiety experienced by foreign language (FL) learners; and to find out the strategies they used to cope with their anxieties. A Likert-type questionnaire was distributed among 100 students, although 76 respondents satisfactorily completed and returned the survey. The findings confirmed the presence of FLA among a majority of the students, irrespective of the differences in their academic levels. Although different in terms of geographical contexts, a possible implication of the findings for the present study was that francophone students studying in Ghana faced similar communication challenges.

Students in foreign language learning environments suffer from significant levels of anxiety because they are challenged to handle the learning materials in the medium of the target language with which they are not very familiar (Javid, 2014). In the process of interacting with their teachers, colleagues and even the textbooks, students in Javid's (2014) study were confronted with contingent challenges that create anxiety in English as a Foreign Language (EFL) learners. This made it difficult for them to achieve their language proficiency goals in the target language.

Briefly, Javid (2014) administered the Foreign Language Classroom Anxiety Scale (FLCAS) to 216 randomly selected freshmen students enrolled in the preparatory year programme at Taif University in Saudi Arabia. The findings showed medium level of language learning anxiety among respondents.

Following from the studies so far discussed (Hwa & Peck, 2017; Javid, 2014; Marwan, 2007), FLA appears to present itself in foreign language environments irrespective of geographical location.

Francophones studying in Ghana can therefore be concluded to be barely any different from the

respondents in the studies discussed above. In fact, Tabiri and Budu (2017) have found that one of the main difficulties Francophones studying in Ghana encounter is academic, which, according to them, negatively affects their (students') performance. This implies that in order to improve francophone students' educational experience in an English learning environment such as Ghana, remedies to language barriers need to be sought – an area the present study sought to explore.

In a study to examine the differences between students' FLA levels (high, moderate, low) and student achievement in different learning environments – traditional or distance learning – in a college setting, Bollinger (2017) made some interesting findings. The FLCAS was administered to Spanish and French language learners at a community college in Central Georgia in a quantitative study. Bollinger (2017) wanted to find if there were statistically significant differences in foreign language students' achievement and foreign language anxiety scores, based on their FLA levels and their learning environment. Students' course final grades were used to measure their foreign language achievement. A causal-comparative design was used in conducting this study, and data were analysed and interpreted using T-tests and a one-way ANOVA.

Results showed that the place of learning (traditional or distance) had no significant bearing on student achievement, however, there were significant differences in student achievement between students with different levels of FLA. In addition, there were significant differences in FLA scores between students in traditional and distance learning foreign language classes, suggesting that, actual immersion in the foreign country increases more anxiety as compared to receiving the education over another medium such as the internet. Interestingly, the enrolment of foreign students (of which francophone students are a part) in Ghana is on the increase (WENR, 2019). This may be attributed to the fact that universities nowadays have an interest in reflecting an internationalized operating profile, as according to the Times Higher Education World University

Rankings (2019), the international profile of universities is one criterion by which they are ranked in terms of performance. Essentially, the findings imply that it is highly possible for francophone students studying in Ghana to encounter more anxiety in communicating via the English language and would therefore need some form of assistance in negotiating meaning with their English-speaking counterparts. This, along with their acceptance and use of such assistive communication technologies as language translation tools, was what this study sought to explore.

A common theme running through the findings of the aforementioned studies is the existence of FLA. Considering the fact that language is a communication tool, evidence from the reviewed literature suggests that in any learning environment, the inability to communicate effectively leads to relatively poorer performance.

In spite of the fact that the reviewed studies are set in different geographical locations from Ghana, their subject matter is parallel to the Ghanaian context. In Ghana, just as in the countries where the above previous studies were conducted, there are foreign students, among whom are Francophones with limited English proficiency (LEP). This group of people also experience varied levels of FLA, especially because the language of instruction in Ghanaian tertiary institutions is English (Tabiri & Budu, 2017).

Moving on to the scope of healthcare delivery, a study by van Rosse, de Bruijne, Suurmond, Essink-Bot and Wagner (2016) on communication challenges in care delivery found that language barriers threatened the quality of hospital care received by patients who did not share linguistic commonalities with their caregivers. They sought to investigate safety risks patients faced during hospitalization due to language barriers and the way they (language barriers) are detected, reported, and bridged in Dutch hospital care.

The study took a mixed-methods approach where the researchers sampled 576 ethnic minority patients who were hospitalized in 30 wards within four urban hospitals. The nursing and medical records of 17 hospital admissions of patients with language barriers were qualitatively analysed. In addition, 12 in-depth interviews were undertaken with care providers and patients and/or their relatives to identify the safety risks of patients during hospitalization. The medical records of all 576 patients were screened for language barrier reports. The results were then compared to the Dutch language proficiency of patients as reported by the patients themselves. Van Rosse et al. (2016) concluded that in situations where patients did not share a common language with healthcare providers, language barriers posed a serious threat to the success of medical care.

Ali and Watson (2018) had a similar conclusion as van Rosse et al. (2016) in their study to explore nurses' perspectives of language barriers and their impact on the provision of care to patients with limited English proficiency from diverse linguistic backgrounds. Individual interviews and focus group discussions were organized to collect data from 59 nurses working in tertiary care hospitals in England.

Ali and Watson (2018) identified communication as the most important aspect of healthcare provision and an essential component of a nurse's professional role, regardless of his or her specialty or clinical area. They also identified language barriers as the biggest obstacles to providing appropriate, adequate, effective, and timely care to patients with LEP.

These unanimous conclusions suggest the correctness of a school of thought, which argues that there can be little to no progress without communication. Unfortunately, these studies have only focused on the communication challenges posed by language barriers, without proffering any solutions. By exploring the experiences of francophone students in the Ghanaian learning environment and their acceptance and use of translation tools to negotiate meaning, this study will

contribute a fresh perspective to the discourse and hopefully encourage more research work on language translation tools for communication in foreign language environments.

Coleman and Angosta (2017) also explored the personal experiences of acute-care bedside nurses of patients with LEP. The study was a phenomenological one in which a convenience, purposive sample of 40 registered nurses working in bedside care in a 380-bed hospital in the United States of America was interviewed. It was found that provision of care to patients with LEP is a challenge to many nurses as well as other healthcare providers due to the language barrier between them (healthcare providers) and patients with LEP.

These results serve as proof that language barriers inhibit communication success in any human setting.

3.2.3 Overcoming Language Barriers with Language Translation Tools

Language translation tools attempt to make the communication across cultural and linguistic boundaries easier, while trying to retain, as much as possible, the content and meaning of the message. These tools are however quite volatile due to the need for context and social intelligence on the part of the translator and the lack of it on the part of (the) language translation tools. This is because language translation tools are inanimate products of technology incapable of adaptive intelligence beyond what has been programmed into them. In addition, translations often call for special phraseology and these may not be in the translation tool's ability.

Désilets et al. (2009) conducted an ethnographic study to determine the types of translation problems faced by human translators and the types of resources they used to solve difficulties

pertinent to translation. They found that human translators consulted translation tools and resources 41 per cent of the time in the practice of their profession.

In a study to find out what makes it difficult to communicate through machine translation, Yasuoka and Bjorn (2011) found that little was known, as regards the practice of machine-translation mediated communication.

Moreover, translation technology has become an integrated part of human life. According to Christensen et al. (2017), translation technology is no longer used exclusively by professional translators. It is also used by many unprofessional translators, who take advantage of free online machine translation (MT) engines to help them understand and produce texts in foreign languages. They found that in 2016 alone, Google Translate, (an online language translation tool) translated an average of 143 billion words a day in 100 language combinations.

3.2.4 Usefulness and Ease of Use of Language Translation Tools

Scholars have differing views on the usefulness of language translation tools.

Chen et al. 2012 in a quantitative study sought to evaluate the general performance of freely available machine translation (MT) tools in the translation of metadata records. They randomly selected metadata records and translated them from English into Chinese using such language translation tools as Google Translate, Bing, and SYSTRAN MT. These translations were then evaluated using a five-point scale for both fluency and adequacy. They found that translations rendered by Google Translate and Bing scored equal to or greater than three. Chen et al. (2012) concluded that language translation tools are dependable.

Other scholars, however, came to a different verdict. For instance, Turner et al. (2019) conducted a mixed-method study to evaluate the potential of (automated) translation technologies to improve emergency communication between Emergency Medical Services (EMS) personnel and LEP individuals in need of urgent medical attention in the United States. According to them, language barriers pose challenges to communication in emergency response in the United States and this negatively affects emergency care delivery and quality for individuals with LEP.

Turner et al. (2019) developed a scenario-based design as well as post-session questionnaires for EMS respondents and LEP participants, providing qualitative feedback on translation technologies. Five group sessions were conducted – 3 Chinese and 2 Spanish – with 12 Chinese-speaking LEP participants, 14 Spanish-speaking LEP participants, and 17 EMS personnel. They found that although both EMS and LEP participants appreciated the flexibility and ease of use of the translation tool, multiple translation errors and difficulty responding to questions limited its usefulness.

Research has shown that Spanish and Chinese speakers are more likely to have limited proficiency in the English language, and this poses a challenge to such patients residing in the United States. For this reason, health care providers in the United States as of the time of the study had leveraged technology to facilitate communication between them and their patients, in the form of *iTranslate*, a mobile phone application for translation (Chen et al., 2016). Chen et al. (2017) quantitatively evaluated the quality of translations done by *iTranslate*. The contents of the original education material for the diabetes patients were translated into English by two professional translators and then by *iTranslate*. Their output was then evaluated blindly by six certified medical translators – six Spanish, six Chinese – to compare the translations done by the application software and the humans. The translations were rated on four scales: meaning, adequacy, fluency and severity.

They found that although *iTranslate* generally provided translation accuracy on simple sentences, more errors were made in translating complex and difficult sentences. They therefore concluded that language translation apps, such as *iTranslate*, needed to be used with caution. In that regard, they seemed to agree with Turner et al. (2019) in their assertion that language translation tools are limited in usefulness.

Moreover, all professional translators are now involved in some kind of translator-computer interaction (TCI) (Bundgaard et al., 2016). Bundgaard et al. (2016) therefore conducted a study to investigate the relationship between machines and humans in translation. The scholars reviewed empirical research into the impact of Computer-aided translation tools on translation processes, and reported on an observational study of TCI processes in one particular instance of MT-assisted translation in a major Danish translation service provider (TSP). They found that although translation tools aided multi-lingual communication to some extent, they also restrained the process of communication.

Patil and Davies (2014) in a study conducted in the United Kingdom also evaluated the ability of Google Translate (a language translation tool) to produce 100% accurate translations, and concluded that language translation tools, precisely Google Translate, could not be relied on, in terms of accuracy. According to them, Google Translate uses a statistical matching to translate, rather than a dictionary / grammar rules approach, which sometimes leaves it open to results that do not make much meaning in a given context.

While MT enables collaborators to communicate via their native languages, it can introduce errors that make communication difficult. Gao et al. (2014) also agree with Weissbort and Eysteinnsson (2006) in their position that the output of machine translation lacks in 100% accuracy. According

to them, machine translation (MT) creates both opportunities and challenges for multilingual collaboration.

Moving on, in order to improve upon doctor-patient interaction in hospitals for improved health conditions of patients with LEP, hospitals depend on medical interpreter services. However, these services are not always available, for which reason effective alternatives have become necessary (Leite et al., 2016). Leite et al. (2016) attempted to determine how efficient and effective Google Translate (which is an example of a language translation tool) could perform under such circumstances. To do this, they used the translation tool to communicate with a patient in the process of presenting a clinical case and concluded that it was one of the most readily available, free and easy to use translation tools available. This is especially in cases where it serves as an initial mode of communication between a doctor and patient in situations where language is a barrier. However, similar to other scholars, Leite et al. (2016) warned users to not put total trust in Google Translate and should only use it in emergency cases where all other avenues to find a human translator have proven futile.

Furthermore, in Malaysia, Google Translate has become the go-to for many English as a foreign language (EFL) students to perform tasks for their EFL class activities. Although this is the case, their insufficient knowledge and limited vocabulary on the language structure hinders them from effectively identifying the accurate and appropriate contextual meaning or semanticity of words and phrases (Jaganathan, Hamzah & Subramaniam, 2014). These researchers analysed the use of Google Translate among EFL students in decoding contextual semanticity. As part of its method, the study identified the strategies taken by the EFL student in selecting translations from Google Translate to arrive at a specific meaning. Intensive English Proficiency (IEP) students of the 2014 academic year from the School of Languages of the Universiti Sains Malaysia were sampled for

the study. Among others, findings relevant the present study indicated that Google Translate is generally easy to use, which is one of the reasons they continue to use it. As has been found in other related studies, the findings also indicated that some students used Google Translate because their friends and colleagues recommended it to them.

Finally, the current wave of technology has now made it possible to have instant translations to and from various languages (Medvedev, 2016). Medvedev (2016) conducted a study to explore the importance of translation in the English learning classroom, as well as explore the instant translation tools that were used in the English Foundation Program at the Language Centre at Sultan Qaboos University in Oman. Medvedev (2016) concluded that Google Translate, being a vital part of the “Google family”, could be regarded as one of the easiest and most accessible tools to help users meet various translation needs.

It is clear from the review of literature that language translation tools may not be entirely counted on if one wants to communicate effectively with another from a different linguistic background, especially in professional contexts like healthcare. However, in the context of this study, and as was seen in some of the related studies (Jaganathan et al., 2014; Medvedev, 2016), unlike in the medical context where language translation tools have been found rather ineffective for medical purposes, the learning environment may prove to be more tolerant of errors.

3.2.5 Technology Acceptance and Use

Considering the fact that people from different linguistic backgrounds can leverage existing technologies to create and negotiate meaning in order to mitigate the communication challenges posed by language barriers, and given the fact that an individual’s acceptance and use of a

particular type of technology depends on him/her, this section, which provides a review literature on the general acceptance and use of (a) technology, is presented.

Humans are currently living in an era of advanced technology, and this impacts our lives in diverse ways (Granić & Marangunić, 2019). The educational setting has been recognized as an area with good potential for the incorporation of new technologies. This learning environment is filled with a wide range of users of learning technology, which is expected to support the process of knowledge acquisition and transfer.

The use of technology takes time and requires a change in paradigm in order to get people to adopt it (Baturay et al., 2017). Baturay et al. (2017) conducted a study to investigate the intention of preservice teachers towards technology acceptance.

A survey was adopted to examine the potential association among three constructs – computer competence, attitudes towards Computer-aided Education (CAE) and intention of technology acceptance. Empirically validated scales were used to measure the constructs. The findings were analysed using regression and correlation analysis.

The results indicated a significant and positive relationship between computer competence, attitude towards CAE and intention towards technology acceptance. More specific to the present study, perceived usefulness was found to have positive relationship with intentions towards CAE.

Although perceived ease of use similarly had significant positive relationship with the intentions towards CAE, it did not predict the intention towards it. Implicit in the findings is the idea that, the acceptance and eventual use of language translation tools by francophone users will depend on their perceived usefulness and in some cases, on the perceived ease of use, since language translation tools, just like the technology adopted in CAE, are products of technology.

Similarly, Hussein (2017) investigated the attitudes of university students towards the use of Elearning, based on the Technology Acceptance Model. This study analysed the relationship of university students' intention to use E-learning with three antecedents, including attitude, perceived usefulness, and perceived ease of use. A survey was used to collect data from 151 randomly selected respondents.

Hussein's (2017) study found that attitude is a significant predictor towards student's intention to use E-Learning. Interestingly, perceived usefulness and perceived ease of use were not significant predictors of the intention to use the E-learning technology. This finding is in direct contrast to findings of other TAM studies (Baturay et al., 2017; Dumpit & Fernandez, 2017, Granić & Marangunić, 2019; Iqbal & Bhatti, 2015), thereby highlighting a disparity in the discourse community of TAM. The present study will hopefully throw more light on the 'confusion' and provide some clarity.

Dumpit and Fernandez (2017) included the subjective norm, internet reliability, perceived playfulness, and speed as additional constructs. To analyse the use of social media in Higher Education Institutions (HEIs) using the Technology Acceptance Model, data were gathered and analysed from 500 students from both public and private HEIs in the Philippines.

The study revealed that perceived usefulness, perceived ease of use, subjective norm, and perceived playfulness (happiness) are robust predictors of usage behavior of students.

Considering the amount of work that has been done on the TAM, there remains a gap in existing knowledge as regards representative scholarly literature on the model (Granić & Marangunić, 2019). Granić and Marangunić (2019) conducted a study to provide an overview of the present state of research efforts on TAM application in the field of learning and teaching for different

learning domains, learning technologies and types of users. According to them, TAM's core variables, perceived ease of use and perceived usefulness, have been proven to be antecedent factors affecting acceptance of any technology.

For some scholars, TAM is the only popular option among researchers for exploring acceptance of any new technology primarily because of its robust and parsimonious nature. Examples of such are Iqbal and Bhatti (2015), who conducted a study to investigate the readiness of university students towards M-Learning. The study focused only on the individual context in which students' readiness to use M-learning is investigated using the TAM. According to them, M-learning is learning delivered via mobile devices and mobile technology.

The study adopted the quantitative approach in which students from private sector universities in Rawalpindi/Islamabad were sampled and given questionnaires to fill.

The findings, which were based on 244 valid responses, indicated that the students' perceived usefulness and perceived ease of use positively influenced their behavioural intention to accept and use M-learning.

Similarly, Bakhsh et al. (2017) conducted a quantitative study with 612 students and 448 other faculty members to examine the factors that influence students and faculty behaviour towards M-learning acceptance in Pakistan and found that together with prior experience, perceived usefulness and perceived ease of use positively influenced behavioural intention (BI) towards the acceptance of M-learning.

In another study, which was set in Jordan et al. (2014) attempted to explain the individual's adoption intentions toward mobile commerce using its perceived usefulness and perceived ease of use.

The study took a quantitative approach in which data were collected from 14 universities using a paper-based questionnaire. The analysis included 425 valid data sets.

The findings of the study revealed that perceived usefulness and perceived ease of use were important factors in explaining an individual's intention to adopt the mobile commerce technology.

The findings also demonstrated the impact of self-efficacy and perceptions of external control on the perceptions of ease of use and the impact of image and output quality determinants on the perceptions of usefulness.

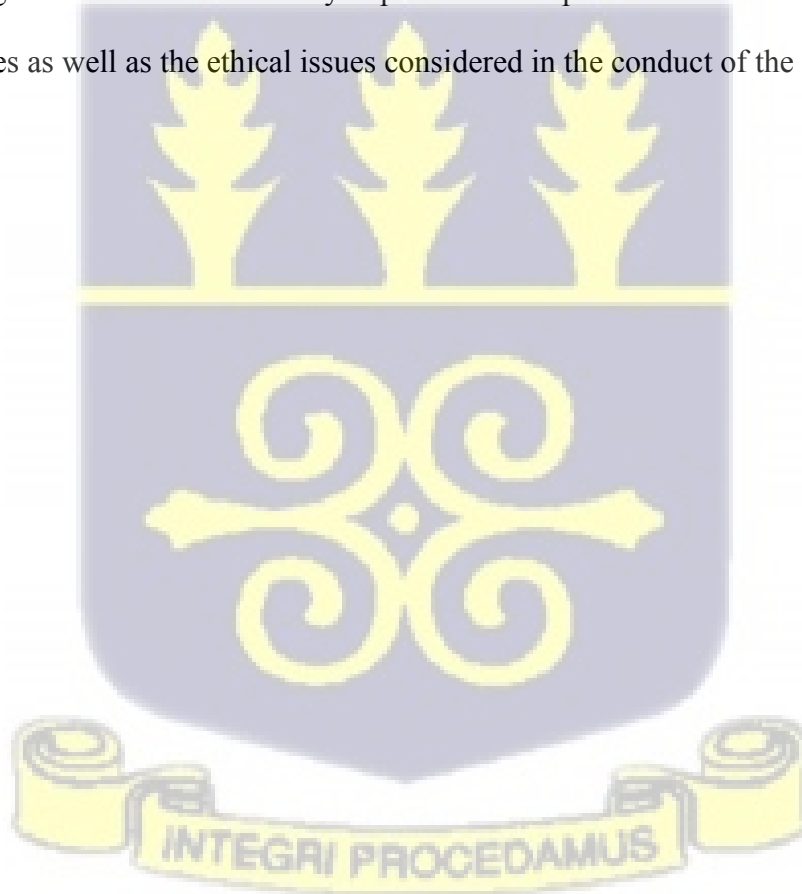
The related studies in this section suggest that the process of technology acceptance and use varies from person to person. Whereas some consider the perceived usefulness, and perceived ease of use of technologies before acceptance, others base their acceptance on different factors. In addition, certain other factors also in turn influence the perception of usefulness and ease of use of technologies. Examples of such are self-efficacy and perceptions of external control, which influence perceptions of ease of use and the impact of image and output quality, which affect perceptions of usefulness. This is relevant to the present study because one of the ideas the study aims to explore is the acceptance and use of language translation tools, which are also products of technology and what influence users' acceptance and otherwise rejection of said technologies.

3.3 Chapter Summary

The review of related studies in this chapter gives helpful insight into the phenomenon of SLA in a study abroad socialisation context, and communication challenges caused by language barriers as well as the factors that may go into francophone students' acceptance and use of technologies to mitigate the challenges.

Whilst some of the literature focused on the accuracy of translations made by language translation tools, others dwelt on the reliability of these tools and the degree to which users must trust their outputs. The review showed a scarcity of studies that examine the communication challenges of francophone students studying in foreign countries such as Ghana and the opportunities language translation tools present them to mitigate said challenges. This study therefore helps to fill this gap by exploring the Ghanaian context as a microcosm of the African setting.

Chapter four, which follows, describes the research methods used in the present study. Specifically, it explains the research design and the reasons for its choice. The population of research interest and the sampling decisions are also clearly explained. Also presented are the data collection and analysis processes as well as the ethical issues considered in the conduct of the study.



CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter described the research methods used in the present study. Specifically, it explained the research design and the reasons for its choice. The population of research interest and the sampling decisions – including the sample size and sampling method employed – were also clearly explained. Also presented were the data collection and analysis processes; as well as the ethical issues considered in the conduct of the study.

4.2 Research Design

The study employed the qualitative approach, entailing the use of in-depth interviews, in the data gathering process. According to Wimmer and Dominick (2011), qualitative methods allow researchers to view behaviour in a natural setting without the artificiality that sometimes surrounds experimental or survey research. In addition, qualitative techniques can increase a researcher's depth of understanding of the phenomenon under investigation, which is what this research sought to achieve. With regard to the choice of the qualitative approach for a TAM study such as this, scholars have argued that the TAM is no longer reserved for quantitative studies (Vogelsang, Hoppe & Steinhueser, 2013). They assert that it is necessary to find out the nuances associated with users' personal experiences with tools and their individual reasons for adopting them.

Wimmer and Dominick (2011) posit that in-depth interviews, in addition to providing researchers with a wealth of detail, also provide accurate responses on personal experiences or sensitive issues, mainly due to the rapport developed between the interviewer and informant. As this was an explorative study, this enabled an inductive revelation of the personal testimonies of individual informants. Unlike in the survey method where there is the use of pre-set questions and answer options, there was little to no loss of depth and contextual flavour in this method. The in-depth interview method was therefore the best approach to explore francophone students' acceptance and use of language translation tools from the perspective of the TAM.

Among other things, this method enabled informants to freely reflect on, and share experiences of, their particular and sometimes peculiar experiences and anecdotes about studying in a foreign language learning environment. The method also inductively revealed the opportunities and challenges that language translation tools offer for overcoming the barriers that might be posed to foreign language students as they seek to access higher education in non-native language contexts. Specific subjects of interest were francophone students studying at the Ghana Institute of Languages (GIL). The study attempted to explore and capture all relevant information pertinent to the informants such as their demographic data, their use of language translation tools as well as the reasons behind their choices of language translation tools and their related usefulness and ease of use.

4.3 Population and Sample

According to Babbie (2014), a population for a research study is an aggregation of elements from which a sample is actually selected. The population for this study constituted francophone students studying in Ghana, specifically, from the Ghana Institute of Languages (GIL).

The decision to use the selected tertiary institution centres on two factors. Firstly, it allowed for a diversity of responses from informants of varied francophone nationalities. Secondly, GIL provides academic programmes that francophone students as well as English-speaking Ghanaian students share a common interest of studying, for which reason they are taught together in the same classroom.

The GIL was established in 1961 to teach foreign language in order to promote Pan-Africanism and cordial relations between Ghanaians and foreign nationals; particularly those whose lingua franca is not English. In addition to the foreign languages taught – French, German, Arabic, Chinese, English, Portuguese and Spanish – the GIL also teaches translation and bilingual secretaryship, which all require competence in the English language since they are delivered in English. According to the *uniRank World Universities Report (2019)*, student enrolment at GIL is between 1,000 and 1,999, about 20 per cent of which are indigenously Francophone, for which reason it was included in the population of the present study.

Approximately, there are 200 francophone students studying at GIL. The study sampled 20 informants. This is because the findings were not intended to be generalisable to a larger group; rather, the study sought a focused and in-depth description of the particular and individual experiences of informants about their LEP challenges and the barriers and opportunities that translation tools offer in overcoming these challenges. On the contentious question of sample size, Tracy (2013:138) explains that “[s]ample size is critically important for researchers who need statistical power to generalize, but quality is usually more important than quantity for qualitative research.” In operational terms, Bertaux (1981) points out that a researcher learns a great deal from the first few interviews, by the 15th interview, the researcher recognises patterns in the interviewees’ experiences, more interviews confirm this, creating way for saturation of knowledge.

Guest et al. (2006) also assert that 12 interviews of members of a homogenous group is all that is needed to reach saturation. All these factors complement the decision to sample 20 informants for the study.

4.4 Unit of Analysis

A unit of analysis is the smallest element of a phenomenon of interest in a study. According to Wimmer and Dominick (2011), a unit of analysis may be a single word, symbol, an article, a theme or even an entire story. The units of analysis for this study were the sampled francophone students of GIL. Data was initially collected between April and May 2020. However, for the purposes of more depth, a second round of data collection was conducted between September and October 2020.

4.5 Sampling Procedure

Data was gathered from the population using the purposive sampling method, where the samples were chosen based on their use of language translation tools. Wimmer and Dominick (2011) assert that purposively chosen samples are deliberately selected to represent a population because their behaviours or characteristics are relevant to the study.

At GIL, the Director of the Institute was introduced to the research topic after which he granted the researcher access to the students to be interviewed. However, before the researcher could meet with any of the possible informants, the institute closed down following directives of the President of Ghana – Nana Addo Dankwa Akufo-Addo – that schools were to close down and the whole country was to go on total lockdown, following the rising number of coronavirus cases in the

country. The researcher therefore secured the telephone numbers of 25 francophone students of GIL and from these, 20 informants were included in the sample. A screener question on whether or not they use language translation tools was posed to them. Among the five other students who were not included in the sample, three were unreachable by telephone and two did not use language translation tools. Worthy of mention is the fact that many of these students had left Ghana to their individual countries especially due to the upsurge of the coronavirus disease in Ghana.

After reaching out to these informants by telephone, a meeting was arranged by the researcher to meet each of them at their chosen place of convenience. Four interviews were organised at the department of Communication Studies of the University of Ghana and four took place at the informants' places of residence at *Madina*, located in the Greater Accra Region. The rest of the interviews were organised via the web-based video conferencing software, Zoom.

4.6 Data Collection Instrument

A semi-structured in-depth interview question guide was used for data collection. While eight of the interviews were conducted in a face-to-face manner, 12 were conducted virtually due to the fact that they (the informants) had returned to their respective countries of origin. The interviews were recorded, using an audio recording device.

All the questions were open-ended and pertained to their demographic orientation as well as the objectives of the study, as stated in Chapter 1 namely: 1). To explore the language translation tool preferences of Francophones studying in Ghana and the reason(s) for their choices; 2). To explore francophone students' perceptions on the usefulness of language translation tools for overcoming communication challenges; 3). To explore francophone students' perceptions on the ease of use of

language translation tools; 4). To explore the contexts within which Francophones studying in Ghana find the language translation tools most helpful and least helpful; 5). To explore experiences of Francophones studying in Ghana vis-à-vis their communication challenges and their use of translation tools to mitigate them; and 6). To explore what other factors influence francophone students' acceptance and use of language translation tools in the foreign learning environment.

Specific questions were asked in the in-depth interviews, to arrive at answers for the objectives.

To answer the first objective of exploring the language translation tool preferences of Francophones studying in Ghana and the reason(s) for their choices, informants were asked what language translation tools they prefer and what the reasons are for their choices. To explore francophone students' perceptions on the usefulness of language translation tools for overcoming communication challenges they face, informants were asked what perceptions they hold on the usefulness of language translation tools for overcoming communication challenges and whether these influence their acceptance and use of the tools. In addition, to explore their perceptions on the ease of use of language translation tools in overcoming these challenges, informants were asked questions on the perceptions they held on the ease of use of language translation tools. Further, to explore the contexts within which Francophones studying in Ghana find the language translation tools most helpful and least helpful, informants were posed questions on the contexts within which they found the tools most useful and least useful. Again, to explore experiences of Francophones studying in Ghana vis-à-vis their communication challenges and their use of translation tools to mitigate them, informants were asked to share some of their experiences as Francophones studying in Ghana and how the translation tools help them mitigate related communication challenges.

Finally, to explore the other factors that influence francophone students' acceptance and use of language translation tools in the foreign learning environment, informants were asked to discuss

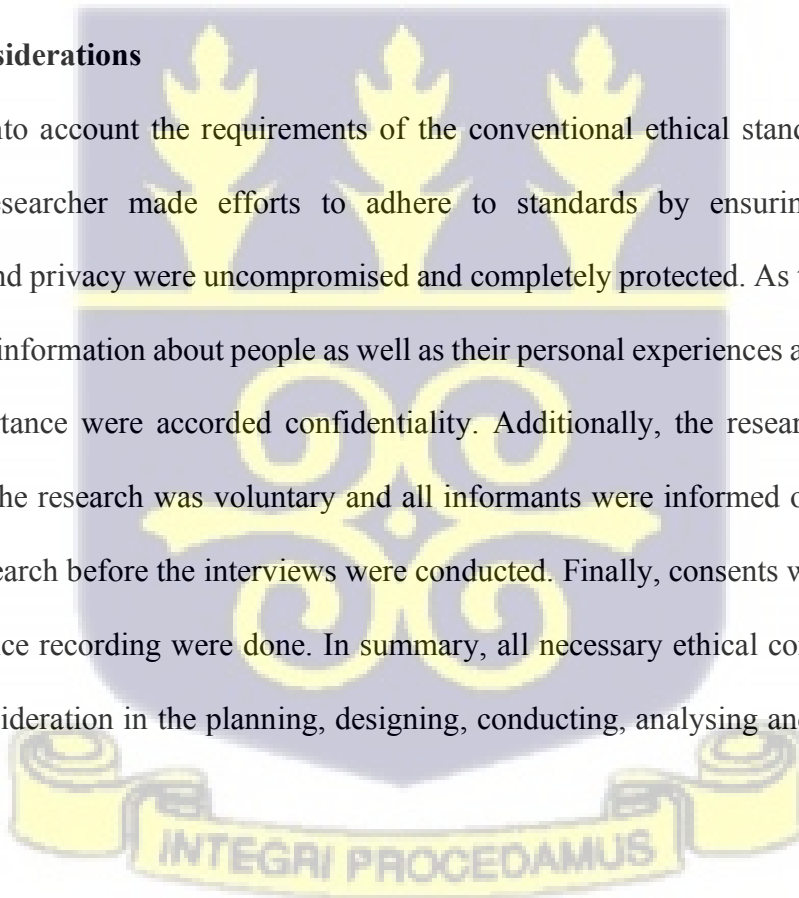
the other factors that influence their acceptance and use of language translation tools in the foreign (English) learning environment.

4.7 Data Analysis

Recorded responses from the in-depth interviews were transcribed for analysis. The data was coded and analysed thematically, based on the themes presented in the objectives of the study as well as the tenets of the theoretical framework underpinning the study – the TAM.

4.8 Ethical Considerations

Clearly taking into account the requirements of the conventional ethical standards in academic research, the researcher made efforts to adhere to standards by ensuring that issues of confidentiality and privacy were uncompromised and completely protected. As the study involved the collection of information about people as well as their personal experiences and opinions, great value and importance were accorded confidentiality. Additionally, the researcher ensured that participation in the research was voluntary and all informants were informed of the purpose and nature of the research before the interviews were conducted. Finally, consents were sought before any forms of voice recording were done. In summary, all necessary ethical concerns were taken into serious consideration in the planning, designing, conducting, analysing and reporting of this study.



4.9 Summary

This chapter covered the research design, population, and sample size of the study. The sampling method employed, the data collection instrument – in-depth interviews – as well as considerations were also discussed. In Chapter five, which follows, the findings generated from these processes are organised and presented in relation to the key research objectives that guided the study and the underlying tenets of the theory of interest – the TAM.



CHAPTER FIVE

FINDINGS

5.1 Introduction

This chapter presents findings from the interviews conducted for the study. These findings are presented thematically. Presenting data thematically helps in producing a clear and organised report as it allows for an easy summary of principal features of a data set (King, 2004), especially because it pushes the researcher to approach data in a well-structured manner. The thematic presentation of findings in this study was helpful for revealing the nature of the acceptance and use of translation tools among francophone students in Ghana and its related dynamics. The thematic presentation also allowed for easy interpretation of findings vis-à-vis the theoretical underpinnings of the study. All 20 interviews were transcribed for analysis.

5.1.1 Context of Interviews

The study sampled 20 francophone students studying at the Ghana Institute of Languages (GIL). The countries of origin of the 20 sampled francophone students range from Benin, Burkina Faso, Chad, Cote d'Ivoire, Mali to Gabon. The interviews were conducted between 23rd April 2020 and 4th October 2020. On the average, each interview lasted for a duration of about 30 minutes. Initially, 12 interviews were conducted, however, for more depth, the researcher conducted supplementary interviews between 30th September and 4th October 2020.

In order to preserve their anonymity, the researcher has given the informants pseudonyms.

5.2 Language Translation Tools Used and Reasons for their Choice(s)

The interviews revealed a range of commonly used language translation tools among francophone students in Ghana. These are DEEPL, Linguee, Google Translate, Microsoft Translator, Reverso and Word Reference. Another informant also mentioned TRADOS as another translation tool that is very good, especially for professional use. It is however inaccessible because of its proprietary nature and the consequent cost involved in using it. Talking about this, he said:

Okay, my preferred language translation tool is TRADOS because it is more advanced than Google Translate and DEEPL and it is more professional. That is why I like it. But for now, I use DEEPL because it's free and easy to access and use but TRADOS is a software that you need to have a license before you access it, and it's very expensive. That is why most of the time I use DEEPL.

The findings showed that DEEPL is the most popular language translation tool among the informants. This was followed by Linguee, which was also followed by Reverso and Google Translate. The least used language translation tool, according to the findings, are Microsoft translator and Word Reference, which are used by only one informant.

A recurrent idea in the interviews was a sense among the informants that users accept and make personal choices of language translation tools based on various subjective factors. For those who prefer DEEPL, it is because according to them, it is really good and better than the others, in terms of equivalence in meaning and the number of languages it translates from and translates into. It also gives them the opportunity to learn new expressions, and is more “profound” than the rest.

For example, Cyril, interviewed on 23rd April 2020 said:

I used Reverso first, I used Google Translate, I used Linguee, and then I used DEEPL. After using [err] DEEPL, I realized that from all those I have used before, it is the best, in terms of [err] equivalence and also in terms of the number of

languages. It helps me to learn new expressions and new ways of saying things that I didn't know before. So I'll say that it helps me a lot.

Another example of a user who preferred DEEPL was Esther, who was interviewed on 5th October 2020. In her opinion, DEEPL is the best language translation tool because not only is it free, it also passed a test she put together to determine the tool that would be most useful to her. This is reflected in her response below:

I use DEEPL. I chose DEEPL because I tested it, and what I did was that I picked one sentence in English that I know how to translate into French correctly. I wrote it in DEEPL and tried to translate it into French to see whether they would give me the exact translation. So I tested several tools and I realised that DEEPL was very close to the exact translation. Before DEEPL, I used [err] Google Translate and I realised that Google Translate does not respect grammatical rules. In French, for example, when you say [errm] I am 10 years, you can't use the auxiliary 'to have', so if you are translating in French, it would be like, 'I have 10 years', you would say '*j'ai 10 ans*' not '*je suis 10 ans*'. Google Translate does not really follow these rules but DEEPL is much better, because I tested it.

She also explained that DEEPL was her preferred language translation tool because it went a step further to make a distinction between American and British English, thus making it very useful for her, especially in terms of variations in spelling in class and home assignments.

She however added that to increase the usefulness of DEEPL, certain other factors such as user demographics could be taken into consideration. She said the following:

DEEPL could take into account the [the] age of the audience, so that it reduces it to the level of the age of the audience. Something like that. I don't know whether it's possible but if something like that can [err] be done, it would be preferable.

Some users who prefer Reverso also claim that after using DEEPL, Linguee and Google Translate, they realised that there was a lot more accuracy in terms of equivalence in meaning with Reverso than with the other language translation tools. In the case of Jean who was interviewed on 2nd October 2020 for example, he started using Google Translate only because that was the first option that was suggested for him when he tried to translate a text on Google. Later, he found out that there were better tools and since then, has stopped using Google Translate. As he put it:

I used to use Google Translate because you know, when you are looking for the translation of a word, you go straight to Google, and type the word you want to translate, most of the time, Google Translate is the first tool that is available. [Errm] I realised that Google Translate is not really effective when it comes to taking into consideration the context so I decided to stop using it. Right now, I use Reverso because Reverso gives many options, related to the sentence you are translating, you see? If you type a sentence, it gives you the context, and also if there is a key word, it gives you many expressions in which the words can have different meanings.

He also explained that although generally useful, if Reverso could make distinctions between British and American expressions, the tool would be relatively more useful to him. The following statement succinctly expresses his point:

I wish the language translation tools could make a difference between American expressions and British expressions because sometimes, it is really confusing, so if these language translation tools can do that, it would be also very helpful.

Many who prefer Linguee are of the viewpoint that because it gives different ways of communicating the same expression, it is more useful than its counterparts are. Eric, who was interviewed on 4th May 2020 was also of the opinion that Linguee is more context-specific than Google translate, hence his preference of Linguee over Google Translate. Talking about this, he said:

I use Linguee because I had tried Google Translate earlier and the translation that it produced for me did not help me. Words only have meaning in their context, and generally, that is what is missing in Google Translate – context.

Interestingly, however, some users of Linguee prefer to combine it with other translation tools such as Reverso and DEEPL. Their position is that they are all context-specific, and hence prefer to use them to complement each other. In an interview conducted on 30th September 2020, Sedgo had this to say on the subject matter:

I use Linguee and Reverso. They give you many expressions in which the words can have different meanings. Also, when you are looking for a particular word, they don't just translate the word. They support their answers with [err] formal text, and articles from the internet so that you can have a broadened idea of how the word can be translated and how the expression can be used.

Josephine, interviewed on 4th May 2020, and who prefers Google Translate to the other translation tools explained that her usage behaviour was because Google Translate provides the translation as well as its definition in English.

I use Google Translate because I have noticed that it is more useful because it gives the translation of the word and then below, down below, the definition of the word in English, which really helps me.

Marie who was interviewed on 6th May 2020 and who uses Reverso, DEEPL, and Word Reference said that she continues to use them because that is what she has been using for many years, and is therefore reluctant to try new ones. Sylvia, who was interviewed on 23rd April 2020, initially thought DEEPL was better than Reverso in terms of accuracy and reliability but continued using Reverso after her first try because according to her, “Reverso is not bad at all”.

5.3 Perceptions on the Usefulness of Language Translation Tools

The study revealed that all informants find language translation tools, irrespective of type, useful. However, they aver that their usefulness could be limited if the tools are not used with caution, since they lack the context that human translators are usually privy to. A few informants mentioned that they do not find the tools helpful in their interactions with their English counterparts, especially in the out-of-classroom socialisation context. An example is Cyril who gave the following response:

It might be a bit complicated when I'm having a conversation, just in the midst of the conversation, just take my phone and look up for the word; so, generally, I get the meaning from the context.

He explained that it was impractical to simultaneously consult a translation tool and engage in meaningful conversation.

On the same subject matter, Esther said the following:

When I'm socializing with people, I just try to speak naturally. I try not to use any tool to translate.

Seth also shared his opinion:

The truth of the matter is that you cannot use machine translation when you go to market or something because you have become used to the [errm] to the expressions that you use in that environment. So there is no need to use a machine translation over there.

Francophone students' perceptions of usefulness of language translation tools were measured against five distinct factors as follows:

- How well they (the translation tools) help them express themselves better;

- The accuracy of the translations they (the translation tools) produce;
- Their (the translation tools') ability to help them improve upon their academic performance;
- Their (the translation tools') ability to help them negotiate meaning and understanding in the foreign learning environment;
- Their (informants') readiness to recommend the tools they use to others and their intentions for future use.

Firstly, the informants reported that in addition to language translation tools helping them express themselves better, they also teach them new ways of saying things as well as help them improve upon their performance in school. Moreover, they help enrich their vocabulary and make meaning of technical and scientific texts while making it possible for them to complete their assignments quickly. In fact, many informants claimed that they could use language translation tools all day. Sophie, interviewed on 23rd April 2020, and who uses Reverso actually said that she doubts she would have survived in Ghana without language translation tools. Again, for some of the informants, the quality of the translation tools in terms of the accuracy of the translations they produced played a role in their perceptions of the usefulness of the tools.

With regard to the language translation tools' ability to help them express themselves better and communicate more effectively within the foreign learning environment, many of the informants said DEEPL, Linguee, Google Translate and Reverso helped them in this regard, with just one person giving a similar response for Word Reference and Microsoft Translator.

This was what Eric said about Linguee and DEEPL. He uses both tools to complement each other.

They help me to learn new expressions; new ways of saying things that I didn't know before; so I'll say that they help me a lot. They [they] really help me.

The following response from Justice who was interviewed on 4th October 2020 and who is also a user of Reverso gives a reflection of some of the reasons why he prefers Reverso:

I can say Reverso is very good and it is very helpful. For instance, there are words in French that sometimes I don't know their equivalence in English but when I use [err] Reverso, it gives me the equivalence and it has helped me to improve my vocabulary.

In terms of francophone students' perceptions on the usefulness of the language translation tools with regard to their accuracy in translation, few informants felt that translations produced by language translation tools were generally accurate most of the time, while others claimed that it was rather Linguee, Reverso and DEEPL that produced accurate translations most of the time. This is particularly because according to some of the informants, the above-mentioned tools are more context-specific. Jean succinctly expressed this idea when he spoke about Linguee and Reverso in the following terms:

When you type a sentence, they are going to give you the context, and also a word for word translation, also, if there is a key word, they are going to give you many expressions in which the words can have different meanings. You just have to type the sentence and the translation tool provides everything, like [err] the context.

Some informants also argued that although helpful, the tools should be used with caution. In this regard, some of the informants recommended that Google Translate be used with caution while others also recommended the same approach for DEEPL, Reverso and Linguee. The following response from Amina, interviewed on 2nd October 2020 and who uses DEEPL reflects this point:

I think it is [errm] very helpful but we should still be careful when using it because the machine cannot get the full context. It might translate the words, but it might

not get the context and the context is very important when you are trying to get the meaning of something. So yes, it is very helpful if you want to understand something very fast but you have to still be very careful when you are using it.

Jane, also interviewed on 6th May 2020 shared her opinion on the subject. The point she made is reflected in the following statement:

Well, what people actually need to understand is that the language translation tool is not going to do an absolute translation. Generally, I access it to have a general idea of what to say. Once you have the general idea, there are certain words, which stand out to you, that you have difficulties with. But once you get the general idea, it is up to you the translator to put yourself behind the machine, to sit down and take each word according to the context. So for me, the translation tool is actually perhaps [uh] an aid, to have a general idea.

Jean also explained that although helpful, language translation tools generally tended to be double-edged swords, especially for language learners. In his opinion, while helping language learners express themselves at the moment that they need to, continued use could also lead to a level of dependence on the technology among users, since they could simply access their translation tools when in need of making meaning of a conversational situation. The long-term effect, according to Jean, is negative on the undisciplined user. The following is an excerpt of his response:

Using the translation tools makes students very lazy, because instead of using it to be more effective, or to have more effective speaking skills or writing skills, some just use those language translation tools to translate everything and [err] at some point, they don't really keep anything in mind. They don't learn anything, from using those [errm] language translation tools. They just translate, and the by next day, they didn't retain much.

Isaac, interviewed on 2nd October 2020 also seemed to share a similar view with Jean when he said that he would not advice anyone to entertain a continuous use of the language translation tools (he

uses Google Translate) because according to him, permanent dependence on language translation tools to express oneself “is not the goal”.

Concerning francophone students’ perceptions on the usefulness of language translation tools with regard to their ability to improve upon their academic performance, many of the informants aligned themselves with DEEPL, Reverso and Linguee, while just a few of them claimed to prefer Google Translate and Microsoft Translator.

Sophie had the following to say:

Yes, it really does. It really does [erm] because sometimes when I am in the exam hall, I don’t really need to take my dictionary or use this Reverso because I have the words and expressions in my mind already.

Similarly, Sylvia shared the following opinion:

Sure, I think it improves my academic performance, because in exams for example, we don’t use them. All we use is dictionary so if you are accustomed to them that means that you have been translating things and you have new vocabulary. So that’s how it helps me because when I go to the exam hall I don’t have that opportunity to use them so when I use them at home, I try my best to learn something from them so that things can be easy for me in the exam hall. They are very helpful.

With respect to the informants’ perceptions on the usefulness of language translation tools in terms of their (the tools’) ability to help them negotiate meaning and understanding within the foreign learning environment, many informants claim DEEPL, Reverso and Linguee help them in this regard. Just a small number of the informants gave similar reports about Google Translate and Microsoft Translator.

In this regard, Isaac explained that outside of the academic environment, Google Translate helps him in his business activities, especially when he needs to communicate or express himself in

English. According to him, Google Translate is useful to him in negotiating a level of meaning and understanding with his Anglophone business clients.

Sophie reported that even when her language translation tool gives an inaccurate rendition of a translation, she is able to manoeuvre her way around making some meaning because of her little understanding of the English language and her understanding of the context in which the expression was used. The following statement summarises her point:

...I would say that actually, everyone can use it. But you have to have some knowledge, to know that when you translate a word, in this context, it can be used, in this context, it cannot be used. So I'd say that for me, because I have some little background in English, I can know that yes, in this context this might be used, in this context, this cannot be used.

Seth who is a user of DEEPL also indicated that, in addition to helping him express himself better, the language translation tools helps him get better meaning and understanding of assignments and texts. He said the following:

Sometimes you may not be sure about the type of expression to use, so, using maybe, a machine translator will enable you to get an understanding of the text or assignment before you.

In relation to informants' perceptions on the usefulness of language translation tools in terms of their readiness to recommend their tool preferences to others, some of them were ready to recommend DEEPL, Reverso and Linguee, whereas Google Translate and Microsoft Translator got the least number of people willing to readily recommend them to others.

For example, Erica exclaimed with excitement when asked whether she would recommend her tools to others, “Of course!” She explained that her answer and reaction were because in her opinion, for free, DEEPL and Linguee were the best language translation tools.

Similarly, Sophie had this to say about Reverso:

“I can say Reverso is very good and it’s very helpful and if I’m going, if I’m to advise someone, I would tell the person to use Reverso.”

Interestingly, however, Isaac, who uses Google Translate said that although he finds it somewhat helpful, he was not ready to recommend it to others in future. He explained that the usefulness of Google Translate would depend on the person and although it helps him to some extent, he cannot advise others to use it.

Dennis, interviewed on 4th May 2020, also said that although language translation tools are generally helpful and although he would recommend it to others, he would advise them to use them sparingly, as in his opinion, they can become addictive, thus “endangering” their English language learning process. The following is an excerpt of his response:

Yes, I can recommend to [the] others to use it. I can recommend them to use it, but, the thing that I can’t recommend to them is like, using it permanently, because instead of helping them sometimes, they would be addicted, and if they are addicted, they wouldn’t make any effort anymore. So each time when they would have to express themselves, they would have to use the translation tool. This is not the goal. So I do not recommend them to use it permanently.

To increase the usefulness however, Dennis suggested that language translation tools could be made to be accessible offline, thereby making it possible to use them even in the absence of access to internet. He said the following:

I would like it to be free, not online, like, we can use it without having data, like Google map. It has offline mode. So if Google Translate could have [errm] offline mode, it would be okay.

Finally, as regards users' perceptions on the usefulness of language translation tools in terms of their intended future use of the tools, almost all the informants said that they would continue to use their tools, given that new and better ones are not introduced in future and their English proficiency levels do not improve. Only Dennis and Isaac have no intentions of continuous use of language translation tools in the future because according to one of them (Isaac), that is not the goal. The goal is to master the English language to the extent that he would have no need for the tools in future. For this reason, he explained that he would rather make more Anglophone friends with whom he can actually practice his English and learn some new expressions than continue to depend on the language translation tools.

5.4 Perceptions on the Ease of Use of Language Translation Tools

The findings reveal that the informants find language translation tools generally easy to use. This perceived ease of use is actually one of the factors that influence informants' acceptance and use of their tool preferences. All informants responded positively when asked about how easy or complicated their language translation tool preferences are to use. Some, however, went ahead to say that there was the need for some level of experience before one could actually benefit fully from language translation tools, because of the errors that are sometimes associated with the translations they render. The response below from Sylvia who uses both DEEPL and Linguee captures this point succinctly:

Sylvia: I think they are really easy because you just put your expression or your word inside and it gives you the available equivalence for it.

Similarly, Sophie had this to say:

Sophie: I think they are very easy to use, but again, I think that you need a little experience before using them. I would say that actually, everyone can use it. But you have to have some knowledge, to know that when you translate a word, in this context, it can be used, in this context, it cannot be used...

Two other informants (Jane and Dennis) stated that for them, once there is access to reliable internet and a smartphone or computer, they could easily access their language translation tools, Linguee and Google Translate respectively, which they find very convenient. The following is a quote of Jane's response:

Well, it is not really complicated. Just access the site ...and then, well, type what you have to say and then it gives you a response, so it is easy enough. All you need is the internet and a good phone.

For Sylvia, however, although she also finds the language translation tools easy to use, it is her opinion that there is more room for improvement in terms of accuracy.

...maybe for them to put accurate things because Google for example, when you look for "*petit à petit l'oiseau fait son nid*", it will give you "little by little the bird makes its nest". Meanwhile it is not the equivalent of that idiomatic expression. It is rather "little drops of water make a mighty ocean", so for such things, they should try to put the accurate equivalence.

In Jane's opinion, Linguee would be easier to use if it could take more words or longer expressions for translation. She said the following:

Actually, I would like it to take more words. Yes, increase the paragraphs because it is generally limited. So if it would be possible to translate an entire text at once, that would be nice...

Seth asserted that although DEEPL is easy to use, it could be improved to become less cumbersome and to use especially when one wants to make meaning of a text in .pdf format.

The use of DEEPL is easy, is very easy, but it gets to a point when a text is in pdf form. Sometimes, it messes everything up so if they can do something about that, it will be good.

5.5 Contexts within Which Language Translation Tools Are Most Helpful and Least Helpful

The findings revealed that there are three major contexts within which francophone students in Ghana use language translation tools – the classroom context, individual studies and social interactions. The findings showed that most of the informants find the language translation tools most useful in both individual studies and classroom contexts but not in social interactions, where only a few of them find them useful.

The findings also showed that there are other contexts in which some of the informants do not find the language translation tools useful. These include the classroom contexts (for few of the informants), social settings such as the marketplace and the neighbourhood as well as conversational situations. Seth, who does not use them in the context of the marketplace, argues that he usually goes there with a fixed set of words and therefore has no need for a language translation tool. He said:

The truth of the matter is that you cannot use machine translation when you go to market or something because you have become used to the [errm] to the expressions

that you use in that environment. So there is no need to use a machine translation over there.

Another informant who does not find the tools useful in the marketplace, the neighbourhood and the classroom stated that this was because the other interlocutors sometimes spoke Ghanaian local languages like Twi and Ga, which are not in the tools' ability to translate, thus limiting the usefulness of the language translation tools for him in that context.

Interestingly, some informants find the tools not useful in the context of the classroom because they are uncomfortable using them in class during classes for the fear of being reprimanded for using phones during lectures.

Furthermore, Cyril indicated that during conversations with others, he does not find the tools useful because in his opinion, it is impractical and rude to keep consulting his phone while talking to others. He said the following:

...while reading or when I hear a word that I don't know about, that's when [I, I] I use them. It might be a bit complicated when I'm having a conversation, just in the midst of the conversation, just take my phone and look up for the word. So generally, I get the meaning from the context.

In the context of individual studies, all informants claim to use language translation tools. Francophone students, after classes, purposively seek English content and translate them, in order to test their proficiency levels and improve upon them.

While some of them look for texts to translate, a few others use them for ostensibly entertainment purposes, although they claim that they have didactic uses. For example, Sophie says she watches English movies and music videos, sometimes with subtitles that she can use the language translation tool to translate. She explained that this helps her to learn and memorise new English

words and expressions as well as the best ways to use them. According to her, on the average, she does this between 10 and 15 times a day.

This is what she had to say:

I have watched videos on YouTube; I watch [uh] English channels; and when there is a word that is not clear to me, I check instantly. I would say that it is useful to me in the sense that I learn new words and after that, I know how best to use them. Others also use their preferred language translation tools at home for their take home assignments. For example, Cyril said that he tries to get by most times with dictionaries, however, when it comes to his assignments, he uses his preferred language translation tool. This is expressed in the following statement:

Personally, I use DEEPL. So it's [err] when I'm translating that I use these tools. But if for instance I'm watching a movie, and I see a word that I don't understand, I just use my phone's dictionary.

Sophie also said the following:

I feel the need to use the translation tools when I am working on an assignment. Also, when I'm speaking with somebody and I know that this person speaks very good English...

In addition, common subjects or courses for which many of the informants mostly find the language translation tools most helpful are what they describe as technical courses. According to them, the technical courses include economics, law, critical thinking, academic writing, translation theory, international relations and Information and Communication Studies.

With regard to the use of language translation tools within the classroom context, most of the informants found their tool preferences useful in this regard. For a few of them, however, it is more useful to reserve the translation tools for outside the classroom and use dictionaries within the classroom context instead. Many of those who use language translation tools in the classroom

context, use it mainly to look for ways or expressions to answer questions in class, translate texts and in some cases, instructions to assignment given.

Vanessa is one of such informants and this is what she had to say:

Generally, I use the tool when I am translating for assignments or things like that and even in class. But mostly, it's at home when I have an assignment in translation, and maybe when I'm reading something or watching some movie, I can just go to Google Translate and type something and it gives me the meaning or the equivalent in French. I usually use it in the translation setting because I also have dictionary so unless I don't find them in the dictionary, I can now go to my tools.

For some of the informants, it is rather in the context of social interactions that they find the language translation tools most useful. In this regard, they come in handy when they have to communicate with their English-speaking neighbours and make transactions and interactions with their English counterparts, especially those who they believe speak very good English. The following is what Sophie said:

I feel the need to use the translation tools when I am working on an assignment. Also, when I'm speaking with somebody and I know that this person speaks very good English.

For Isaac, the situation is not so different, as he leverages the language translation tools to communicate with his Anglophone clients outside of the classroom context.

I have some small businesses, and I have international customers, and sometimes, I would have to express myself in English. There are some specific terms that I cannot get at the first time, so I go to Google Translate and try to solve my problem over there...

5.6 Experiences of Studying in Ghana vis-à-vis Communication Challenges and Language Translation Tools

The interviews revealed different experiences of francophone students in the foreign learning environment. Informants' experiences largely related to their school environment, outside the classroom contexts as well as their use of language translation tools.

For instance, Jane said that she felt lost in the English system, especially since the courses are taught in English, and therefore needed time to adjust, particularly in the school environment. According to her, this negatively affected her in school, one of the reasons for which she sought language translation tools. She said:

Well, I would say that the first thing is actually the language barrier, especially for a francophone who is not used to English. My personal experience, when I arrived, [uh] I understood when people spoke; I could read, I could write, but the problem was with communication. I could express myself only through gestures.

Sophie also shared her experience:

[Errm] I'd say that at first, I had issues; with the course I'm doing right now, I had issues with [errm] following the lessons because I had...I needed time to adjust to the English system because it was the first time I had that much English to take in. It was kind of stressful, and yes, it [it] took time. It took time for me to adjust to it. It affected my performance because it was a bit difficult to learn. I didn't have that drive, you know, when it's your language, it's easier. Most of the time I feel anxious; Sometimes I'm even shaking when I speak; I'm nervous about class tests most of the time because I know that the way I will express myself, [err] I will write things, I know that I'm going to make mistakes.

Seth also revealed that limited English proficiency was not his only challenge. He also had a very strong French accent that always manifested itself whenever he tried to speak English, hence making it even more difficult for the regular Ghanaian to easily understand

anything he was trying to communicate. The language tool helped him with his proficiency despite his accent. The following response describes his experience in this regard:

I still remember when I came to Ghana and I was supposed to interact in English. It was difficult and I also had a certain Ghanaian friend who was saying that as for me, my English is like I am speaking French. Sometimes, because of my accent and people, I used to feel uncomfortable.

Another interesting experience was Jean's. According to him, some words he thought were English words, because the translation tools and dictionaries said so, did not have the same denotation in Ghana. It took a while for him to get accustomed to the "Ghanaian system". The following is an excerpt of what he said:

I realised that in Ghana, when it comes to [err] the community, there are specific words that Ghanaians are used to. For "shaving sticks" for instance, I was used to saying "razors", because that's what I saw in the dictionary, and so to me, it was the right word. But according to the context and the culture of the country, it was not the appropriate term, and this was [err] one of the challenges I faced when I first came to Ghana.

These challenges notwithstanding, some informants find studying in Ghana still advantageous because according to them, it provides the opportunity to be immersed into the actual environment whose language you want to learn. This is what Cyril had to say:

First of all, you are immersed in the language. [Um] Because if you learn [err] English in a francophone country, well, you go to school; while you're in school, you study English. Once you are out there, it will be only, let's say you are in a French country so you will be hearing only French. You will be speaking French. You go out there, you see your family. You see your friends, and in about 30 minutes, you'll already have forgotten what you've learnt. So being in an Anglophone country while learning English is the best. Immersion is the best.

He is also excited about the experience and the opportunity and unlike others, feels confident and encouraged when he has to speak English in class.

On a personal level, I feel confident and encouraged because it gives me the opportunity to better myself. Yes, [I] I believe that every opportunity that is given to me is an opportunity to better my English and to improve on it. So I don't feel nervous or anxious.

Across the informants interviewed, the issue of language barrier appeared to run through, with some stressing how speaking the Ghanaian local languages around them does not help them. It was found that there is also a local language barrier to using language translation tools. In fact, sometimes, according to Eric, some of their lecturers, instead of speaking in English, speak the local dialects, which according to him, is not helpful to at all. For these Ghanaian local languages, there are no language translation tools to help them translate and communicate with the local language speakers, hence, making language translation tools, not helpful in such situations.

For three informants in particular, immersion into the Anglophone learning environment has been difficult especially because of the prevalence of local Ghanaian languages like Twi and Ga, which not only makes it difficult to speak the target language – English – in a social setting, but also, as indicated earlier, cannot be translated with language translation tools. Below is a quote of Cyril's response:

Well! It is always advantageous to be foreign and to be in an environment in which we speak the language we want to learn... But in Africa precisely in Ghana, we have our mother tongues. 'Twi' is much spoken here and it influences a little bit [uh] the way we would really like to speak English because well, not everyone speaks English everywhere.

The following is a response from Sylvia, who also shared her opinion on the subject:

If you have to be in Benin, I am not sure you can really learn it because even if you want it you can't because you are in a francophone country. So maybe you learn

something in school but when you go home or when you meet people you can't really express yourself. You are obliged to speak the same French so even though here I still meet French people, at least I know that if I go out alone it's likely that I will meet Anglophones. So if I am going to the market alone, I am not sure I would meet a francophone there to speak French so it's okay; just that sometimes too you go somewhere and the first thing the person says is in Twi so it doesn't help. Even in class, too sometimes the lecturers they just shift to Twi so it is really frustrating.

In addition, when they, students with limited English proficiency, need help expressing themselves, especially in the classrooms, some colleagues make fun of them. Although they could use language translation tools in the classroom to help them express themselves better, some of these students do not use them for the fear of being reprimanded by their lecturers for using phones in class. The following response from Amina illustrates this point:

I would say it is annoying because sometimes I know the answer but as I raise my finger or I'm questioned, the fact that everyone is supposed to listen to me creates [err] some kind of stress for me. I'm really tense and it makes my voice tremble and the answer actually hardly even comes out...

This happens most of the time but I've learnt how to speak to myself to calm myself before speaking because if I make a mistake, the others are happy and they make fun of me.

Similarly, in the case of Stephanie, communicating within the academic environment is difficult because of the anxiety she feels, especially because she believes she is going to make a mistake and become a laughingstock of the class. In this case therefore, she finds the translation tools very useful in the classroom, especially when a question is thrown to the class, and she needs to know how best to express the answer in English. She, like many of the other informants, finds examinations and class tests stressful because of the anxiety she feels due to her limited English proficiency. However, she tries to prepare adequately and give it her best. She responded:

Class tests are stressful because we do not know what to expect, otherwise, we prepare and do what we have to do. It is the same for examinations. We prepare and do what we have to do.

Outside the academic environment however, Stephanie feels more confident and less anxious to communicate in English because she feels it is a freer opportunity to practice her English with speakers of the language, make mistakes for which she would not be mocked and then get corrected. Within the social setting outside of the academic environment, she again consults the language translation tools, sometimes, to make sure that she expresses what she really means to say well.

I feel more confident; Since well, there are less people, and well, if it is one person, I feel more confident than in front of a large number of people.

From the findings, it is deduced that informants are generally stressed and anxious during class and less so outside of the academic environment, which is also an opportunity for them to use the tools, make mistakes, and get corrected.

According to Jane, her participation in class is dependent on the course. There are some courses in which she feels comfortable, and therefore has no issues with attempting to communicate in class. For other courses however, she prefers to just stay quiet and observe the class. The following is a quote of the point she made:

My participation in class actually depends on the course. There are some courses like translation theory that I am more comfortable in. It is easy to understand so I participate. For some other courses, I prefer to be quiet and just listen.

She added that one course that she was not as comfortable in and hence stayed quiet and listened was critical thinking because according to her, “it is a lot of English.”

Another person, Sophie, considers herself a naturally nervous person, for which reason she finds it difficult to communicate in class even with the availability of language translation tools, because the anxiety of speaking the language in which she is not so familiar, in addition to her naturally nervous state, makes it more challenging for her. This however, does not deter her from attending lectures. The worse it does is make her a silent observer and an unwilling participant in class.

I think naturally I am kind of a nervous person so even though I know the answer I am still nervous because I don't know what others may think about it. So I don't like to talk in class.

5.7 Other Factors That Influence Acceptance and Use of Language Translation Tools

Apart from the informants' perceptions of the usefulness and ease of use of language translation tools, the study found five (major) other factors that also influence their acceptance and use of language translation tools. These factors comprise the following:

- The number of languages the translation tool translates from and translates into;
- Recommendations from others;
- The accessibility of the translation tool;
- The nature of their (the informants') classes;
- The diversity of the tool in terms of English variation.

For example, for some informants, the number of languages the language translation tool could translate from was a determining factor in their behavioural intentions towards the tools. According to them, the more languages the translation tool translates from, the more quality the translations produced by these tools are deemed to be. Seth, Sophie and Josephine shared this opinion, in

addition to their perceptions on the usefulness and ease of use of the tools. These informants are users of DEEPL, Linguee, Google Translate and Reverso.

The interviews also established that recommendations were reasons for the acceptance and use of translation tool preferences by informants. What this means is that some of the informants only accepted and eventually used the language translation tools they are currently using not necessarily because of their perceived usefulness and their perceived ease of use, but rather, because they were recommended by their lecturers and senior colleagues. This is quoted from a statement by Jane below:

The lecturers in class recommended DEEPL; it was recommended to me, and well, recommendations of friends who were there before me...

The interviews further reveal that for some other users of language translation tools, the accessibility of the tools was a determining factor. For this group of informants, the more accessible the tool, the more likely they were to accept and use them. The following statement by Stephanie succinctly captures this point:

I would say that it is what has been in my reach; these tools are on the phones and are reachable; it can be taken anywhere.

On another hand, and in fact, for many of the informants, the nature of their classes played a role in their individual choices of language translation tools. Implicit in this is the idea that had it not been for their classes and the approach the classes and lecturers took, they would not be using the tools they are currently using. Below are statements from informants Stephanie and Eric:

Stephanie: I think they have played and they are still playing a role because [errm] I am sure if I were not in GIL and I find myself in some business school, I am not sure I would have known about these tools and even be using them;

Eric: Sometimes, [errm] we have to use these tools because of some of our classes

The speed and the fact that no payment is required before use were also determining factors in informants' acceptance and use of their current preferred language translation tools. Speed in this regard is referring to the swiftness with which the translation tools provide the translated versions of the expressions they intend to communicate. The following response by Sophie illustrates this:

I noticed that Reverso is super easy to use and also the speed. Yes, it is very fast. I would like to continue to use it

Indeed, there are some translation tools such as TRADOS, as indicated by Seth, which take payment before providing translation services. It therefore makes sense that users would lean more towards language translation tools that do not require payment before use. This is an excerpt of the view of Sylvia on the matter of cost as a factor of use:

...because they are also free and I know there are other software which are also very good but these ones are also free and good

Finally, for some other informants, the “diversity” of the tools was a determining factor. Diversity, in this context, is a hypernym for the tools' ability to provide different contexts in which expressions can be used as well as tools' ability to differentiate between American and British English. Stephanie said the following:

... and especially [uh] the diversity, because as I said [uh] it gives different ways of saying certain things in different situations...

Moreover, Esther indicated that she leaned towards DEEPL more because of its ability to differentiate between American and British expressions. The following is an excerpt of what she said:

So DEEPL translation can produce translations that reflect certain particularities. For example, American or British English and [err] talking about variations in spelling, they are covered. DEEPL translator gives me [errm] full control. It allows me to take full control over the English language.

Interestingly, Jean, who uses Linguee and Reverso because of what he describes as their ability to provide different contexts in which English expressions can be used, would want them to be upgraded to differentiate between American and British English. He said:

I wish the language translation tools could make a difference between American expressions and British expressions because sometimes, it is really confusing.

5.8 Chapter Summary

This chapter presented the findings from data collected from sampled francophone students of the Ghana Institute of Languages. The findings show that the informants of this study are different in terms of their choices of language translation tools. There are various translation tools available to them, and the students have different preferences. However, the most used ones are DEEPL, Linguee, Reverso and Google Translate. Although the preferred language translation tools are all equally useful, informants have different reasons for which they have different preferences. Moreover, in addition to their perceptions on the usefulness as well as their perceptions on the ease of use of their translation tool choices, other factors such as recommendations, accessibility,

diversity, speed and “freeness” play important roles in their decision making towards acceptance and use of language translation tools.

In chapter six, which follows, the findings are discussed, as juxtaposed against the tenets of the theory underpinning this study, as well as the research objectives and research questions.



CHAPTER SIX

DISCUSSION

6.1 Introduction

This chapter discusses the findings in relation to the research objectives, the research questions, the literature reviewed and theoretical framework that underpinned this study. The Technology Acceptance Model (TAM) guided this study while a review of related scholarly materials on communication challenges in foreign language contexts and technology acceptance was also undertaken. The discussion sought to confirm whether the findings of the present study are theoretically grounded in the assumptions of the aforementioned theory, in addition to whether or not they confirm findings of earlier related studies on the subject and their implications.

6.2 Language Translation Tools Used and Reason(s) for their Choices

Christensen et al.'s (2017) claim that translation technology has in recent times been integrated into human life was supported by the findings of this study. The findings confirm their assertion that many people who are not professional translators today take advantage of free online language translation technologies to help them understand and produce texts in foreign languages.

Francophone students interviewed in this study use six different language translation tools. However, the translation tools that are mostly used across the interviewed students are Reverso, Linguee, DEEPL and Google Translate. While there are other language translation tools such as TRADOS that could be used, the cost tends to be a barrier to students.

Informants of this study accept and use particular language translation tools based on various reasons, and these reasons vary from person to person. In addition to their perceptions on the usefulness and the ease of use of their translation tool preferences, some of the other reasons include the following: the number of languages the tools translate from and into, the diversity of the tools, the quality of their output in terms of accuracy and equivalence in meaning, the speed with which they translate, their accessibility and their (the tools') ability to teach them (new) ways of expressing themselves.

The popularity of Google Translate among the sampled francophone students at GIL is comparable to findings by Chen et al. (2012) who singled it out, as a dependable language translation tool in terms of accuracy and adequacy in meaning. It is important to note that other studies do not support this finding. For example, such scholars as Patil and Davis (2014) and Gao et al. (2014), after evaluating the ability of Google Translate to produce 100 per cent accurate translations, concluded that Google Translate could not be relied on, for accuracy, and described it as one that does not take into consideration grammatical rules when translating. This, according to them, often leads translations to results that do not make much sense in the given context. Findings from the present study suggest that although Google Translate sometimes lacks accuracy due to its lack of context, it still helps francophone students at GIL negotiate a level of meaning and understanding within the academic and social spheres, especially since they (the students) are usually privy to the context.

6.3 Perceptions on the Usefulness of Language Translation Tools

The Technology Acceptance Model (TAM) suggests perceived usefulness and perceived ease of use as the determining factors for the acceptance and use of a technology. The theory further explains that certain external factors also play a role in users' perceptions on the usefulness and

ease of use of the new technologies to which they are introduced. The findings of this study affirm the assertions of the Model. In the context of this study, the external factors include the foreign learning environment, users' level of proficiency in the English language as well as their experience in the use of the language translation tools. The findings suggest that being in Ghana has been overwhelming for the francophone students, for which reason they use translation tools to mitigate some of these challenges. In addition to this, informants report that they find the tools useful particularly because their level of proficiency in English is low. With regard to the experience, some users of the tools make particular choices because of unfavourable past experiences they have had with certain tools, thus influencing them to make different choices, which they find relatively more useful.

The assertion that perceived usefulness is a significant predictor of acceptance and usage behavior (Bakhsh et al., 2017; Dumpit & Fernandez, 2017; Faqih & Jaradat, 2014; Granić & Marangunić, 2019; Iqbal & Bhatti, 2015) was supported in the present study. On the other hand, findings of Hussein (2017) which suggested that perceived usefulness is not a significant predictor in the acceptance and use of a technology were unsupported. For instance, informants like Jean and Esther prefer the translation tools they are currently using because before they made their decisions, they tested them and found that they would be useful to them particularly in their assignments and individual studies.

The researcher measured the usefulness of the language translation tools to informants against the following five yardsticks:

- How well they help informants express themselves better;
- The accuracy of the translations they produce;
- Their ability to help informants improve upon their academic performance;

- Their ability to help informants negotiate meaning and understanding in the foreign learning environment and their readiness to recommend the tools they use to others;
- Users' general impressions about their translation tool choices.

The findings lead us to conclude that language translation tools help francophone students express themselves within the spheres of the academic environment as well as within social spheres in addition to the fact that they help improve upon their academic performance suggests how useful these tools are to them. Only few informants found the tools not very useful in the context of social interactions. For example, one of such people (Cyril), it would appear rude and distracting to continuously refer to their phone while in an ongoing conversation with someone.

The informants generally intend to recommend their language translation tool preferences to others in future, and in fact, they have plans of continuous use, on condition that their English proficiency does not improve and more useful translation tools are not developed.

In spite of the fact that the informants admit to the errors associated with the translations produced by these tools, they do concur that the language translation tools serve as aids to communication, which help them negotiate meaning and understanding. This is particularly because they are usually privy to the context they find themselves in and can therefore adjust the translations to suit the context accordingly. This is dissimilar to findings in earlier related studies (Chen et al., 2017; Patil & Davis, 2014; Turner et al., 2019), which were mainly situated within the medical context. In the medical context, errors were not tolerated especially because of the far-reaching consequences that may arise from miscommunication within the ambits of healthcare and medicine.

6.4 Perceptions on the Ease of Use of Language Translation Tools

Jaganathan et al. (2014), Leite et al. (2016), Medvedev (2016) and Turner et al. (2019) posit that language translation tools are flexible and easy to use. There is similarity between their findings and the findings of this study. For instance, the informants of this study asserted that language translation tools are not complicated to use. Generally, all language translation tools are easy to use, for which reason informants say they are not deterred from using them. All that is required is a working computer or smartphone and reliable internet. This corroborates findings of previous related studies, which also asserted that language translation tools are easy to use.

There is a similarity between the findings of the present study and those of Turner et al. (2019) and Chen et al. (2016), with regard to the assertion that language translation tools are indeed easy to use although they produce many translation errors, for which reason human participation in the translation process is necessary.

In addition, according to some informants, experience and some knowledge in the target language are necessary in order to have full benefits of the tools, especially since they sometimes produce erroneous translations due to their lack of context. The ease of use of the translation tools is a determining factor in their acceptance and use, and this is supported by findings from related previous studies (Bakhsh et al., 2017; Faqih & Jaradat, 2014; Iqbal & Bhatti, 2015).

6.5 Contexts within Which Language Translation Tools Are Most Helpful and Least Helpful

Tabiri and Budu (2017) in their study concluded that francophone students in Ghana need remedies to their communication challenges not only in the classroom contexts, but also in various other social situations. As indicated in the findings, the informants find language translation tools most

helpful in three contexts – classroom context, social spheres and individual studies. In addition to giving them the opportunity to interact with the English-speaking Ghanaian community, immersing into an English-speaking country like Ghana for further studies drives francophone students to use language translation tools to negotiate meaning and understanding and to better express themselves in the target language – English. In the classroom context, some francophone students use the tools to understand assignment instructions and the best expressions to answer questions in class. Some, however, do not use the tools within the classroom context because of the fear that they would be reprimanded for using mobile phones in class, in which case they use dictionaries instead.

Within the social spheres, francophone students use the tools to communicate with their English-speaking neighbours in and around the neighbourhood in which they find themselves. This is in direct relation to the assertions of certain scholars that numerous opportunities are presented for foreign students to engage with native speakers within various contexts, which also consequently helps improve upon their communicative competence (Isabelli-Garcia, 2017; Pinar, 2016).

With regard to individual studies, some informants use language translation tools at home for personal practice in translation, while watching English movies or watching videos on YouTube. This way, they are able to move at their own pace, correct their mistakes without feeling embarrassed that anyone is watching and most importantly, learn and memorise new expressions and ways of saying things within different contexts.

Finally, common subjects in which interviewed francophone students at GIL find language translation tools most useful are economics, law, international relations, critical thinking, academic writing, translation theory as well as information and communication technology.

6.6 Experiences of Studying in Ghana vis-à-vis Communication Challenges and Language Translation Tools

The informants of this study, since their admission into GIL, and their arrival in the English learning environment, have had many experiences with regard to their communication challenges and their use of language translation tools to try to mitigate them.

Not unexpectedly, the findings revealed that most of the informants experience communication challenges in the form of foreign language anxiety (FLA) because of the language barrier. This happens predominantly in class and supports the findings of previous studies (Hwa & Peck, 2017; Javid, 2014). According to them, this does not help them in their academic performance, and they end up participating less in class. Even though language translation tools are available for them to use in the classroom, some informants mentioned that they always avoid speaking in class because their English counterparts and even some lecturers make fun of them every time they do so, especially when they make mistakes. In fact, one person says she avoids speaking in class to protect herself from becoming the “laughing stock” of the class.

The findings also revealed that francophone students needed time to adjust to the English system in order to feel more at ease in the foreign (English) learning environment. This was however made difficult for them especially when their lecturers, who they expect to deliver the lessons in English, sometimes speak Twi and Ga, Ghanaian local languages, for which there are no language translation tools to translate from. In addition, sometimes, when they go out, often with the hopes of speaking English for the purposes of practice, they are sometimes only met with Ghanaian local languages, which they do not understand. Not only does this not help their English learning process, there is no availability of language translation tools that can translate from and into the Ghanaian local languages.

It is worthy to note however that it is not all the informants who experience FLA. Some did admit to feeling excited whenever they had to speak in English and actually always looked forward to doing so in class because according to one of them (Cyril), that way, he got to practice his English, which he believed, would help him improve.

Interestingly, despite the admission to communication challenges that francophone students face in the light of the language barriers they claim to experience, the findings reveal that the informants nevertheless consider being immersed into the English system as an opportunity to actively engage and interact with native speakers of their target language. Indeed, a study by Isabelli-Garcia (2017) revealed that studying in target language countries helps improve fluency and pronunciation in the target foreign language, especially since various opportunities to engage with native speakers are presented to foreign students. This explains why francophone students at GIL get frustrated when some lecturers and others within their social spheres try to communicate with them in the Ghanaian local languages when they speak with them.

6.7 Other Factors That Influence Acceptance and Use of Language Translation Tools in the Foreign Learning Environment

In addition to their perceptions on the usefulness and ease of use of their preferred language translation tools, most of the informants considered the number of languages the tools translate from, the diversity of the tools, recommendations of others, accessibility of the tool, the nature of their classes as well as the speed and whether or not these tools were free before accepting to use them. The findings suggest that in the process of technology acceptance and use, although users' perceptions of usefulness and ease of use play significant roles in the adoption process, other factors may sometimes come to play, depending on the user. This is similar to studies by Dumpit

and Fernandez (2017) who found that subjective norms, in addition to perceived usefulness and perceived ease of use were robust predictors of acceptance and usage behaviour towards a technology.

Similarly, prior experience was identified by Bakhsh et al. (2017) as a factor that played a significant role in the acceptance and use of a technology. Indeed, one informant said that she uses Reverso because that is what she has been using for many years, even before arriving in Ghana, for which reason she has no intention of changing it since it performs satisfactorily.

These findings have implications for the theory underpinning this study, which is the Technology Acceptance Model (TAM). The Model states that the core variables of TAM, perceived usefulness and perceived ease of use, are the determining factors which influence users' acceptance and use of a particular technology to which they have been introduced for the first time. From the above findings however, it is clear that although the perceived usefulness and the perceived ease of use come to play in the acceptance and use process of language translation tools, other factors, depending on the individual, sometimes also play significant roles. In fact, in some cases, the perceived usefulness and perceived ease of use, according to the findings from the present study, play no role at all in the acceptance and use of language translation tools. In terms of informants' perceptions on the usefulness of language translation tools, in deciding to choose one over the other, they considered such factors as how well the tools could help them express themselves better; the accuracy of the translations the tools produce; the tools' ability to help them improve upon their academic performance; as well as the tools' ability to help them negotiate meaning and understanding in the foreign learning environment. As reported earlier in the findings, in order to achieve this, while some of them tested various tools before arriving at a decision, others just relied on recommendations by the lecturers and friends. Esther shared her experience as follows:

Esther: I use DEEPL. I chose DEEPL because I tested it, and what I did was that I picked one sentence in English that I know how to translate into French correctly. I wrote it in DEEPL and tried to translate it into French to see whether they would give me the exact translation. So I tested several tools and I realised that DEEPL was very close to the exact translation. Before DEEPL, I used [err] Google Translate and I realised that Google Translate does not respect grammatical rules.

In addition, with regard to the users' perceptions of the ease of use of language translation tools, it was found that generally, informants thought all the tools were easy to use. Other determining factors for some of them were the tools' accessibility and ease of installation. Seth shares his experience in the following statement:

I use DEEPL is free and easy to access and use but TRADOS is a software that you need to have a license before you access it, and it's very expensive.

In contrast however, the findings from this study do not support those of Hussein (2017) who found that perceived usefulness and perceived ease of use did not play any role(s) in the acceptance and use of a technology.

6.8 Chapter Summary

This chapter discussed the findings of the study in relation to the research objectives, theoretical framework and the related studies. The discussion revealed that the findings of the current study support components of the Technology Acceptance Model. Additionally, there are similarities and differences between the findings of this study and those of earlier related studies (Bakhsh et al., 2017; Chen et al., 2016; Dumpit & Fernandez, 2017; Faqih & Jaradat, 2014; Granić & Marangunić, 2019; Hussein, 2017; Iqbal & Bhatti, 2015; Patil & Davis, 2014; Turner et al., 2019).

In chapter seven, which follows, a summary of the findings, conclusions, the limitations of the study, suggestions and recommendations for future studies are presented.



CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This study, premised on the Technology Acceptance Model, sought to conduct in-depth interviews into the experiences of francophone students in Ghana and the factors that influenced their acceptance and use of language translation tools. The objectives of this research were to find out whether as indicated in literature in different geographical locations and contexts, the core variables of the Technology Acceptance Model came to play in users' acceptance and use of their language translation tool preferences. The study therefore looked at users' perceptions on the usefulness and ease of use of language translation tools, their experiences in an Anglophone environment such as Ghana, contexts within which translation tools are most useful and not useful to them as well as other factors that influence their acceptance and use of the language translation tools that they use. In this chapter, the findings, and discussions in the previous two chapters are discussed. The chapter also identifies and acknowledges the limitations of the study and makes recommendations for future research.

7.2 Summary of Main Findings

Findings from this study to a large extent supported the assertions of the Technology Acceptance Model, which underpinned the study. In addition, findings from earlier related studies were supported from the findings of the present study. This is in terms of studies on second language acquisition promoted through immersion programmes, experiences in foreign language

environments, the perceived usefulness and perceived ease of use of technologies which affect users' acceptance and use of technologies, as well as other factors, which play similar roles as the perceived usefulness and perceived ease of use in the adoption of a technology. The study made the following key findings: 1. the most popular language translation tools among francophone students in GIL are Reverso, Linguee, DEEPL and Google Translate. 2. Perceived usefulness and perceived ease of use influenced informants' acceptance and usage behaviour towards their language translation tool preferences. It can therefore be said that the findings supported the assumptions of the TAM that users accept and use new technologies based on their perceived usefulness and perceived ease of use of said technologies. However, other factors also came to play in informants' decision-making process. These factors were the accessibility of the tools, the number of languages the tools translated from, the diversity of the tools, the speed with which they produced translations, the fact that no payment was required before use, the nature of their classes, and finally, recommendations from others. The study also revealed that interviewed francophone students at GIL find their preferred language translation tools easy to use and useful in terms of learning new expressions and making meaning of otherwise nonsensical texts. They however draw caution to the fact that although language translation tools are generally helpful to them, they sometimes produce erroneous translations, for which reason they should not depend solely on them, but rather nuance the translations they produce to fit the context in which they find themselves.

It was further revealed that there were three major contexts within which francophone students at GIL find the translation tools most useful – social spheres, classroom, and individual studies. The most use is in both individual studies and the classroom contexts. This notwithstanding, it was also found that in the classrooms and social settings such as the market as well as in interactions with

other English speakers, some of the informants do not find the tools useful for various reasons which are subjective to them (the informants).

7.3 Conclusions

Several studies have pointed to the communication challenges foreigners face in foreign language environments, a phenomenon which translation technologies could help mitigate. However, although there have been quite several studies on the subject, very few have focused on the context of the foreign learning environment. Majority of the studies that have attempted to do this have focused on the context of medicine, that is, the use of translation technologies to mitigate communication challenges in foreign language medical contexts. To a large extent, previous studies concluded that translation technologies are not reliable, particularly in the context of healthcare and medicine. This study however found that translation technologies are not that bad. In fact, the context in which they are used is a determinant of whether or not they can be deemed reliable and useful. What this means is that although many previous studies reported the unreliability of translation technologies in terms of accuracy, this study has found that they can be helpful in the context of the foreign learning environment, where they serve as aids to communication, and not absolute solutions to language barriers. Although this does not apply to all situations and all informants, language translation tools help most francophone students at GIL negotiate some meaning and understanding within both the social and classroom contexts. Therefore, the argument made by previous studies that translation tools are unreliable is probably particular to the context of use or need such as in medical or technical settings. On the contrary, they have utility within contexts such as the foreign language learning environment, on which the present study is focused. In fact, the findings of the study revealed that francophone students in

Ghana find language translation tools most helpful in three contexts – the classroom context, social spheres, and individual studies.

Additionally, the study found francophone students using six different types of language translation tools, and this varied from person to person. Reverso, Linguee, DEEPL, and Google Translate are the most popular language translation tools among the students interviewed, with cost being a barrier to students who wanted to use professional translation tools like TRADOS.

Furthermore, factors that influenced acceptance and use of language translation tools were found to vary from person to person. Across all the informants, however, their perceptions on the usefulness and the ease of use were constant factors. Aside from informants' perceptions on the usefulness and the ease of use of the language translation tools they choose, other factors such as the accessibility of the tool, the diversity of the tool as well as the number of languages it translates from play significant roles in their (informants') choices of translation tools. Additionally, contrary to the findings of Hussein (2017), which suggested that perceived usefulness is not a significant predictor in the acceptance and use of a technology, the present study found that it was possible for informants to accept and use translation tools because of their perceptions of usefulness of the tool.

Informants' experiences varied. While most of them faced communication challenges in the form of foreign language anxiety (FLA) because of the language barrier, others needed time to adjust to the English system to feel more at ease in the anglophone learning environment. This latter quest was difficult for them as they were often met with local Ghanaian languages in the stead of the English language – a difficult situation for them because language translation tools are not designed to translate from and into the local Ghanaian languages.

Also, some lecturers who francophone students expect to deliver their lessons in English, sometimes speak Twi and Ga, making comprehension and linguistic improvement even more difficult for them.

7.4 Limitations of the Study

There are two major limitations to this study. Firstly, the study used a qualitative approach whose findings are inevitably specific to the context studied. The findings are therefore not generalisable to other contexts and language translation tool users. A quantitative dimension or mixed-methods approach would have provided breadth in addition to the depth provided by the current findings.

The second limitation stems from the fact that the COVID-19 pandemic forced many of the informants back into their countries before data was collected for the study. Considering this, only eight out of the 20 informants were interviewed face-to-face. The rest of the informants were interviewed via Zoom. To some extent, this limited the study in the sense that there was no uniformity in the method of data gathering for which reason it is difficult to determine whether informants' responses would have been any different, in terms of depth of responses or insights from nonverbal cues and the opportunity for probing, if they had been interviewed through the same method. It is possible that some may have been more comfortable with one approach than they would have been with the other. Unfortunately, however, this is difficult to tell.

7.5 Recommendations for Future Studies

Stemming from the study's findings, and limitations, the researcher presents the following suggestions for policy, for practice and for future research:

1. As the present study's findings were limited to the personal experiences of francophone students it impossible to generalise it to a larger population. Future studies may therefore consider including a quantitative or mixed-methods approach or dimension that picks on the indicators identified in the present study for more breadth in addition to the depth in the findings.
2. From the findings, some of the informants found it challenging to integrate into the Anglophone learning environment, particularly because of the presence of local Ghanaian languages such as Twi and Ga, which cannot be translated using language translation tools. It is recommended that future updates of language translation tools are modified to include Ghanaian languages like Twi and Ga.

7.6 Summary

In this chapter, which concluded the study, a summary of the main findings was presented. In addition to this were the limitations and recommendations for future research. This study is an addition to scholarship on multi-lingual communication as well as communication challenges in light of language barriers. Communication challenges in foreign language environments, as well as the roles language translation tools play in helping mitigate the communication challenges, remain important, in the context of the learning environment, even if that is not the case for the context of health care. For this reason, scholarship must continually explore and analyse best ways of mitigating these challenges and how effectively these remedies work.

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APPENDIX A

INTERVIEW GUIDE

[Screener Question]

Do you use language translation tools [like Google Translate]? If informant answers “YES”, proceed to ask subsequent questions. If “NO”, move on to the next possible informant.

1.0 [My first set of questions are on the challenges you may be facing due to your level of English language Proficiency]

1.1 Which country do you come from?

1.2 How long have you been in Ghana and for how long have you been at this institution?

1.3 How would you describe your experience in terms of the challenges you face as a French speaker schooling in Ghana?

1.3.1 How would you describe your level of English language proficiency?

1.4 In what ways would you say these challenges affect your academic performance? 1.4.1 Notwithstanding these challenges, what opportunities, if any, do you find in studying in a non-French speaking educational institution?

2.0 [In this set of questions, my interest is in exploring your experiences of anxiety when you have to communicate in class]

2.1 Explain how you feel (i.e., confident/eager/encouraged or tense/nervous/apprehensive) when you are called upon (or expected) to speak in class: To what extent would you say you feel this way? Why?

2.2 Given your level of English Proficiency, how would you describe your attitude towards the following:

2.2.1 Class attendance (Why?)

2.2.2 Class tests (Why?)

2.2.3 Examinations (Why?)

2.3 Do you feel any different (less anxious) when speaking English with Ghanaian speakers outside the academic environment? Please explain why you answered YES or NO.

3.0 [In this next set of questions, I am interested in finding out the specific ways in which you use language translation tools to overcome your language barrier, and what your experiences have been with this remedy]

3.1 In what situations / under what circumstances do you find the language translation tools most helpful and least helpful as a francophone student studying in Ghana?

3.1.1 In what ways do you use these tools to overcome your language barrier?

3.2 What is/are your preferred language translation tool(s)? Why?

3.3 Are there others you have used before but do not use anymore? Why?

3.4 What are your general impressions with using these tools?

4.0 [Here, I am going to ask questions pertaining to your perceptions on the usefulness of the language translation tool(s) you currently use]

4.1 In what ways does using (your current preferred) language translation tool(s) improve (or fail to improve) your ability to express yourself as a student?

4.2 Would you say that using language translation tools improves (upon) or does not improve your performance in school? Why do you say so?

4.3 Overall, how helpful do you find your preferred language translation tool(s) in the learning environment?

5.0 [This next set of questions will focus on your perceptions of ease of use of the language translation tool(s) you currently use]

5.1 How would you describe your current language translation tool(s) in terms of how easy or uncomplicated it is to use them / it?

5.2 What would you wish it could do better?

6.0 [The following set of questions will focus on exploring the relationship between (your) learning environment and (your) preference of language translation tools in terms of your perceptions of their usefulness and ease of use]

6.1 How would you describe your learning experience in Ghana and the role they it played in your choice of the language translation tool(s) you currently use?

6.2 In another setting (different from the academic one in which you presently find yourself), do you think you would use (at all) or continue to use your current preferred language translation tools? **(IF YES)** Why? **(IF NO)** Why not?

7.0 [In the next set of questions, you will provide answers on your actual use of (a) particular language translation tool(s)]

7.1 How would you describe your average daily use of (your current preferred) language translation tool(s)?

7.2 Would you continue using the tool(s) you are currently using in future? Why?

8.0 [Here, I am interested in finding out if other factors also influence your acceptance and use of language translation tools]

8.1 Are there any other factors that you consider / considered before using a / the language translation tool(s) (you are currently using)? **(IF YES)** What are they? **(IF NO)** Skip.

9.0 [In this last set of questions, I will try to find out some common terms you tend to encounter for which reason you seek the aid of language translation tools]

9.1 In what areas of study do you usually need the help of language translation tools?

10.0 Would you recommend the language translation tool(s) you currently use to others? **(IF YES)** Which ones and Why? **(IF NO)** Why not?

