INDIVIDUAL DIFFERENCES AMONG SAUDI LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE: AN EXPLORATORY CORRELATIONAL STUDY OF LEARNING STYLES, AFFECTIVE FACTORS AND ENGLISH PROFICIENCY AND PERFORMANCE

by

Noaf Aljasir

A thesis submitted to the University of Birmingham
for the degree of DOCTOR OF PHILOSOPHY

Department of English Language
and Applied Linguistics
School of English, Drama and
American and Canadian Studies
College of Arts and Law
University of Birmingham
May 2016

UNIVERSITY OF BIRMINGHAM

University of Birmingham Research Archive

e-theses repository

Abstract

This thesis critically examines two distinct differences among learners of English as a foreign language (EFL) in Saudi Arabia: their learning styles (specifically, perceptual learning styles, peer collaboration and tolerance of ambiguity (TA)) and the affective factors (namely, anxiety, motivation and self-efficacy) that influence their learning. This mixed-methods study builds systematically and methodically on the little that is known about these variables among Arab learners of EFL. Its originality lies in it being the first study to explore the interrelationships between six major learning styles and affective factors in an EFL learning context. To achieve this, three self-developed questionnaires were distributed to 334 freshman students at a public university in Saudi Arabia. Semi-structured interviews were also conducted with 20 learners. Findings revealed that the participants were multimodal, exhibited a moderate preference for peer collaboration and were moderately tolerant of ambiguity. They also showed moderate levels of anxiety, motivation and self-efficacy. Importantly, all six variables were significantly related to English proficiency and/or performance. Furthermore, all correlations between learning styles and affective factors were significant, except those between peer collaboration and self-efficacy and between TA and motivation. The thesis concludes with a discussion of theoretical, practical and research implications of the findings.

Dedication

This thesis is dedicated to my late father, Abdalrahman Aljasir.

Acknowledgements

First and foremost, I would like to thank God for giving me the opportunity to pursue my doctoral studies and for guiding and helping me through the entire process.

I would also like to thank a number of people who have supported me throughout this challenging, exciting and memorable learning journey.

My sincerest appreciation goes to my supervisor, Dr Suganthi John, for supporting me throughout every step of this research. The knowledge and insight I gained through our discussions were invaluable in helping me explore my research in great depth. I am forever indebted to her for all her advice, guidance, encouragement, inspiration and for her faith in me.

Special thanks go to my family. Words cannot express how grateful I am to my mother for being there for me each step of the way. Her love, support and prayers gave me the strength I needed to pursue this work.

My sincerest appreciation also goes to my husband, Ibrahim, for his endless support and patience throughout my doctoral studies. None of this would have been possible without his love, his encouragement and his belief in me. This accomplishment is as much his as it is mine.

I would also like to express my deepest gratitude to my brother, Dr Bader, and my sisters, Albandari, Mashael and Dr Shuaa, who have always encouraged me to follow my dream. They are truly the best siblings anyone could ever ask for.

I am also grateful to my precious little girls, Linda and Myrna, for making my life full of joy. They are a true blessing in my life.

I would like to extend my appreciation to my colleagues in Saudi Arabia for their sage advice and assistance in translating and checking the validity of the instruments I developed for this project.

Last but definitely not least, I am grateful to the participants of this study for devoting time from their busy schedules to sharing their learning experiences with me. They were the ones who made this project a reality, and they are the ones for whom this project speaks.

Table of Contents

List of Figures

List of Tables

List of Abbreviations

L2	Second language
FL	Foreign language
ESL	English as a Second Language
EFL	English as a foreign language
TA	Tolerance of ambiguity
IA	Intolerance of ambiguity
FLA	Foreign language anxiety
SDT	Self-determination theory
IM	Intrinsic motivation
EM	Extrinsic motivation
SCT	Social cognitive theory
DIQ	Demographic Information Questionnaire
LLSQ	Language Learning Styles Questionnaire
AFLLQ	Affective Factors in Language Learning Questionnaire
VARK	Visual, aural, read/write and kinaesthetic
SAS	Style Analysis Survey
PLSPQ	Perceptual Learning Styles Preference Questionnaire
FLCAS	Foreign Language Classroom Anxiety Scale

Chapter 1: Introduction

1.1 Background to the research

For decades, researchers have been concerned with factors that could possibly contribute to the creation of individual differences among language learners and subsequently, result in variations in their performance. Attention has been paid to such factors as learning styles (Budner, 1962; Castro & Peck, 2005; Dewaele & Wei, 2013; Ely, 1995; Fleming & Mills, 1992; Joy & Kolb, 2009; Keefe, 1979; Kinsella & Sherak, 1998; Reid, 1998; Vahedi & Fatemi, 2016; Wong & Nunan, 2011), affective factors (Bandura, 1986, 1997; Cook, 2008; Deci & Ryan, 1985; Dörnyei, 2005; Dörnyei & Ryan, 2015; Gardner, 1985; Horwitz, Horwitz & Cope, 1986; Scovel, 1978; Stengal, 1939; Ushioda, 2008; Yan & Horwitz, 2008), language aptitude (Abrahamsson & Hyltenstam, 2008; Harley & Hart, 2002; Sparks & Ganschow, 1991), intelligence (Fishman, 1965; Morgan & Fonseca, 2004; Pishghadam, 2009) and learner autonomy (Benson & Voller, 2014; Little, 2000; McNamara & Deane, 1995). Such studies have attempted to investigate the possible influences of individual learner factors on language learning experiences and outcomes.

Of particular interest to the present study is the fact that the above concern with individual differences among learners has spread to the Arab world and more specifically, to Saudi Arabia, where this study took place (see e.g. Aldosari, 2014; Alkhatnai, 2011; Almutairi, 2007; Alrabai, 2014; Al-Saraj, 2013; Al-Sharief, 2013; Javid, 2014). When investigating language learning in the Saudi context, some of the unique features of this context should be taken into consideration such as the facts that Saudi Arabia is the centre of the Muslim world and Arabic, the language of *Qur'an*, the Holy Book of Islam, is its official language. In addition, Saudi Arabia has a rich history that goes back several thousand years,

and Saudis are very proud of their heritage, culture and literature. Although the Saudi society may appear closed and unwilling to accept foreign influences, Saudi Arabia's need for industrial development and economic growth in an increasingly interconnected and globalised world has necessitated the introduction of the English language in education, industry and commerce (Faruk, 2013).

According to Almarefh Journal (2012), an official journal published by the Ministry of Education in Saudi Arabia, the Ministry not only spends a significant sum of money but also goes through considerable effort to develop the teaching and the learning of English in the country. This is evidenced by the Ministry revising English curricula periodically, incorporating the use of technology in English classes, providing professional development training courses to English teachers, making English a required subject for all students from the fourth grade and providing intensive English language courses to freshman university students. Despite all these efforts, several researchers (e.g. Ahmad, 2011; Al-Zubeiry, 2012; Khan, 2011; Mahib ur Rahman & Alhaisoni, 2013) maintain that the performance of the majority of Saudi students in the four skills of listening, speaking, reading and writing does not meet the expectations, and in fact, is below average. As an English teacher and researcher, this issue stimulated my curiosity to explore the reasons that prevented the students from achieving a good command of the English language despite the fact that all facilities were provided to them. Subsequently, I started to carry out a series of informal discussions with my students about the major challenges they had been facing with English learning. The students began by talking about how they preferred to learn the language (i.e. their learning styles) without having a clear idea of the different types of learning styles. I also observed that they seemed to vary considerably in the ways they preferred to receive and interpret new information. Some appeared to be more receptive to visual modes of presentation, such as

pictures and charts, while others preferred oral or written explanations. In addition, some students expressed a preference for carrying out activities in a group of classmates, while others seemed to work better individually. There were yet other students who felt more comfortable and willing in comparison to their peers in tolerating new and conflicting information without being overwhelmed by their ambiguity.

As a teacher who was concerned about meeting my students' needs and interests and helping them reach their fullest potential, I was determined to explore the learning styles that the students preferred to use when learning English (especially since such research in the Saudi context is surprisingly scarce, as will be discussed in Chapter 2) and to raise the awareness of English teachers, educators and policy makers about this important aspect of language learning so that appropriate actions could be taken to cater for the students' differing styles. Consequently, this study attempts to investigate the learning styles that appeared to dominate the students' concerns in the discussions, which could possibly be grouped into: perceptual learning styles (visual, aural, read/write and kinaesthetic), peer collaboration and TA.

As Cornett (1983) theorises, people are born with particular predispositions towards certain learning styles. These styles are subject to the influence of culture and individual experiences and hence, give general directions to learning behaviour. Often, successful language learners have multiple learning styles and experienced learners possess alternative ways of learning (Reid, 1998). Researchers (e.g. Duff, 2004; Dunn & Dunn, 1979; Ely, 1995; Fleming & Mills, 1992; Kinsella & Sherak, 1998; Kolb & Kolb, 2005; Reid, 1984) have proposed several learning style classifications, most of which suggest that learners favour different modes of acquiring knowledge or vary in their preferences for certain social or environmental factors.

Moreover, the growing emphasis on student-centred approaches to learning has promoted a corresponding interest in the affective dimension of the foreign language (FL) learner. In fact, scholars have been concerned with identifying the reasons why some students feel more anxious, less motivated and less self-efficacious in FL modules than in other subjects. They have also been concerned with creating a learning environment that contributes to lowering students' anxiety and fostering their motivation and self-efficacy. As Oxford (1990) insightfully points out, "the affective side of the learner is probably one of the very biggest influences on language learning success or failure. Good language learners are often those who know how to control their emotions and attitudes about learning" (p. 140).

In the case of my students, they seemed to be aware of the challenges that learning a FL entailed, and it appeared that the main obstacles that some of them were facing when learning English could possibly be categorised into three affective factors: anxiety, motivation and self-efficacy. Firstly, a few students complained that feeling anxious inhibited them from using English to communicate and interact with others, and they thought that that had a negative impact on the development of their oral skills. They also seemed apprehensive about their English tests and were afraid of failing the module. Concerning the students' motivation, I experienced that first-hand in my work and found it a real and pressing problem, as a few students were inattentive, put little effort into learning English or had no idea what goals they were working towards. In contrast, those who were motivated to learn the language seemed to be more active in class and more content with their learning experience. Last but not least, the students who had a poor sense of self-efficacy (i.e. those who were not confident about their ability to perform certain learning tasks) were more self-critical and exerted less effort towards learning English than those with higher self-efficacy levels. Consequently, the students' concerns about the impact of the above affective factors (anxiety, motivation and

self-efficacy) on their language learning stimulated my interest in exploring the complex nature of these factors, their types, sources and influences on the language learning process. The learning styles and affective factors mentioned above will be discussed in great detail when I review the literature in Chapters 2 and 3.

In the following sections, I present some background information about the status of the English language in Saudi Arabia and its increased prominence in the Saudi educational system. This is followed by a discussion of the purpose of the study and its research questions. The significance of the study is then presented along with the challenges that have been encountered whilst carrying out this research. Finally, there is an outline of the structure of the thesis with a brief overview of the contents of each chapter.

1.2 The Saudi education system

Compulsory education in Saudi Arabia begins at age six and follows a 6-3-3 system. Male and female students go to separate schools. They first attend six years of primary school, followed by three years of intermediate school and another three years of secondary school. At the beginning of the second year of their secondary education, students can choose either a humanities or a science track. Boys have a third option, which is attending vocational school to be trained for certain jobs. To enter a university, students need to earn acceptable scores on a series of admission tests, including an English proficiency test.

It should be pointed out that English is the only FL taught in Saudi public schools. Additionally, several universities in Saudi Arabia have recently required students to attend a foundation year before they can join an academic discipline. The purpose of the foundation year is to provide students with an intensive English language program along with the knowledge base they need for their undergraduate academic career.

English plays a substantial role in Saudi Arabia's educational, economic, industrial and technological growth. The majority of Saudis have favourable attitudes towards English and consider it essential in several aspects of life, such as securing a good job, travelling abroad and communicating with foreigners (Aldosari, 2014; Al-Sharief, 2013; Elsheikh, Babiker & Abu Alhassan, 2014; Javid, Al-Asmari & Farooq, 2012). Yet in practice, students' English language performance is generally inadequate and unsatisfactory (Ahmad, 2011; Al-Zubeiry, 2012; Khan, 2011; Mahib ur Rahman & Alhaisoni, 2013). This could be attributed to several factors. As English is primarily a FL in Saudi Arabia, this circumstance does not provide students with sufficient opportunities to practice the language in real life situations. According to Oxford and Shearin (1994), a FL is "one that is learned in a place where the language is not typically used as the medium of ordinary communication .... Foreign language learners are surrounded by their own native language and have to go out of their way to find stimulation and input in the target language" (p. 14). On the other hand, a second language (L2) is "one that is learned in a location where that language is typically used as the main vehicle of everyday communication for most people .... The learner of a second language is surrounded by stimulation, both visual and auditory, in the target language and thus has many motivational and instrumental advantages" (Oxford & Shearin, 1994, p. 14). Backer and MacIntyre (2003) also maintain that:

> Foreign language learners are at a disadvantage because they are surrounded by their own native language and must search for stimulation in the target language. The foreign language students typically receive input from the target language only in the classroom setting and lack the opportunities that a second language learner would have to practice the target language on a daily basis. (p. 67)

Since in Saudi Arabia, English is most frequently used in academic contexts, a large number of learners do not get enough opportunities to use the language in real-life situations outside the classroom. Hence, it would be interesting to examine the extent to which this issue could

6

influence the learning style preferences of the learners and the affective factors influencing them.

1.3 Purpose of the study and research questions

As pointed out in Section 1.1 above, learning styles and affective factors seem to be among the most prominent variables that have a significant impact on performance in learning English. Previous studies have revealed that mismatches can occur between learners' preferred styles of learning and their teachers' teaching styles, thereby having a negative impact on the learning process and students' attitudes (Ehrman, 1996; Peacock, 2001; Tuan, 2011). Similarly, previous research has warned that when students experience negative feelings, such as anxiety, lack of motivation or low self-efficacy, they are likely to struggle and fail (Dörnyei, 2003a; Horwitz, 1991). In order to empower learners and engage them in language learning, the present study aims to investigate their learning style preferences as well as the affective factors influencing their learning. The ultimate goal is to provide new insight into these individual differences and promote awareness of the necessity of accommodating them in the language classroom.

Researchers (e.g. Al-Tamimi & Shuib, 2009; Alkhatnai, 2011; Almutairi, 2007; Castro & Peck, 2005; Egel, 2009; Joy & Kolb, 2009; Naqeeb & Awad, 2011; Peacock, 2001; Wong & Nunan, 2011; Zhang & Evans, 2013) have conducted learning style studies with such variables as learning strategies, teaching styles, gender, age and achievement. Similarly, previous research on affective factors (e.g. Andrade & Williams, 2009; Elsheikh et al., 2014; Ezzi, 2012; Hashemi, 2011; Javid et al., 2012; Kormos & Csizér, 2008; Liu & Ni, 2015; Mehrpour & Vojdani, 2012; Tilfarlioğlu & Cinkara, 2009; Wu, 2010; Yan & Horwitz, 2008) has focused on the assessment of these variables in several educational settings, the

relationship between affective factors and success in language learning and the links between certain demographic characteristics and affective factors. However, to the best of my knowledge, no research has examined the interaction between six major learning styles and affective factors and the relationship between of each of them and English language proficiency and performance. That is probably because correlating a number of different variables is challenging and usually beyond the scope of small research studies (see Section 1.4 below for further details on this point).

In addition, the above variables may vary in different contexts and among different populations (see e.g. Aldosari, 2014; Alkhatnai, 2011; Al-Saraj, 2013; Aqel & Mahmoud, 2006; Chu & Nakamura, 2010; Li, 2012; Pan, Zang & Wu, 2010). The current study therefore, aims to investigate the experiences of Saudi learners of English with learning styles and affective factors and to explore the possible links between these variables and their relationships to English language proficiency and performance. In order to provide a clear picture of the situation, this study integrates quantitative and qualitative approaches. I have administered three questionnaires to collect information on the students' demographic characteristics, learning styles and affective factors. I have also conducted semi-structured interviews with selected participants to interpret and elaborate on the questionnaire findings.

During my literature review, I have examined several instruments developed for the assessment of learning styles and affective factors in language learning and have noted that previous studies (e.g. Cassidy, 2004; Coffield, Moseley, Hall & Ecclestone, 2004; De Bello, 1990; Rayner & Riding, 1997; Riding & Cheema, 1991) found problems with the designs of some instruments (e.g. Reid's Perceptual Learning Styles Preference Questionnaire, PLSPQ). Yet, others were found to have poor internal consistency and test-retest reliability (e.g. Kolb's Learning Style Inventory, LSA) and still others were not developed for language learning

purposes (e.g. Felder-Soloman's Index of Learning Styles, ILS). In fact, Coffield and his associates (2004) have cautioned that "some of the leading developers of learning style instruments have themselves conducted the research into the psychometric properties of their own tests" (2004, p. 137). The researchers argue that in order to make financial profits, those developers strongly promote the use of their own instruments to assess learning styles. Moreover, the contents of a few well-known measures of affective factors, such as Horwitz et al.'s (1986) Foreign Language Classroom Anxiety Scale (FLCAS) and Gardner and Lambert's (1972) socio-educational model were criticised by several scholars in the field (e.g. Dörnyei, 2005; Norton, 2013; Sparks & Ganschow, 2007). As a result, I have felt an urgent need to design my own survey questionnaires which I believe, are more appropriate for the purpose and population of my study.

In order to explore the various relationships between learning styles and affective factors, which represents the main objective of this study and its unique contribution to the literature, the two groups of variables were investigated separately and the links between them were subsequently examined. Accordingly, three research questions were addressed in this study:

Q1. What learning styles do Saudi learners of English prefer to use?

Q1a. Do these learning style preferences differ according to the learners' demographic characteristics? (In this study, 12 demographic characteristics are examined).

Q1b. What elements in the classroom influence the learners' preferences for these learning styles?

Q1c. What is the relationship between the learning style preferences of the learners and their English language proficiency and performance?

Q2. What affective factors influence Saudi learners of English?

Q2a. Do these factors differ according to the learners' demographic characteristics (see Q1a above)?

Q2b. What elements in the classroom influence the learners' experiences with these affective factors?

Q2c. What is the relationship between the affective factors that influence the learners and their English language proficiency and performance?

Q3. What is the relationship between the learning style preferences of Saudi learners of English and the affective factors influencing them?

1.4 Significance of the study

An examination of the literature on individual differences in language learning reveals that amongst other things, awareness of learning styles and affective factors can empower both learners and instructors and make the learning environment productive and satisfying (Castro & Peck, 2005; Dewaele, 2013; Dörnyei, 2005; Oxford, 1992; Ushioda, 2008; Wong & Nunan, 2011; Yan & Horwitz, 2008). As the present study seeks to investigate three learning styles (perceptual styles, peer collaboration and TA) and three affective factors (anxiety, motivation and self-efficacy) that influence the students' learning of English, its significance is considered multi-faceted. It is an attempt to make an original contribution to the current state of knowledge on learning styles and affective factors, and it could have significant implications for theory, research and practice.

The present study uses a large sample size of Saudi learners of English (see Section 4.5.1 in Chapter 4) to build upon previous studies in the field and provide new insights into six major learning styles and affective factors, with the ultimate aim of providing a multi-dimensional picture of the students' language learning experiences. Since this type of

investigation has not been undertaken in Saudi Arabia, the findings of this study fill the gap in the literature and contribute to the development of existing theories on learning styles, anxiety, motivation and self-efficacy in the EFL learning field.

In addition, although several instruments have been developed to assess learning styles and affective factors in different language learning settings, very few valid and reliable instruments exist in the Arab world. Consequently, designing six detailed learning styles and affective factors scales makes this study particularly significant. Although the scales are quantitative measures, they examine a wide range of sources and consequences of the six variables in relation to English language learning. Additionally, they have been found to be both valid and reliable (see Section 4.4.2 in Chapter 4), are written in the participants' native language (Arabic) and take into consideration the distinct context of learning English at the tertiary level in Saudi Arabia. Indeed, these instruments can be used in future research in the rest of the Arab world, which shares numerous features of the education system used in Saudi Arabia. Moreover, the use of in-depth, semi-structured interviews serves to provide detailed information about the variables investigated in this study. The interviews provide a reasonable number of Saudi university students with the opportunity to voice their thoughts and experiences with learning styles and the affective factors that influence their language learning. Thus, unlike most previous research which was generally survey-based and rarely employed qualitative measures to address the individual needs of language learners (see my review of previous studies in Chapters 2 and 3), the present study gives equal emphasis to the quantitative and qualitative approaches and thus, provides a more comprehensive account of the participants' learning experiences.

In terms of research, this is the first study, to my knowledge, that investigates TA and self-efficacy beliefs among Saudi learners of English. Since these issues are particularly

important for language learning (see e.g. Kamran & Maftoon, 2012; Naseri & Ghabanchi, 2014; Nezhad, Atarodi & Khalili, 2013; Magogwe, 2006; Sa'dabadi, 2014; Tilfarlioglu & Ciftci, 2011; Vahedi & Fatemi, 2016), the current study aims to fill the gap in the literature by exploring them thoroughly from different angles (e.g. the factors that influence them and their effects on language learning) in order to identify them appropriately and obtain a deep understanding of their different aspects.

Additionally, the current study is unique in that it offers new insights into the interconnections between six major learning styles and affective factors. Similar studies that I have recently come across limited their investigation to examining a single relationship between one learning style and one affective factor (e.g. Chang, 2010; Dewaele & IP, 2013; Hashemi, 2011; Hsu, 2007; Kim & Kim, 2011; Suwantarathip & Wichadee, 2010). This is probably due to the perceived challenges of correlating a number of different variables, which is often beyond the scope of small research studies. Those studies were also limited in their dependence on quantitative data collection and analysis. Hence, my research has a wider theoretical scope and greater methodological rigor than previous studies in the field.

Moreover, my study can be significant in the sense that a large number of the learners' demographic characteristics have been identified in order to explore possible links between them and the learning styles and affective factors influencing learning. The ultimate goal is to present a vivid picture of the learning experiences of the participants. To my knowledge, no similar detailed investigation into these interrelationships has been conducted to date.

Pedagogically, this study can be beneficial to English language education in Saudi Arabia and beyond. Myers (1992) points out that when students understand how they learn best, they are likely to become more autonomous and responsible learners. Additionally, Carrell, Prince and Astika (1996) maintain that language teachers should recognise their

students' individual differences and apply different techniques to cater for their needs. Researchers also assert that special attention should be paid when designing and implementing instructional materials. Oxford (1992), for example, argues that "if language activities are perceived as irrelevant or uninteresting, or if they conflict with the learner's particular style, the learner might tune out or lower the level of involvement" (p. 33). More recently, Pallapu (2007) points out that "knowing the learning styles of the learners aids the designer or instructor to develop a curriculum to address various needs of the learners in a group or class" (p. 34).

As the Ministry of Education in Saudi Arabia fully realises the importance of learning English and strives to enhance the quality of education and to encourage learners to become more involved in learning, it is hoped that the findings of this study will provide a better understanding of how learning styles and affective factors play a vital role in learning English at the tertiary level. They can also offer meaningful suggestions on how to cater for different learning styles in the same classroom and how to help students recognise and overcome the affective challenges they face in the learning process.

Therefore, teachers can gain insight from the current study in relation to adapting their teaching styles and using a variety of activities to cater for the different learning styles of their students. Likewise, the results of this study can provide teachers with empirical evidence regarding the demographic and classroom factors that can influence anxiety, motivation and self-efficacy and their impact on language learning. Understanding how learners vary in their affective needs can help teachers select appropriate materials, modify their teaching techniques and shape the learning environment to best account for student diversity.

1.5 Challenges encountered in the study

The major challenges encountered during this research can be summarised as follows:

1. As previously stated, no previous study exists on TA and self-efficacy beliefs of Saudi learners of English. Likewise, there is a lack of comparative studies linking a number of different language learning styles and affective factors.

2. Since this study attempts to use a number of theoretical frameworks to account for the complex interplay of different factors (e.g. personal, psychological and educational), analysing and interpreting the data is, to some extent, time-consuming.

3. No appropriate assessment tools of learning styles and affective factors exist in the Arab world.

As a teacher and researcher who believes in the importance of this field of research, I have addressed the above obstacles with enthusiasm and persistence. Since the existing theoretical frameworks for the above phenomena are limited, the present study attempts to investigate them by using the inductive approach, which involves analysing the data and using the findings to explore aspects of the phenomena. Moreover, in order to best understand the topics listed above, the "concurrent triangulation design" is adopted, which involves separate collection and analysis of quantitative and qualitative data (Creswell, 2003, p. 217). The results of the two phases are then integrated into a single overall interpretation. To compensate for the scarcity of suitable learning styles and affective factors assessment tools in the Arab world, I have developed my own survey questionnaires in this study, based on an extensive review of the literature together with prolonged discussions with my English students. I have also adopted and adapted a few items from well-known scales, as will be discussed in Chapter 4.

1.6 Structure of the thesis

This thesis is organised in a series of eight chapters as follows:

Chapter 1: Introduction

This chapter provides an overview of the study and a detailed description of the education

system used in Saudi Arabia. It also discusses the purpose of the study and outlines the key

research questions it investigates. The chapter then highlights the significance of the study

and points out the challenges encountered when conducting it.

Chapter 2: Language Learning Styles

This chapter reviews selected literature that is relevant to this study. It provides an overview

of learning styles and the key role they play in language learning. It then presents several

definitions of learning styles and highlights their significance. Next, the reasons behind

designing survey questionnaires for use in this study are outlined. After that, there is a

discussion of three major learning style categories that the present study investigates:

perceptual learning styles, peer collaboration and TA. The chapter then reviews recent studies

on learning styles in EFL learning and evaluates their relevance to the present study and their

points of strength and weakness. Lastly, a description of the learning style profile of Saudi

learners of English is presented.

Chapter 3: Affective Factors in Language Learning

This chapter reviews the literature on three important affective factors influencing English

language learning: anxiety, motivation and self-efficacy. It also examines prominent

definitions and types of each of these factors and the major instruments used to assess them.

The theoretical frameworks supporting this study are then discussed. Thereafter, the chapter

reviews previous studies on affective factors in EFL learning and points out their relevance to

the present study. Finally, a description of the affective factors profile of Saudi learners of English is provided.

Chapter 4: Methodology

This chapter describes the research design of the present study and provides a rationale for using a mixed methods approach. The pilot study is then discussed together with the validity and reliability of the instruments used in this study. Next, there is a detailed description of these instruments, which are: a demographic information questionnaire, two self-developed questionnaires that assess language learning styles and affective factors and in-depth, semi-structured interviews. The chapter also provides information on the target population of the present study, the procedure for selecting the sample and the ethical issues taken into consideration when conducting the study. Finally, the procedures for collecting data for the main study and the methods used in analysing the data are described.

Chapters 5–7: Results and Discussion

These chapters provide detailed analyses of the findings of each of the three research questions posed in this study. They combine quantitative findings from three questionnaires and qualitative findings from semi-structured interviews with selected participants. Each chapter attempts to draw connections between the quantitative and qualitative results and to explain how they corroborate each other.

Chapter 8: Conclusions and Recommendations

This chapter draws a number of conclusions about the findings of the three research questions discussed in Chapters 5–7. It also considers the implications of the findings for theory and practice. This is followed by an outline of a few limitations of the present study. Finally, recommendations for future research in the field are provided.

Chapter 2: Language Learning Styles

2.1 Introduction

This chapter reviews previous literature that is relevant to this study. It begins by providing an overview of learning styles and the significant role they play in the language learning process. It then presents several definitions of learning styles and highlights their significance and shared perspectives. After that, the chapter investigates the debate about matching or mismatching learning styles and teaching styles. It also explains why learning style research has been heavily criticised over the years. Next, the reasons behind developing specific scales in this study are explained. The chapter then proceeds to a discussion of three major learning style categories that the present study investigates: perceptual learning styles, peer collaboration and TA. In the subsequent sections, there is a detailed discussion of each of these categories along with their significant definitions, influential models and a review of relevant empirical research. To keep up with the rapid changes in the field, the review focuses on research that took place within the last ten years. To facilitate the comparison of the findings of different studies, the review includes only those studies that were carried out with regular university students learning EFL. Thus, studies undertaken in other educational contexts (e.g. schools and distance learning courses) or in countries where English is an L2 (e.g. India, Malaysia and Hong Kong) are excluded from the review.

2.2 Overview of learning styles

Over the past fifty years, individual differences and the various ways through which learners acquire and process new information have attracted considerable attention in numerous fields, such as first and second language acquisition, education and psychology. It

has been noted that individuals differ in their preferred ways of perceiving, processing and acquiring information (see e.g. Cassidy, 2004; Fleming, 2001; Kinsella, 1995; Oxford, 2003; Peacock, 2001; Reid, 1995; Sarasin, 1999). According to Kinsella (1995), learning style "appears to be influenced by both nature and nurture; it is a biological and developmental set of characteristics" (p. 171). This suggests that factors such as up-bringing experiences and the environment play a significant role in shaping the individuals' learning styles.

It should be pointed out that although language learning styles have frequently been researched in Europe, North America and East Asia, similar studies in the Saudi context have been scarce. This context deserves special attention given the distinctive characteristics of the Saudi culture, as pointed out in the previous chapter. According to Oxford (1996), "language learning is fully situated within a given cultural context" (p. x). Brickman and Nuzzo (1999) also agree that educators should become aware of the impact of culture on students' learning styles.

Significantly, learning style research does not only identify how individuals prefer to learn, but it also assists teachers and educators to adjust to the individuality of their learners in order to create an effective learning environment. This could have such positive impacts as improving attitudes towards the learning process and enhancing intellectual skills and performance (Irvine & York, 1995). The current study therefore, has arisen out of a fundamental belief that exploring the different learning styles that exist in Saudi EFL classes can provide language instructors and educators with a useful means of identifying diversity in the language classroom and creating a stimulating environment for the learners. That was especially interesting given the unique status of English in Saudi Arabia as the only FL officially taught in the country, as pointed out in Section 1.2 in the previous chapter.

2.3 Definitions of learning styles

Learning style has been defined in several different ways, and there has been little agreement on its precise nature. Ehrman, Leaver and Oxford (2003) warn that terms such as *learning styles*, *cognitive styles* and *personality types* have different meanings but are often used interchangeably, causing confusion regarding their distinction. Healey, Kneale and Bradbeer (2005) also report that some studies "refer to learning styles, others to learning approach and learning orientation. Often, the same construct is described in different terms and the same term can be used to refer to quite different constructs" (p. 31).

Several scholars (e.g. Felder & Spurlin, 2005; Gilbert & Swanier, 2008; Psaltou-Joycey & Kantaridou, 2011; Shaw, 2012; Xu, 2011) agree that one of the most prominent and frequently cited definitions in the literature is the one proposed by Keefe (1979), which describes learning styles as "characteristic cognitive, affective, and psychological behaviours that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (p. 2). Kinsella (1995), one of the pioneers in the field of learning styles, describes learning style as "an individual's natural, habitual, and preferred way of absorbing, processing, and retaining new information and skills" (p. 171). A similar definition of learning style has been provided by Fleming (2001), who views learning styles as "an individual's characteristics and preferred ways of gathering, organizing, and thinking about information" (p. 1). In fact, from my extensive review of the literature, I have realised that although scholars focus on different dimensions of learning styles (e.g. psychological, social and environmental), they often maintain Keefe's original perspective, which views learning styles as learner's preferred ways of receiving, processing and retaining new information (see e.g. Cassidy, 2004; De Bello, 1990; Dunn, Dunn & Perrin, 1994; Felder, 1993; Fleming,

2001; Kinsella, 1995; Oxford, 2003; Oxford, Ehrman & Lavine, 1991; Peacock, 2001; Reid, 1995; Sarasin, 1999).

The above definitions are especially significant to this study, as they provide shape and direction to the present research. I view learning styles as preferences which individual learners exhibit when responding to new information in the learning environment. Additionally, there seems to be a dynamic interplay between those learning styles on the one hand and the learning environment and what learners bring to it on the other hand. This impacts their learning experiences in numerous ways, as will be explained in Chapter 5.

As pointed out above, the term *learning style* has occasionally been used synonymously with *cognitive style.* Cassidy (2004) clarifies the distinction between these two terms by explaining that "cognitive style is an individual's typical or habitual mode of problem solving, thinking, perceiving and remembering, while the term learning style is adopted to reflect a concern with the application of cognitive style in a learning situation." (pp. 420–421). Cuthbert (2005) also asserts that cognitive styles involve "a fusion of particular methods of thinking and of personality" (p. 236).

Moreover, learning styles have often been confused with learning strategies. Oxford (2001) explains the difference between the two concepts by pointing out that learning styles refer to "general approaches" to language learning, whereas learning strategies describe "specific actions, behaviors, steps, or techniques" used to carry out language tasks in specific learning situations (pp. 44–45). Oxford (2003) further explains that "when the learner consciously chooses strategies that fit his or her learning style and the L2 task at hand, these strategies become a useful toolkit for active, conscious, and purposeful self-regulation of learning." Nunan (2010) also points out that learning styles differ from learning strategies in

that the former are unintentional or spontaneous and characterises the individual, whereas the latter involve specific actions employed by learners in order to facilitate their learning.

Last but not least, it should be pointed out that learning styles are not the same as multiple intelligences. Gardner (1983) defines intelligence as "the ability to solve problems or to create fashion products that are valued within one or more cultural settings" (p. 81). He challenges the traditional view of intelligence that is limited to linguistic intelligence and mathematical intelligence by proposing the existence of several or multiple intelligences: spatial intelligence, musical intelligence, bodily-kinaesthetic intelligence, interpersonal intelligence, intrapersonal intelligence and naturalist intelligence. Gardner (1983) argues that all individuals possess these types of intelligences but in different degrees and combinations. These intelligences "are used concurrently and typically complement each other as individuals develop skills and solve problems" (Manner, 2001, p. 392).

Both learning styles and multiple intelligences are student-centred learning theories that call for changes in traditional teaching methods in order to accommodate individual differences among learners in the same classroom and create an optimal learning environment. Yet, Silver, Strong and Perini (1997) explain the difference between them by pointing out that learning style theory is interested in the contents and products of learning, while multiple intelligence theory focuses on the differences in the learning process. Gardner (1999) further adds that "the concept of style designates a general approach that an individual can apply equally to an indefinite range of content. In contrast, an intelligence is a capacity, with its component computational processes, that is geared to a specific content in the world" (p. 83).

2.4 Important considerations about learning styles

In this section, I present a few important issues that usually feature when the concept of learning style is discussed. Three of the more salient points, which will be demonstrated again in the current research, include:

1. Although learning styles are generally presented as opposites, they are not dichotomous.

The opposite pairs (e.g. visual vs. aural, tolerance vs. intolerance of ambiguity) "operate on a continuum or on multiple, intersecting continua" (Oxford, 2003, p. 3). That is to say, one learning style does not exclude the existence of another, and learners may exhibit a variety of learning style preferences. For instance, some learners may prefer visual presentations of information more than verbal explanations, others may learn best through hands-on activities and still others may be equally comfortable with both group and individual modes of learning. Even within the same individual, learning style is not a steady phenomenon which functions in the same manner all the time (Ehrman, 1996).

Kolb (1981), another pioneer in the learning style field, explains that "learning styles represent preferences for one mode of adaptation over the others; but these preferences do not operate to the exclusion of other adaptive modes and will vary from time to time and situation to situation. This idea of variability seems essential, since change and adaptation to environmental circumstances are central to any concept of learning" (p. 290). More recently, Brown (2007) emphasises this point by arguing that as learning tasks vary, some individuals may prefer to draw on visual or verbal information, whereas others may be both highly field dependent and highly field independent depending on the context. In other words, it is possible for learners to adjust their learning styles to the requirements of the particular subject or task at hand (Entwistle & Ramsden, 1983). Therefore, one of the best ways to view

learning styles could be to consider them as "comfort zones", reflecting the modes through which individuals learn best (Gibson & Chandler, 1988, p. 258).

2. Learning styles should be regarded as typical or habitual approaches to learning rather than fixed behaviours that are unaffected by the learning task, situation or environment (Cuthbert, 2005).

Preferences regarding learning styles denote individual choices and develop with the learner subconsciously (Keefe, 1987). Fielding (1994), also asserts that "learning styles are flexible structures, not immutable personality traits" (p. 403). People are born with particular preferences towards certain learning styles; however, personal development and learning experiences can have a great influence on those preferences (Healey et al., 2005).

These concepts of instability and change are of particular significance to the present study. It seems that students come to their English classes with a set of learning style preferences that according to Reiff (1992), impact how they learn, how they interact with each other and how their instructors present information. Awareness of these preferences is the key to creating a flexible educational environment for all learners.

3. There is no one right way to learn a FL.

Successful learners perceive and process information in various manners. Accordingly, different learning styles should be viewed as "value-neutral" (MacKeracher, 2004, p. 80) and should not be judged as better or worse. In other words, "one learning style is neither preferable nor inferior to another, but is simply different, with different characteristic strengths and weaknesses" (Felder & Brent, 2005, p. 58). What contributes to learning success is the appropriateness of particular styles to certain learning contexts and tasks.

By the same token, learning style is not a reflection of one's learning ability. Riding (1997) cautions that the terms *learning style* and *learning ability* are sometimes confused with

each other. The researcher explained that the two concepts are independent of each other and that certain tasks might appear easier to some learners than others merely because those tasks better suit those learners' preferred styles of learning. Unlike abilities, styles are adaptable in some learning contexts and for some tasks (Snowman & McCown, 2011). What causes such confusion might be that some educational contexts value certain learning styles more than others and thus, mistakenly perceive the less-appreciated ones as learning disabilities (MacKeracher, 2004). In fact, as Hickson and Baltimore (1996) point out, the concept of learning style pays attention to learners' strengths rather than their deficits.

2.5 The debate about learning styles and teaching styles: Matching, mismatching or stretching?

Pashler, McDaniel, Rohrer and Bjork (2009) point out that the concept of learning style implies that learners vary with regard to the ways of learning that are most efficient for them. The learning process could, therefore, be facilitated when the environment allows for the use of a wide range of learning styles (Gilbert & Swanier, 2008). According to Burke and Doolan (2008), "when people *use*, rather than ignore their natural styles, they learn more, more quickly, and with less frustration than they do when trying to use someone else's style" (p. 206). In fact, some studies (e.g. Gregory & Chapman, 2002) have shown that when individuals who require additional support are taught through their preferred learning styles, their academic performance is enhanced. Hence, classroom instruction should be prepared carefully in order to provide ample opportunities for learners to acquire information through their preferred learning styles. Moreover, Claxton and Murrell (1987) eloquently explain that:

> Information about style can help faculty become more sensitive to the differences students bring to the classroom. It can also serve as a guide in designing learning experiences that match or mismatch students' styles, depending on the teacher's purpose. Matching is particularly appropriate in working with poorly prepared students

and with new college students, as the most attrition occurs in those situations. Some studies show that identifying a student's style and then providing instruction consistent with that style contribute to more effective learning. (p. 5)

It should be pointed out that the idea of *style-stretching*, proposed by Oxford and Lavine (1991), has received considerable approval in the language learning field. The researchers suggested that in order to attain certain educational objectives, individuals may need to stretch their learning styles by implementing new, less comfortable ones. In some situations, mismatching could be acceptable in order to encourage students to try out new approaches of learning that could help develop their capacities as learners and their learning experiences. It should however, be pointed out that mismatching should be implemented carefully especially with low achievers as they may become intimidated by unfamiliar learning modes.

According to Felder, Felder and Dietz (2002), "understanding learning style differences is thus an important step in designing balanced instruction that is effective for all students" (p. 3). Instruction that addresses a wide range of learning style preferences has been found to have a better impact than conventional teaching, which takes into consideration only a limited number of styles. It is therefore, concluded that rather than attempting to teach learners in complete agreement with their preferred styles, instructors are encouraged to employ a variety of teaching styles. As Felder (n.d.) convincingly asserts:

> If the balance is achieved, all students will be taught partly in a manner they prefer, which leads to an increased comfort level and willingness to learn, and partly in a less preferred manner, which provides practice and feedback in ways of thinking and solving problems which they may not initially be comfortable with but which they will have to use to be fully effective professionals.

2.6 Criticism of learning style research

As the literature on learning style has raised a number of substantial and at times, controversial issues over the past fifty years, it is not surprising that this concept is not widely accepted by some scholars in the field. For example, Reynolds (1997, cited in Cuthbert, 2005)

maintains that the use of learning styles involves "labelling and stereotyping whilst ignoring the personal historical contexts that led up to the learning, and the context in which the learning will take place" (pp. 242–243). Moreover, De Vita (2001) views learning style research as constituting "an extremely rich but fragmented theoretical landscape" (p. 166). In the same line, Desmedt and Valcke (2004) argue that scholars have been "often daunted by the multitude of definitions, models and instruments" (p. 445).

One of the most influential critical reviews of learning style research was published by Coffield et al. (2004) and it identified 71 learning style models and examined 13 major ones. The results of the review have been widely discussed in a significant number of publications in the field (e.g. Avis, Fisher & Thompson, 2014; Cohen, 2014; Dörnyei & Ryan, 2015; McDonough, Shaw & Masuhara, 2012; Merriam, Caffarella & Baumgartner, 2012). Coffield et al. (2004, p. 55) claim that the field of learning styles is distorted with "labelling, vested interests and overblown claims", as follows:

1. Identifying a student's learning style implies that the teacher regards him/her as "a certain type of learner".

2. The psychometric properties of learning style instruments have been mainly assessed by their own developers, who are also using those assessment tools for commercial purposes. As a result, the researchers warn that research on learning styles may be influenced by "overblown claims of some of the developers and their enthusiastic devotees" (Coffield et al., 2004, p. 55).

3. Coffield et al. (2004) caution that educators may not pay enough attention to the crucial interplay between learning styles and pedagogy. They argue that learning styles are commonly used for "teaching' purposes as opposed to an enhancement of pedagogy" (p. 129).

26

Nonetheless, it should be noted that Coffield et al. (2004) are not completely dismissive of learning style research. Rather, they admit the major benefits of learning styles in education by arguing that those "who dismiss all the practical consequences of learning styles research as either trivial or 'old hat' are missing opportunities for professional growth and institutional change" (p. 43).

Learning styles have also come under fierce attack from Sparks (2006), in responding to an article published by Castro and Peck (2005). Sparks claims that "the notions that focusing on students' styles will affect their success in foreign language learning and that knowing students' preferred learning styles is relevant to instruction in foreign language classrooms are unfounded" (pp. 521–522). In response to the various criticisms of learning style research, Felder and Brent (2005) wisely explain that:

> The simple mention of the term arouses strong emotional reactions in many members of the academic community (notably but not exclusively the psychologists), who argue that learning style models have no sound theoretical basis and that the instruments used to assess learning styles have not been appropriately validated. On the other hand, the studies summarized in the sections that follow paint a clear and consistent picture of learning style differences and their effects on student performance and attitudes. (pp. 58–59)

More recently, Felder (2010) asserts that:

> Every two years or so, some academic psychologists conduct a literature review and conclude that no research supports the use of learning styles in teaching, and journal reviewers and editors treat this conclusion as a new revelation that once and for all debunks learning styles. These pronouncements have never had the slightest effect on the world academic community's extensive and continually growing use of learning styles models and assessment instruments, but that has never deterred others from repeating the exercise two years later. (p. 1)

In fact, advocates of learning style research argue that if students understand the learning styles that suit them (i.e. how they learn best), they can make the necessary adjustments to maximise their learning (Smith & Ragan, 1999). According to Tripp and Moore (2007), "Dunn and Dunn (1992) suggest that research on learning styles provides

direction for either how to teach individuals through their styles, patterns or how to teach them by capitalizing on their personal strengths …. Identifying learning styles and adapting lessons can motivate [and] encourage students to succeed and eliminate unfair labeling" (pp. 24–25).

Learning style models are thus, considered agreed upon means for identifying individual differences among learners; particularly, how they prefer to learn and how they can learn best (Scott, 2010). To sum up, despite the criticism of learning style research, there is sufficient evidence to warrant its merits, as a considerable amount of research has found a significant positive relationship between learning styles and success in language learning (e.g. Castro & Peck, 2005; Erton, 2010; Han, 2015; Kamran & Maftoon, 2012; Kim, 2008; Wong & Nunan, 2011; Zeinolabedini & Gholami, 2014). Hence, the present study aims not only to identify the learning style preferences of Saudi learners of English but also to examine whether or not those styles have significant associations with the learners' English language proficiency and performance.

2.7 Learning style instruments

Research in the area of learning styles has taken place for more than five decades and in that time, researchers have approached this concept from different perspectives and proposed a variety of methods to identify the style preferences of individual learners. A number of recent reports (e.g. Cassidy, 2004; Coffield et al., 2004; Hadfield, 2006; Smith, 2005) have provided comprehensive critical reviews of several learning style models and instruments. For example, as pointed out in the previous section, Coffield et al.'s (2004) report presents a detailed review of 13 renowned learning style scales together with an assessment of their construct validity, predictive validity, internal consistency and test-retest reliability. The

researchers conclude that "some of the best known and widely used instruments have such serious weaknesses (e.g. low reliability, poor validity and negligible impact on pedagogy) that we recommend that their use in research and in practice should be discontinued" (p. 55). Examples of the models that have been criticised for their low reliability are Dunn and Dunn's learning styles inventories, Gregorc's Style Delineator (GSD), Jackson's Learning Styles Profiler (LSP), Kolb's Learning Style Inventory (LSI) and Riding's Cognitive Styles Analysis (CSA). Instruments that have shown poor validity include Dunn and Dunn's learning styles inventories, Kolb's LSI and Myers-Briggs Type Indicator (MBTI). As a result, Coffield et al. (2004) conclude that "no consensus has been reached about the most effective instrument for measuring learning styles and no agreement about the most appropriate pedagogical interventions" (p. 55).

With regard to the present study, I have examined several learning style models that attempt to explain how learners prefer to perceive and process information and have found that they vary significantly in their focuses, depending on what each researcher is keen to explore (i.e. the research purpose and objectives). Consequently, it was necessary to develop specific scales for use in this study for the following reasons:

1. As mentioned above, the majority of learning style instruments lack the psychometric properties required to ensure that their use in FL learning contexts is appropriate and consequently, to provide useful pedagogical recommendations.

2. From my experience as an EFL teacher for seven years, it appears to me that some of the major individual differences among my students could possibly be grouped into three main categories:

a. The perceptual styles through which they most effectively perceive and process new information: visual, aural, read/write and kinaesthetic styles.

29

b. The social style that appeals to them when they carry out classroom tasks: individual/group work (peer collaboration).

c. The extent to which students are comfortable with uncertainty: tolerance/intolerance of ambiguity.

There is no doubt that other categories of learning styles (e.g. cognitive and environmental styles) exist in any learning situation and are worthy of investigation. However, it should be pointed out that my extensive observations of and prolonged discussions with a considerable number of Saudi learners of English seemed to identify the above three categories as particularly important to the students. The students pointed out that what mattered most to them were: the form in which new information was presented to them, the means through which classroom activities were carried out and the clarity of the presentation of new material. They considered other factors such as the surrounding environment secondary. Consequently, the current study arose from a need to validate these preliminary observations through the collection and analysis of empirical data. Since the learning styles examined in the present study belonged to different categories (perceptual, social and personality styles, respectively), the learning style profile presented in this study could enhance our understanding of the learning style preferences of Saudi students by providing a multifaceted view of them.

3. In order to account for the different demographic characteristics of the learners, the above learning styles were examined in relation to the participants' gender, age, track of study, previous education, English language proficiency, parents' education and several other characteristics.

4. It is also important to point out that the examination of language learning styles in the present study was influenced by the belief that learning styles are "flexibly stable" (Coffield

et al., 2004, p. 2). That is, although learners often express typical preferences for specific learning modes, these preferences are likely to develop and change throughout the learning process. Hence, it is possible to encourage learners to adjust those preferences in order to maximise their learning in less favoured environments.

In the following section, I discuss the learning style categories investigated in this study along with their significant definitions, influential models and relevant empirical research.

2.8 Learning style categories investigated in this study

2.8.1 Perceptual learning styles

As the name indicates, perceptual learning styles describe how individuals prefer to use their senses to acquire and process new information (Slater, Lujan & Di Carlo, 2007). According to Sims (2006), "most people retain a dominant and an auxiliary learning modality. We usually rely on those modes to process information at an unconscious level, but we may be consciously aware of which modes we prefer. We access through our senses, but generally favor one" (p. 45). Researchers (e.g. Armstrong, 2004; Drago & Wagner, 2004; Kinsella, 1995; Murphy, Gray, Straja & Bogert, 2004; Reid, 1995) have identified several types of perceptual learning styles. The three major categories that have frequently been used in learning style research are the following:

1. The visual learning style: individuals prefer to learn new information through sight. Visual aids, such as pictures and charts help them understand new material better than verbal explanations. Similarly, a graphic illustration may clarify an idea better than a talk about the same topic. Therefore, when listening to a talk, visual learners tend to create mental pictures of what it is being said.

2. The aural learning style: individuals prefer to learn new information through the oral-aural channel. They learn more effectively by listening to lectures and discussions. These learners also prefer to receive oral, rather than written, instructions and to discuss new material with their classmates to reinforce what they have learned.

3. The kinaesthetic learning style: learners learn best through whole-body movement and interaction with the surrounding environment. They prefer to use physical activities, such as going on field trips, dramatising and interviewing to learn new information.

Other perceptual learning styles that have been identified in the literature are the tactile and haptic styles. The former describes a preference for learning through touch and hands-on activities, while the latter encompasses both the kinaesthetic and tactile styles. Hence, haptic learners prefer to learn new information through both whole-body movement and touching objects.

Perceptual learning styles have been studied extensively in the EFL learning field (see e.g. Gilakjani, 2012; Kinsella, 1995; Li, 2012; Reid, 1987; Salehi & Bagheri, 2011; Seifoori & Zarei, 2011; Phantharakphong, 2012). Such studies have concluded that it is essential for instructors to become aware of individual differences in the same classroom and to employ a variety of teaching styles to cater for them.

2.8.1.1 Theoretical framework supporting this study

Fleming and Mills (1992), early pioneers in perceptual learning style research, have proposed the VARK model, which identifies individuals' preferred sensory modes of processing information. VARK stands for visual, aural, read/write and kinaesthetic learning styles. The researchers began with Stirling's (1987) VAK taxonomy (visual, aural and kinaesthetic), but they subsequently found that this classification was inadequate to explain

the intricate differences they observed among learners. Therefore, they expanded VAK to VARK, which further divided the visual mode into two categories: a preference for graphic or symbolic illustrations of information (i.e. the visual learning style) and a preference for textual demonstrations (i.e. reading and writing). Individuals with the latter preference learn best through reading texts. They also like to make lists, summarise new material and take notes of classroom lectures in order to facilitate their learning.

Thus, the VARK model identifies the following perceptual learning styles: visual (V), aural (A), read/write (R) and kinaesthetic (K). Individuals with no particular preference for any style over the others are considered multimodal (MM). Since VARK was more detailed than the majority of perceptual learning style models, in which no distinction was made between the visual and read/write styles, the present study adopted the VARK classification system to investigate the perceptual style preferences of Saudi learners of English. This model was found useful in interpreting the results of the present study, especially that reading and writing are indispensable for learning any FL and thus, require particular attention.

Critics of learning styles (e.g. Adey, 2007; Coffield et al., 2004; Smith, 2005) argue that the majority of their assessment tools lack validity and/or reliability. However, with regard to the VARK inventory, the possibility of selecting more than one response option for each of its items together with its unique layout makes it difficult to validate using common statistical procedures (VARK website). Nonetheless, the dimensions of the VARK inventory were studied by Leite, Svinicki and Shi (2010), and their findings lent support to its tenets. The researchers also found that all four subscales of this inventory had acceptable reliability (VARK website). Nonetheless, Fleming and Baume (2006) explain that VARK "is, technically, not a learning styles questionnaire, as it provides feedback only on one's preferred modes for communicating. These 'modal preferences for learning' are only a small

part of what most theorists would include in a complete package deserving to be called a learning style" (p. 4).

As discussed in Section 2.6 above, learning styles questionnaires have been criticised on the basis that obtaining information about individuals' preferred styles of learning does not enhance the learning process. In response to this, Svinicki (cited in Fleming & Baume, 2006) has eloquently defended the VARK inventory by pointing out that "its strength lies in its educational value for helping people think about their learning in multiple ways and giving them options they might not have considered" (p. 6). Thus, knowledge about learning styles helps individuals understand how they learn best so that they can reflect on their learning and plan for the following steps. Moreover, Fleming and Baume (2006) point out that "knowledge of, and acting on, one's modal preferences is an important condition for improving one's learning" (p. 4). Therefore, guided by the theoretical assumptions of the VARK model, this study aimed to examine the perceptual style preferences of Saudi learners of English and whether they think it would be beneficial for them to step outside their comfort zones and try different learning styles. However, since the VARK inventory did not address language-related issues, I developed the Perceptual Learning Styles Scale in the present study according to the VARK classification system and used my knowledge of the literature and discussions with my English students in developing the questionnaire items. That helped ensure that all items in the scale were pertinent to language learning situations. I also adopted and adapted a few items from existing and validated questionnaires in the field, as will be explained in Chapter 4.

2.8.1.2 Previous studies on perceptual learning styles in EFL learning

Researchers have become increasingly concerned with exploring prevalent learning styles among EFL learners in different parts of the world, such as the Middle East (e.g. Saudi Arabia, Palestine, Iran and Turkey) and East and Southeast Asia (e.g. Thailand, China, Japan and Taiwan). According to Oxford, Hollaway and Horton-Murillo (1992), "although culture is not the single determinant, and although many other influences intervene, culture often does play a significant role in the learning styles unconsciously adopted by many participants in the culture" (p. 441). Tileston (2004) also points out that "different learning styles and modality preferences tend to run in various ethnic and cultural groups" (p. 15). Thus, providing teachers with the relevant information about their students' cultures and their possible effects on learning style preferences can help them incorporate the more preferred styles into their teaching and eventually, improve students' understanding, retention and achievement (Joy & Kolb, 2009; Xiao, 2006). Meanwhile, educators should be aware that neither ethnicity nor culture is the sole determinant of learning style preferences. I review below a few studies carried out in different of EFL settings, starting with Saudi Arabia and the rest of the Middle East, in order to examine the similarities and differences between their findings and those of the present study. The review includes only those studies whose participants were learning EFL in their home countries in order to avoid including learners with cross-cultural experiences, which could have influenced their learning style preferences.

First, it should be pointed out that research on the language learning styles of Arab university students is remarkably limited in scope. In addition, employing different learning style classifications and measures in existing studies makes it challenging to compare their findings. To begin, Almutairi (2007) investigated the learning styles of 209 English learners at King Faisal University in Dammam, Saudi Arabia, using Oxford's Style Analysis Survey

(SAS) followed by a focus group of 10 students. One of the major findings of her study, which was consistent with that of the present study, was that a large percentage (41%) of the participants preferred the visual style. Significantly, the teacher was found to play an important role in influencing the learners' use of perceptual learning styles. In addition, learning styles were found to be influenced by such factors as the learners' cultural values and previous academic achievement in English.

A more recent study was conducted by Alkhatnai (2011), employing Reid's PLSPQ and in-depth interviews, to examine the preferred learning styles of 100 Saudi students at King Saud University in Riyadh, Saudi Arabia. In contrast to the above finding, Alkhatnai reported that the auditory style was the most preferred one among the learners, followed by the visual and kinaesthetic styles. In addition, and in congruence with the finding of the present study, a significant positive relationship was found between the learners' use of their preferred learning styles and motivation to learn English. This will be examined in further detail in Chapter 7 of this thesis.

One of the strengths of the two studies reviewed above was the use of the mixed methods approach, which offered sufficient interpretation of the collected data. In addition, their reasonably large sample sizes provided a useful benchmark with which the results of the present study could be compared. It should also be pointed out that the SAS, used by Almutairi (2007), has an acceptable reliability coefficient of .76 and has been utilised effectively in a variety of EFL settings. However, caution is required when interpreting the findings of Alkhatnai's (2011) study. The original target population of the PLSPQ was learners of English as a second language (ESL) in the United States of America, rather than EFL learners. Alkhatnai (2011) made no mention of any cross-cultural validation of this instrument, which could have affected the validity of the results of his study.

In a similar Arabic context, Aqel and Mahmoud (2006) investigated the learning style preferences of 120 English learners at An-Najah National University in Palestine, using a 24-item questionnaire adapted from the Learning Style Inventory (LSI) available on the Penn State website. In line with the findings of the present study, data analysis showed that the students preferred to learn English through the visual and written representations. Another significant large-scale quantitative study in this respect was undertaken by Naqeeb and Awad (2011), who developed a 20-item questionnaire to explore the perceptual learning styles of 386 EFL learners at the Arab American University in Palestine. In contrast to Aqel and Mahmoud's (2006) finding above, data analysis revealed that the auditory style was favoured by most of the students.

There were several strengths in Aqel and Mahmoud's (2006) and Naqeeb and Awad's (2011) studies. First, they both benefited from the use of large sample sizes, which allowed generalisations to be made. In addition, they employed learning styles questionnaires with extremely high Cronbach's Alpha reliable coefficients (.98). However, the incongruity in the findings of these two Palestinian studies could have arisen from the different academic backgrounds of the participants in each study. As Naqeeb and Awad (2011) pointed out, the students in the former study were from the Green Line, while those in the latter study were from the West Bank. Thus, the two studies involved different educational institutions and teaching approaches. This suggests that an issue that needs attention is the impact of the participants' learning experiences on their perceptual style preferences. This is taken into consideration when collecting and interpreting the data in this study.

Recently, a considerable amount of literature has been published on the learning style preferences of students in Iran, another country in the Middle East. However, the findings of these studies are not generally inconclusive. Salehi and Bagheri (2011), for example, used

Reid's PLSPQ to examine the learning styles of 110 Iranian learners of EFL. The questionnaire was translated and then piloted with 29 students, and an acceptable Cronbach's alpha value of .75 was obtained. Importantly, the researchers found that the auditory style was a major learning style preference among the participants, while the visual and kinaesthetic styles belonged were minor learning preferences. Based on the findings, Salehi and Bagheri (2011) suggest that it is important to:

> raise teachers' awareness concerning their own learning and teaching styles. It is known that most teachers tend to teach in the way they were taught or in the way they preferred to learn. Sometimes because of the difference between the teachers' teaching style and learners' learning styles some conflicts may arise, which might have negative effects both on the learner and on the teacher. (p. 122)

This argument is logical; yet, since Salehi and Bagheri's (2011) research is quantitative in nature, it does not allow for the verification of the negative effects of the mismatching of learning styles.

A study that combines both quantitative and qualitative data in a way similar to the current study was carried out by Seifoori and Zarei (2011), who used a modified version of Reid's PLSPQ to examine the learning style preferences of 94 Iranian university students. To obtain a deeper insight into those style preferences, the researchers conducted semi-structured interviews with 24 participants. Unlike Salehi and Bagheri's (2011) study above, the results of this research showed that the kinaesthetic style was the most dominant learning style among the learners. In the same context, Gilakjani (2012) developed a 15-item questionnaire to explore the learning styles of 100 EFL learners in Iran. In contrast to the findings reported above, Gilakjani (2012) found that nearly half of the learners preferred the visual learning style, 35 per cent favoured the auditory style and the remaining 15 per cent preferred to use the kinaesthetic style when learning the English language.

The differences in the findings of the three studies of Iranian university students above may be attributed to the different research designs and instruments that the researcher used in their studies. Nonetheless, their rationale is relevant to the present study because it stresses the importance of examining the learning styles of university students learning EFL.

Moreover, numerous studies have attempted to identify the learning styles of EFL students in East and Southeast Asia. Chu and Nakamura (2010), for instance, carried out a cross-country study to examine the learning styles of EFL learners in Taiwan and Japan. A total of 168 Taiwanese and 140 Japanese university students participated in the study, and a learning styles questionnaire consisting of 30 questions was developed for this purpose. Data analysis revealed significant differences between the learners in the two countries. Taiwanese students were found to prefer the kinaesthetic learning style, whereas Japanese students reported to learn English best using the auditory style. In the same way, Li (2012) used Reid's PLSPQ to investigate the preferred perceptual styles of 92 students at a university in China. Importantly, the researcher noted that Chinese learners of EFL preferred to use more than one learning style, more specifically, the visual and kinaesthetic styles. This led Li (2012) to conclude that teachers should "accept these differences instead of labelling students with bad or wrong learning styles, and integrate these differences into their classroom teaching by making their class more inclusive" (p. 12). This view is supported by Zhang and Evans (2013), who also examined the learning styles of 466 Chinese English learners. Oxford's SAS was translated into Chinese and piloted with 40 students. Data analysis revealed that the visual style was a major learning style among the learners, while the kinaesthetic style was ranked the highest among the minor styles. Based on these findings, Zhang and Evans (2013) proposed that "an optimal way to react to multiplicity of learning styles of Chinese undergraduates is to design classroom activities, tasks, and assignments in a balanced manner

by taking all the learning styles into account" (p. 67). This observation gives credence to a few of the suggestions made in the current study, as will be explained in Chapter 8.

Although the studies reviewed above are limited by their sole dependence on the quantitative research design, they benefit from the use of large sample sizes, which facilitates the generalisation of their findings to the larger population of EFL learners.

A recent study which efficiently employed the mixed methods approach was carried out by Phantharakphong (2012) to investigate the learning styles of 311 university students in Thailand. The VARK questionnaire was translated into Thai and used to collect data, and in-depth interviews were subsequently conducted. It was found that the majority (28.6%) of the students preferred to use the kinaesthetic learning style. That was followed by multimodal preferences, read/write, aural and visual learning styles. This large-scale study benefits from using a survey questionnaire together with open-ended interviews as a means of elaborating on the different learning experiences of the participants.

The above studies are of particular importance to the present study. More specifically, the aims of this study are influenced by the views expressed by the researchers above that awareness of learning styles facilitates the accommodation of diversity in the same classroom and allows more individualisation of learning experiences. The observation that learners who belong to the same ethnic group or even the same nationality differ in their learning style preferences, even when the same learning style instrument is used, could possibly indicate the existence of other differences among the learners caused by such factors as demographic characteristics and classroom variables. Such factors are investigated thoroughly in the present research, as will be discussed Chapter 5.

2.8.1.3 The relationship between perceptual learning styles and English language proficiency and performance

To date, little evidence has been found on the association between the use of particular perceptual learning styles and the level of English language proficiency. Similar to the finding of the present study, a few of the studies reviewed above (e.g. Chu & Nakamura, 2010; Naqeeb & Awad, 2011; Zhang & Evans, 2013) found no significant relationship between the learners' English proficiency levels and their preferred perceptual styles of learning.

A different finding, however, was obtained in the Turkish context. Erton (2010) attempted to investigate the relationship between students' personality traits and how these influenced learning styles and English language achievement. The study was conducted with 102 university students in Turkey, and The Jeffrey Barsch Learning Styles Inventory was used to assess the students' perceptual learning styles. Data analysis revealed that visual learners received the highest scores on the English module. One of the strengths of this study was translating the survey into the participants' native language, which minimised possible misunderstandings of the questionnaire items and facilitated obtaining accurate responses. Nonetheless, the finding of Erton's (2010) study should be interpreted with caution since the reliability coefficient of the Jeffrey Barsch Learning Styles Inventory was found to be .65, which was below the acceptable value of .7, as suggested by several scholars (e.g. Brace, Snelgar & Kemp, 2012; Nunnally, 1978; Pallant, 2013).

In contrast to Erton's (2010) finding, Aqel and Mahmoud's (2006) research (reviewed in Section 2.8.1.2 above) reported no significant correlation between the learning styles of their participants and their total English scores. This finding does not match that of the current research in which all perceptual learning styles correlated significantly and positively with the

students' performance in the English module (see Section 5.5.1 in Chapter 5 for a discussion of this finding).

2.8.2 Peer collaboration

Since the introduction of the communicative method to FL teaching, group work has been promoted as a useful means of helping learners practise the target language and interact with its other speakers (Pica, 2002). It has been found that group activities provide ample opportunities for learners to communicate and maximise student-student interaction, which is likely to develop their linguistic and communicative competence (Harmer, 2001). According to Cohen (1994), "group work is an effective technique for achieving certain kinds of intellectual and social learning goals. It is a superior technique for conceptual learning, for creative problem solving, and for increasing oral language proficiency" (p. 6). Similarly, Johnson and Johnson (2012) explain that "cooperation is working together to accomplish shared goals" (p. 263).

Opponents of group work also maintain that learners learn best when they work in a collaborative and interdependent manner in which each group member contributes to the team effort by sharing his/her knowledge and skills. Thus, success is experienced by group members on the basis of the overall achievement of the group as well as that of individual members (Johnson & Johnson, 2012). Some scholars (e.g. Frykedal & Chiriac, 2012; Galton, 2009) contend that groups of three to six members working together to achieve a shared goal are ideal, as they facilitate discussion and debate among their members. In addition, responsibilities can be distributed to group members so that each of them can contribute his/her share to group success (Johnson & Johnson, 2012). It should be pointed out that larger groups do not facilitate active participation of all members and may even allow some

members to sit passively and seldom get involved in the group work. Moreover, group size should depend on the proficiency levels of its members and become smaller when less proficient students are involved (Davis, 1997).

Although group work involves learners as active participants, the teacher's role is vital to the success of the learning process (Chiriac & Frykedal, 2011; Kneff, 2012). Responsibilities of the teacher include selecting classroom assignments, carefully monitoring the groups to ensure that all members have sufficient opportunities to participate in the assigned task and making necessary adjustments if learning objectives are not achieved (Oxford, 1997; Tuan & Nhu, 2010). Indeed, the current study has found that the teacher plays a significant role in the successful implementation of group activities in the English class and encouraging learners to participate in them.

Moreover, it should be pointed out that this study aimed to go beyond assessing the learners' preferences for peer collaboration to identifying the conditions that influenced those preferences. These included: the characteristics of the group members (e.g. cooperation and English proficiency level), the grouping method (e.g. teacher-selected or student-selected grouping) and the distribution of marks.

To begin, one of the major issues that learners often raise about working in groups is the lack of cooperation amongst group members or *social loafing* (Gilovich, Keltner & Nisbett, 2006). The researchers point out that what sometimes makes the performance of a group less fruitful than the sum of the works done by its individual members is that some people do not make as much effort to accomplish a task when they work with others as when they work individually (Gilovich et al., 2006). Despite these limitations, teachers can implement group work efficiently if they become aware of a variety of collaborative activities and grouping strategies (Davis, 1997). Teachers are also advised to assign roles in which tasks are

distributed equally among group members, but at the same time, are dependent on other member's jobs.

Another criticism of group work commonly reported by students is the unfairness of grading individuals' abilities on the basis of the whole group's effort. Given that some members may work harder and contribute more to the assignment than others, individual assessment could be a more accurate indicator of each member's achievement. Chen (2004) recommends that teachers can reduce the effect of this problem by minimising the marks assigned to group work to only a small portion of each student's final score (e.g. 10% or 20%). Alternatively, teachers can ask students to self-assess themselves and evaluate their group members (Chen, 2004, p. 6).

Another form of group work that has often been discussed in the literature is pair work. Pairs consist of only two members and offer learners a better opportunity to practice the target language and develop their oral skills in a less threatening environment than in a whole-class setting (Tuan & Nhu, 2010). Pair work and group work have both similar and distinct characteristics. While Brown (2007) describes pair work as tasks carried out in groups of two members, he refers to group work as a "multiplicity of techniques in which two or more students are assigned a task that involves collaboration and self-initiated language" (p. 224). In this study, both pair and group work are treated as forms of peer collaboration as they indicate that learners are not working by themselves.

The third category of classroom learning style that is examined in the present study is individual work, which describes a situation where "students work by themselves to accomplish learning goals unrelated to those of the other students" (Johnson & Johnson, 2012, p. 263). Learners occasionally need to work at their own pace and to carry out tasks which are suitable for their proficiency levels and preferred learning styles, strategies and interests

(Richards & Bohlke, 2011). This can help maintain their independence and autonomy. When carrying out individual work, teachers should ensure that learners know what is required of them and select tasks that present sufficient challenge and motivation to maintain learners' interest (Richards & Bohlke, 2011). A key advantage of using individual work in the classroom is that the teacher can offer more personal support and help to each learner and can assess individual effort more easily in one-to-one situations than in group settings. On the other hand, one of the major challenges of individual work is that students do not experience the above-mentioned benefits of working with and learning from their classmates (Ahangari & Samadian, 2014). We can therefore, conclude that individual and group work offer different learning possibilities and can be effective if carried out with the right tasks. This is consistent with the findings of the present study, as will be explained in Chapter 5 (Sections 5.4.2 and 5.5.2).

2.8.2.1 Theoretical framework supporting this study

According to Kinsella and Sherak (1998), "Carefully structured student-student interactions provide a classroom forum for extended, meaningful exploration of ideas .... The increased frequency and complexity of linguistic input and output resulting from group work contribute to substantive gains in communicative second language competence." Indeed, peer collaboration has been found useful for providing learners with opportunities for interaction in the target language, improving fluency and communicative competence, sharing ideas and experiences, learning from peers and assisting one another and developing social skills and thinking abilities (see e.g. Bhatia & Makela, 2010; Frykedal & Chiriac, 2012; Tuan & Nhu, 2010; Turner & Lowe, 2014).

Nonetheless, individual learning can also be beneficial when carrying out certain activities in class, as language learners need to develop independence and autonomy (Benson & Voller, 2014; Little, 2000; McNamara & Deane, 1995). For example, when practicing writing, students can begin by working collaboratively to brainstorm ideas about the topic and eventually progress to individual work when actual writing is involved. As a result, "an independent or autonomous student-writer gains efficiency and organizational skills, becoming more agentic at taking responsibility to become a competent (independent) writer" (Dion, 2011, p. 64).

In order to assess Saudi learners' preferences for working collaboratively or individually in the English class, the Peer Collaboration Scale was developed and used in the present study. It was inspired by Kinsella and Sherak's (1994) Classroom Work Style Survey, which aims to identify learners who prefer to do classroom activities independently or in a group. Kinsella and Sherak's survey consists of 24 items, with two response options: *agree* (1 point) and *disagree* (0 points). When peer collaboration is identified as a learner's preferred style, the scale also provides information on the learner's preferences regarding the types of group activities and the selection criteria of group members. A few items were adapted from this survey when developing the Peer Collaboration Scale in the present study, as will be explained in Chapter 4.

2.8.2.2 Previous studies on peer collaboration in EFL learning

As pointed out in Section 2.8.1.2, learners' cultural background is believed to influence their perceptions, which could result in differences in learning style preferences among learners in different parts of the world (Joy & Kolb, 2009; Peacock, 2001). Let us start by examining Alkhatnai's (2011) study of Saudi university students (reviewed in Section 2.8.1.2

above). The findings of this study revealed that the individual learning style was the least

favoured one among the learners. Alkhatnai (2011) explained this preference in light of the

cultural values of the Saudi society, which appreciates cooperation and helping one another,

rather than working alone. This finding is in part congruent with that of the present study

which revealed that the learners preferred peer collaboration in moderation. Nonetheless, that

preference was not absolute, as the learners reported that it depended on several conditions

such as the skills or tasks they were required to carry out in class.

Similar results were obtained from a study carried out in another country in the Middle

East, Iran. Salehi and Bagheri (2011) found that the students considered group work a major

learning style, while they regarded individual work as a negligible style. This finding lead

Salehi and Bagheri (2011) to caution:

> The fact that the students were mainly group learning learners was surprising because the participants' language instructors stated that they were individual learning learners and they employed teaching techniques that cared for the needs of the individual learners mostly, which indicated a mismatch between the teaching styles of the instructors and the learning styles of the participants. (p. 138)

However, conflicting findings were obtained from studies undertaken in East and

Southeast Asia. Chu and Nakamura (2010) found that Taiwanese learners of English preferred

to learn the language with the whole class, whereas Japanese learners favoured individual

learning and were not willing to participate in group work. Chu and Nakamura (2010)

explained that the reason behind Taiwanese students' preference for group work could be that

they sought a learning situation in which they could feel less anxious and less threatened by

the presence of the teacher. Li (2012), on the other hand, found no significant differences in

Chinese students' preferences for group or individual work. Li (2012) attributed the lack of

Chinese learners' preference for peer collaboration to their cultural values. The researcher

explained that the concept of group learning is perceived in the Chinese culture as a long-term

association between members and an influential factor on identity, which makes "Chinese EFL students uncomfortable with the ad hoc nature of small-group work in ESL classrooms, with groups continually forming and reforming according to the task" (p. 10).

2.8.2.3 The relationship between peer collaboration and English language proficiency and performance

When reviewing the literature on peer collaboration, no study could be located that examined the influence of learners' proficiency on their preferences for individual or group work. With regard to English language performance, the only relevant Saudi study was not carried out with university students but at secondary schools. Alghamdi (2014) conducted an experimental study to assess the effect of cooperative learning on verbal interactions in four government secondary schools in Al-Baha, Saudi Arabia. The study found significant differences between the cooperative learning group and the control group, which received traditional lecture teaching method, in the majority of the verbal interaction categories. Findings also revealed that the learners in the experimental groups were more inclined towards working with their peers. They respected one another's views and shared ideas when working collaboratively on a variety tasks. This created more opportunities for them to interact in the English language than their peers in the control group. Although Alghamdi's (2014) study revealed conclusive evidence with regard to the practicability and efficiency of the use of group work in the English class, it should be noted that his study was carried out with high school male students; hence, the results cannot be generalised to apply to students of both genders at higher education institutions in Saudi Arabia. More research is needed in this regard, and this is one of the main concerns of this study.

In another Arab context, Al-Tamimi and Attamimi (2014) investigated the influence of cooperative learning on enhancing the speaking skills of 60 Yemeni students and their attitudes towards learning English. This quasi-experimental study used a pre- and post-test group design, in which cooperative tasks were used in teaching the experimental group, while a traditional teaching method was used with the control group. Results showed a notable improvement in the learners' oral abilities and general attitudes after the implementation of peer collaboration.

Other quasi-experimental studies in different EFL contexts supported the above findings, as they also observed significant differences between collaborative work and teacher-directed instruction in speaking and listening comprehension (Han, 2015), reading comprehension (Dabaghmanesh, Zamanian & Bagheri, 2013), essay writing (Ahangari & Samadian, 2014; Dabaghmanesh, et al., 2013; Zeinolabedini & Gholami, 2014) and lexical development (Kim, 2008; Moghaddam & Faruji, 2013). On the other hand, Nan's (2014) study of 170 English learners in China found that cooperative learning is effective only to a certain degree in improving the academic achievement of the students, while Dabaghmanesh and Soori's (2014) research with Iranian learners reported no significant influence of cooperative learning on performance in a general English course. This last finding is consistent with that of the present study and will be looked at and explained further in Chapter 5.

The studies reviewed above, although different in their designs from the research presented in this thesis, have influenced this study in that they investigated explicitly the relationship between peer collaboration and language learning success. In addition, their findings gave further weight to the belief that some educational contexts give an advantage to learners who prefer or adjust to certain learning styles such as peer collaboration. Since

learning styles are considered value-neutral, it is imperative to ask whether teaching methods should be adjusted to take into account those learners who prefer individual learning. These issues are elaborated on when analysing the data obtained in the current research in Chapter 5.

2.8.3 Tolerance of ambiguity (TA)

The abbreviation TA has been used to refer to tolerance of ambiguity by several researchers in the psychology and second language acquisition fields (e.g. Dewaele & Wei, 2013; Dewaele & Ip, 2013; Dörnyei & Ryan, 2015; Endres, Camp & Milner, 2015; Foote, Davis & Marks, 1975; Furnham & Marks, 2013; van Compernolle, 2016). Language learners often encounter numerous ambiguous situations that involve dealing with a new linguistic system and different cultural aspects of the target language (Ely, 1995; White, 1999). Budner (1962) points out that ambiguous situations are those characterised by "novelty, complexity, or insolubility" (p. 30). That is, they result from new situations with no familiar clues, complex circumstances where several clues are present or conflicting conditions in which existing clues denote different structures (Budner, 1962). Norton (1975, cited in Ely, 1995) adds a fourth element which often causes ambiguity to language learners, which is an unstructured situation in which clues cannot be interpreted. As Ehrman (1993) explains, "the more unstructured the learning, the more important this characteristic, both in the classroom and probably even more outside of the classroom in naturalistic settings" (p. 331). It should also be pointed out that ambiguity is often most noticeable in communicative language contexts and when learners encounter authentic inputs. Ambiguity is also experienced in the language classroom in situations where learners are faced with lexes or expressions whose meanings they are uncertain of, grammatical structures that have diverse usages and sounds that are difficult to pronounce (Ely, 1989).

Learners differ in their willingness to adjust to such unfamiliar situations. Rubin (1975) describes the good language learner as the one who "is often not inhibited … [and] … is willing to live with a certain amount of vagueness" (p. 47). Brown (2007) also maintains that success in language learning requires tolerance of ambiguous information. If ambiguity is not tolerated adequately, learners are very likely to experience difficulty with the target language, which may result in feelings of discomfort, confusion and even stress (White, 1999). It can therefore, be concluded that TA plays a vital role in enhancing or hindering the language learning process.

As far back as Budner (1962), TA was viewed as "the tendency to perceive ambiguous situations as desirable", whereas intolerance of ambiguity (IA) was described as "the tendency to perceive ambiguous situations as sources of threat" (p. 29). Subsequently, Norton (1975, cited in Ely, 1995) provided a more elaborate definition of IA as "a tendency to perceive or interpret information marked by vague, incomplete, fragmented, multiple, probable, unstructured, uncertain, inconsistent, contrary, contradictory, or unclear meanings as actual or potential sources of psychological discomfort or threat" (p. 88). Sharing the same perspective, McLain (1993) defined TA and IA as "a range, from rejection to attraction, of reactions to stimuli perceived as unfamiliar, complex, dynamically uncertain, or subject to multiple conflicting interpretations" (p. 184). A comprehensive and well-accepted definition of these constructs was proposed by Furnham and Ribchester (1995), who described TA and IA as:

> The way an individual (or group) perceives and processes information about ambiguous situations or stimuli when confronted by an array of unfamiliar, complex, or incongruent clues .... The person with low tolerance of ambiguity experiences stress, reacts prematurely, and avoids ambiguous stimuli. At the other extreme of the scale, however, a person with high tolerance for ambiguity perceives ambiguous situations/stimuli as desirable, challenging, and interesting and neither denies nor distorts their complexity of incongruity. (p. 179)

Last but not least, a more recent definition was put forth by Christison (2003), which added to the previous definitions that TA describes "how comfortable a learner is with uncertainty; some students do well in situations where there are several possible answers, others prefer one correct answer" (p. 270).

As we can see, the definitions above viewed ambiguity as a result of unfamiliar or incomplete stimuli or clues which could exist in any learning environment. Accordingly, learners with a reasonable degree of TA are likely to feel at ease when learning a FL with its novel semantic, syntactic and phonological systems. Bringing together these viewpoints, TA is defined in the present study as learners' willingness to process and/or produce input when provided with insufficient material in the learning environment.

2.8.3.1 Theoretical framework supporting this study

As pointed out above, ambiguous situations are those characterised by "novelty, complexity, or insolubility" (Budner, 1962, p. 30). Tolerant individuals welcome challenging and complex situations, in which they can make guesses, take risks and experiment with new linguistic forms and structures (Ehrman & Oxford, 1995; McLain, 1993). Intolerant learners, on the other hand, tend to avoid ambiguous situations, in which vague material makes them feel confused and stressed. They are not willing to take risks or make mistakes, and they may even quit if they feel puzzled (Ehrman & Oxford, 1995). Ely (1995) cautions that "if a student experiences a feeling of 'threat' or 'discomfort' when confronted with linguistic uncertainty and is less inclined to take risks, ESL learning may be seriously hampered" (p. 88). Most teachers have witnessed incidents where learners insist on knowing the meaning of every word in an oral or written text or when they cannot cope with the fact that there is no one-to-one correspondence of words between their native language and the target language. Such

intolerance may hinder performance, as tension can block the processing and retaining of new information as well as the implementation of appropriate learning strategies. Ely (1995, p. 88) identifies three aspects of language learning which can be negatively influenced by IA:

1. Learning individual linguistic elements (phonological, morphological, syntactic and semantic);

2. Practicing language skills

3. Adopting those skills as permanent strategies (Ely, 1995, p. 88).

Ehrman (1996) eloquently explains the importance of being tolerant and open to possibilities when learning a FL by pointing out that "effective language learning is very much a process of reinterpreting one's view of reality using alternative perspectives" (p. 177).

This is especially true of EFL learners, who come from diverse cultural backgrounds and bring various values and beliefs to the learning environment. As Alptekin (2006) explains, interpreting the different aspects and conventions of the target culture can be cognitively challenging and therefore, can cause confusion to the learners.

It should also be pointed out that TA is not fixed and constant but often fluctuates according to context. That is to say, the same learner may show a high degree of TA in one context (e.g. when reading a comprehension passage which contains new vocabulary items) but may be extremely intolerant in another learning situation (e.g. when faced with a grammatical structure that has different usages) (Durrheim & Foster, 1997).

Although previous studies (e.g. Ehrman, 1993; Kamran & Maftoon, 2012; Nezhad et al., 2013) have provided evidence for the positive impact of TA on language learning, it is worth asking if high levels of TA can have a negative influence on the learning process. According to Oxford (1992), very high degrees of TA may result in reverse effects such as "unquestioning acceptance and cognitive passivity" (pp. 37–38). In this case, learners are not

intrigued by the vagueness of the new linguistic system and thus, are not interested in exploring the different available options for using the target language. This may even cause early interlanguage fossilisation (Ely, 1995). On the other hand, learners with low TA can easily get overwhelmed and have difficulty accepting linguistic forms or usages that do not follow certain rules, which often hinder their language learning.

Consequently, it has been recognised that a moderate level of TA helps learners succeed in language learning. Ely (1995), for instance, argues that moderate TA is the "ideal case" and the learner "who is aware of, but not threatened by, linguistic differentiation, and who treats it as an occasion for introspection, experimentation and, ultimately, learning, is the one for whom tolerance of ambiguity will be a help, not a hindrance" (p. 93).

Moreover, since a low level of TA is considered a hindrance, learners with a low TA need more support from their teacher (e.g. adjusting lesson plans and teaching styles) in order to overcome the challenges they encounter with the FL. In addition, the impact of the affective filter (Krashen, 1981) on FL learning should be taken into consideration. When a learner gets confused by the material and the filter becomes high, little information can get through. It is, therefore, recommended that teachers employ a variety of techniques in order to lower the affective filter and allow more language input, which can eventually promote language learning success.

Although there are a few scales developed to assess TA in different learning settings (e.g. Budner, 1962; McLain, 1993), to my knowledge, Ely's (1995) Second Language Tolerance of Ambiguity Scale (SLTAS) is the only scale specially devised to assess TA levels in ESL/EFL learning settings. The SLTAS is a four-point Likert-scale questionnaire. It consists of 12 items, with responses ranging from *strongly agree* to *strongly disagree*. A high score on this scale indicates low TA, and vice versa. Recent research in the field (e.g. Erten &

Topkaya, 2009; Kamran, 2011; Kamran & Maftoon, 2012; Marzban, Barati & Moinzadeh, 2012; Nezhad et al., 2013; Sa'dabadi, 2014) has successfully used this scale to assess TA in language learning. Therefore, Ely's theoretical framework was used as a guideline when preparing the Tolerance of Ambiguity Scale used in the current study, and where applicable, the findings were interpreted in light of Ely's assumptions mentioned above. However, in order to shed some new light on the complex nature of this style among EFL learners in Saudi Arabia, I adapted only a few items from the SLTAS and developed the rest of the items in the Tolerance of Ambiguity Scale using my extensive review of the literature and the insights I gained from my initial discussions with my EFL students in Saudi Arabia. Further details about this scale are provided in Chapter 4.

2.8.3.2 Previous studies on TA in EFL learning

Since TA is considered an important learning style that can either facilitate or hinder language learning, investigating the factors that influence it can provide useful insights. However, although extensive research has been carried out on TA, much of the research up to now has been descriptive in nature and depends on quantitative data gathering. To the best of my knowledge, no study in EFL learning contexts has examined this personality learning style from both quantitative and qualitative perspectives, and no initiative has been made to investigate TA among Saudi or even Arab learners of English. The present research thus, attempts to fill this gap by shedding light on this important style of learning, with the hope of promoting awareness of its significance among English learners in the Arab world. Below I review three studies that examined TA among English learners in the Middle East, and I point out their relevance to the current research as well as their strengths and weaknesses.

In their exploratory examination of TA among 188 freshman students in Turkey, Erten and Topkaya (2009) used a translated version of the SLTAS and found that the students generally had low TA when learning English. Erten and Topkaya (2009) argued that as freshman students had low English language proficiency, they were expected to have low TA levels. They further explained that "tolerance of ambiguity improves as proficiency improves. That is, as learners develop their linguistic knowledge, the need to control every detail in language learning becomes less important, thus resulting in higher tolerance of ambiguity" (p. 40).

Still in the Middle East, Kamran (2011) used a translated version of the SLATS to investigate TA among 114 EFL learners in Iran and found that the learners' average scores on TA varied according to the language skill involved. They were the highest when reading comprehension was involved, while they were the lowest when writing tasks were carried out. This finding lends support to the belief that TA is domain specific and learners can exhibit TA in one area but not in others. Accordingly, Kamran (2011) points out that "English language learners seem to have higher tolerance when confronting ambiguous meanings, unknown words, and unfamiliar topics in a text, as reading is a comprehension skill and learners deal with an existing text rather than trying to create a text." On the other hand, "as writing is a production skill, English language learners encounter larger number of unknown elements of the language they are learning while trying to express their meaning in words, and they experience lower TA" (Kamran, 2011, p. 28). One of the strengths of the above studies was translating the SLATS into the native language of the participants in order to minimise possible misunderstandings of the content. Equally important, the translated versions were reported to have high reliability coefficients.

In the same vein, Marzban et al. (2012) attempted to explore TA among 194 Iranian learners of EFL by using a revised version of the SLTAS. In line with the findings of the present study, data analysis showed that Iranian learners showed moderate levels of TA when learning English. Marzban et al. (2012) explained that the learners in their study were at an advantage as they neither accepted confusing information without questioning nor did they have difficulty comprehending new material due to vague information.

It should be noted here that the studies reviewed above depended solely on the survey method to collect data, which did not provide enough insight into the complex nature of TA in FL learning. Nonetheless, such limitation is often unavoidable due to the size and scope of individual studies along with certain methodological and practical restrictions.

2.8.3.3 The relationship between TA and English language proficiency and performance

An increasing number of studies have recently attempted to explore the link between TA and performance in various language skills. Similar to the finding obtained in the present study, the majority of those studies revealed that students with moderate levels of TA often persevere in the language learning process and accomplish more than those with low TA. Of particular relevance to this research are those studies conducted in the Middle East. Kamran and Maftoon (2012), for example, examined the possible link between TA and reading comprehension among 114 Iranian learners of EFL using the SLTAS and a reading proficiency test. Data analysis indicated a significant positive relationship between the students' TA scores and their scores on the reading test. This result led Kamran and Maftoon (2012) to conclude that "as language learning context in general, and the activity of reading in a foreign language in particular, are abundant with novelty and ambiguous clues, it is expected that when ambiguity is tolerated reasonably, language learning and also reading

comprehension be enhanced" (p. 193). This finding is in agreement with that of Nezhad et

al.'s (2013) research with Iranian EFL learners, which had a similar purpose, design and even

sample characteristics. In the same vein, Sa'dabadi (2014) investigated the link between TA

and test performance of 134 learners of English in Iran using the SLTAS and a cloze test

adopted from the TOEFL. The researcher found that the performance of the students with

high levels of TA was superior to that of students with moderate and low TA levels.

Sa'dabadi (2014) explained this finding by pointing out that:

> Texts are unclear and therefore many concepts may be intentionally or unintentionally
> left ambiguous for the learners to find out and may, therefore, result in a sense of
> anxiety when trying to comprehend the overall meaning of the cloze passage … tolerant
> learners could function more rationally and calmly … and … they were much more
> successful in accommodating themselves with the discomfort of the situation in order to
> produce more appropriate and correct responses to the cloze text. (pp. 343–344)

The majority of the large-scale studies presented thus far, although quantitative in

nature, suggest that when ambiguity is tolerated adequately, language learners' attempts to

interpret linguistic input are likely to succeed. Despite the key role that TA plays in language

learning, previous research has not yet examined TA in the Arab context. This study attempts

to fill this gap in the literature by developing a specific scale to assess this variable among

EFL learners in Saudi Arabia, the demographic and classroom factors that influence it and its

possible links with English language proficiency and performance.

2.9 Components of the learning style profile of Saudi learners of English

As explained earlier in this chapter, no agreement has been reached on the

comprehensiveness of most learning style instruments. Additionally, the psychometric

properties of some of the well-known instruments have also been questioned. Therefore, one

of the aims of this study is to fill this gap by developing learning style scales which are not

only comprehensive, but also closely pertinent to the sample of the study with its unique

cultural, social and educational characteristics. The results of the scales are then presented together as a learning style profile of the learners, which comprises three major dimensions as follows:

1. Perceptual styles (visual, aural, read/write and kinaesthetic) based on the theoretical assumptions of Fleming and Mills' (1992) VARK model;

2. Social styles (peer collaboration/individual learning) based on the theoretical assumptions of Kinsella and Sherak's (1994) Classroom Work Style Survey;

3. Personality styles (tolerance/intolerance of ambiguity) based on the theoretical assumptions of Ely's (1995) SLTAS.

The psychometric properties of the above models and how they have been adopted and/or adapted for the purposes of this study are explained in detail in the methodology chapter (Chapter 4).

2.10 Chapter summary

The literature discussed above offers useful insights into language learning styles from theoretical and empirical perspectives. Due to the paucity of studies examining perceptual learning styles, peer collaboration and TA among English learners in the Arab world, it is necessary to explore these variables and determine the extent to which Arab students are similar to or different from their peers in other EFL contexts. More importantly, there is a need to assess the impact of those preferences on the language learning process. The present study was set out to investigate these issues, and interesting findings were obtained in this regard, as will be discussed in Chapter 5.

Chapter 3: Affective Factors in Language Learning

3.1 Introduction

This chapter aims to address several issues in the literature that have arisen in the present study and to concurrently highlight the gaps that this study attempts to fill. I begin by providing background information on a few important affective factors and their impact on learning EFL. Next, for each of the three factors investigated in this study (i.e. anxiety, motivation and self-efficacy), I present an overview of the factor and examine a number of its significant definitions and classification systems with which this study is concerned. This is followed by a discussion of some influential theories and assessment tools that have influenced the design of this study and the interpretation of its findings. Finally, I review some relevant empirical research and point out differences in findings obtained from cross-cultural studies that involve EFL learners in Saudi Arabia and other parts of the world. As pointed out in the previous chapter, only recent research (i.e. undertook in the last ten years) that involved regular university students learning EFL is reviewed in this chapter. Thus, studies carried out in e-learning contexts, with school children or in ESL settings are out of the scope of this review.

3.2 Overview of affect in language learning

Due to the increasing popularity of learner-centred approaches in ESL/EFL classrooms, the affective state of learners has become a central topic in the field. As Dewaele (2005) points out, understanding affect in language learning is essential for the success of the learning process. In order to help learners reach their optimal learning potential, teachers should help them overcome the psychological challenges created by feelings of anxiety and

despair and should encourage the development of positive feelings such as motivation and self-efficacy.

Notably, a number of varying definitions have been put forward for the term *affect* in the fields of psychology and education. A common feature of most definitions, which has been taken into consideration when conducting the current study, is that individuals' feelings and attitudes impact their actions and reactions. Gardner and MacIntyre (1992), for example, describe affective factors as "those attributes that involve individuals' reactions to any situation" (p. 211). A similar but more recent definition was put forth by Arnold (2009), who views affect as "the area of emotions, feelings, beliefs, moods and attitudes, which greatly influences our behaviour" (p. 145). In the same vein, Ormrod (2014) explains that affective variables refer to "the emotions and general moods that a learner brings to bear on a task. Virtually any form of affect has both psychological elements (subjective feelings) and physiologically elements (changes in heart rate, perspiration, muscular tension, etc.)" (p. 366).

Moreover, researchers and educators have long been interested in exploring the relationship between affect and learners' behaviour. As far back as Dewey (1913), instructors were urged to explore how to raise learners' interest by looking at what was happening inside the learner: "Some reason must be found in the person, apart from the arithmetic or the geography or the manual activity, that might be attached to the lesson material so as to give it a leverage, or moving force" (pp. 61–62). In accordance with this, Dulay and Burt (1977) proposed the existence of an *affective filter*, which describes that "part of the internal processing system that subconsciously screens incoming language based on what psychologists call 'affect': the learner's motives, needs, attitudes, and emotional states" (Dulay, Burt & Krashen, 1982, p. 46). Subsequently, in his Affective Filter Hypothesis, Krashen (1985) used this notion to describe a wide range of feelings and reactions that adult

language learners experience. If the filter is high, it will act as a barrier blocking out the linguistic input that the learner is exposed to and inhibiting learning. Several affective factors (e.g. anxiety, motivation and self-efficacy) can raise or lower the filter. It is therefore, essential to provide learners with a safe and welcoming environment in order to maximise their learning.

3.3 Affective factors investigated in this study

3.3.1 Anxiety

In this section, I provide some significant definitions of anxiety and make a distinction between the major types of anxiety identified in the literature. I then discuss the theoretical model supporting this study and highlight its significance. This is followed by a review of previous empirical research on anxiety among EFL learners in Saudi Arabia and other international contexts. Lastly, studies that have examined the impact of anxiety on English language proficiency and performance are reviewed.

3.3.1.1 Overview of anxiety in language learning

Educators have long been aware of the apprehension and worry learners often experience in FL classes. As a demanding and uniquely challenging endeavour, learning a FL is likely to induce anxiety in learners even when they have a strong desire to learn the target language. Foreign language anxiety (FLA) is therefore, regarded as an important affective factor that is unique to language learning and plays a significant role in the language learning process (Gardner & MacIntyre, 1993).

In fact, as far back as Stengal (1939), anxiety was acknowledged as having a negative impact on language learning. Stengal explained the relationship between language and

identity by pointing out that language acquisition could be inhibited by language shock and culture shock experienced by adult learners. The researcher further explained that "the new language as spoken by them, seems to be the result of a compromise between the demands of reality and their emotional resistance against the new way of expressing themselves" (Stengal, 1939, 476).

During the 1970s, anxiety research was actively carried out by leading pioneers, such as Brown (1973) and Scovel (1978). Guiora's (1979) seminal work also attempted to clarify the link between affect and language learning by introducing the concept of *language ego boundary*. The implication is that speaking a different language can give a person a different identity and cause him/her to act differently, which is likely to disturb the individual's sense of identity and consequently, causes anxiety.

In the early 1980s, research on FLA produced conflicting findings due to the different forms of conceptualisation of this construct. However, advances in the development of FLA models took place in the mid-1980s when it was realised that high levels of anxiety had negative effects on language performance (MacIntyre & Gardner, 1991). The development of Horwitz et al.'s FLCAS in 1986 introduced the construct of *situational anxiety*, which proposed the existence of an anxiety unique to language learning and use which is related to but distinct from other forms of anxiety (Horwitz, 2016).

Research grew considerably in the 1990s with the publication of such influential works as Horwitz and Young (1991), MacIntyre and Gardner (1991) and Aida (1994). Horwitz and Young (1991), for instance, reported that debilitating anxiety (i.e. anxiety which hinders the successful completion of learning tasks) affected approximately half of the learners in language classes. Several researchers (e.g. Chen & Chang, 2009; Ebrahimi, 2013; Hashemi, 2011; Huang, 2012; Liu, 2006; Liu & Jackson, 2008; Liu & Ni, 2015; Makrami, 2010;

Rezazadeh & Tavakoli, 2009; Serraj & Noordin, 2013; S. Wang, 2010; Wu, 2011)

subsequently indicated that FLA could be held accountable for individual differences in

language learning.

3.3.1.2 Prominent definitions of anxiety

Anxiety is a complex and multidimensional phenomenon, which makes it challenging to

provide a generally agreed upon definition of it. Among the massive number of definitions

that exist in the literature, a few of them which have been proposed by pioneers in this field

deserve careful consideration. To begin, Scovel (1978) defines anxiety as "a state of

apprehension, a vague fear that is only indirectly associated with an object" (p. 134).

Following this definition, Horwitz et al. (1986) describe anxiety as "the subjective feeling of

tension, apprehension, nervousness, and worry associated with an arousal of the autonomic

nervous system" (p. 125). The researchers further define FLA as "a distinct complex of self-

perceptions, beliefs, feelings, and behaviour related to classroom language learning arising

from the uniqueness of the language learning process" (Horwitz et al., 1986, p. 128). This

definition, which encompasses cognitive and affective components, has guided the attempts of

this research to identify the common features of anxiety, the factors that influence it and its

impact on the language learning process. It is particularly relevant because it considers FLA a

specific type of anxiety related to the distinctive situation of language learning.

In a similar manner, Gardner and MacIntyre (1993) offer a similar definition of

language anxiety as "the apprehension experienced when a situation requires the use of a

second language with which the individual is not fully proficient" (p. 5). MacIntyre and

Gardner (1994) later elaborate on this definition by describing this construct as "the feeling of

tension and apprehension specifically associated with second language (L2) contexts,

including speaking, listening, and learning" (p. 284). A close examination of these definitions reveals that most of them revolve around the concept that language anxiety is a distinctive affective construct provoked by learning and using another language.

3.3.1.3 Major types of anxiety

Anxiety has been classified into three distinct categories: trait anxiety, state anxiety, and situation-specific anxiety. Although these distinctions were first proposed by Cattell and Scheier (1960), the state-trait distinction was more clearly recognised by the development of Spielberger's (1983) State-Trait Anxiety Inventory (STAI). According to Spielberger (1983), state anxiety refers to the "apprehension experienced at a particular moment in time, for example, prior to taking examinations" (p. 90). MacIntyre (1999) later added that this type of anxiety describes "the transient emotional state of feeling nervous that can fluctuate over time and vary in intensity" (p. 28). Hence, state anxiety has a temporary duration and generally disappears when the stimulus that evokes it is taken away. In contrast, trait anxiety refers to a relatively stable characteristic in an individual that causes him/her to consider several situations threatening. Hence, Trait anxiety is more general and consistent over time than state anxiety. Spielberger (1983) defines this type of anxiety as "an individual's likelihood of becoming anxious in any situation" (p. 90). It is considered "a feature of an individual's personality and therefore is both stable over time and applicable to a wide range of situations" (MacIntyre, 1999, p. 28). Nevertheless, several studies have revealed that these two types of anxiety positively and strongly correlated with each other (MacIntyre & Gardner, 1991).

Moreover, research on anxiety in the classroom has led scholars to identify a third type of anxiety, which is situation-specific anxiety. This refers to an individual's tendency to become anxious in a particular situation. Hence, "it is stable over time but not necessarily

consistent across situations" (MacIntyre, 1999, p. 28). FLA is classified as situation-specific

anxiety because it describes a learner's tendency to become anxious in the FL classroom. This

view has increasingly become popular since the development of L2-specific anxiety measures

such as Horwitz et al.'s (1986) FLCAS. Previous research has also provided theoretical and

empirical support to the existence of this type of anxiety in relation to the use of the four

language skills of listening (Chang, 2008; Chen & Chang, 2009; Hashemi, 2011; Serraj &

Noordin, 2013; S. Wang, 2010), speaking (Chang, 2008; Chang, 2011; Ebrahimi, 2013; Liu,

2006; Liu & Jackson, 2008), reading (Huang, 2012; Wu, 2011) and writing (Liu & Ni, 2015).

This distinction is essential in the present study because it highlights the fact that students

could experience different levels of anxiety when carrying out different language learning

tasks, as will be discussed in Chapter 6.

While anxiety can negatively influence language learning, some researchers argue that

this is not always the case. In fact, Scovel (1978) suggests a further distinction between

facilitating anxiety and *debilitating anxiety*. If anxiety assists in the execution of a task by

inducing learners to exert more effort to improve their performance, it is regarded as

facilitating, as it drives the person to exert greater effort to accomplish a task successfully.

MacIntyre, Noels and Clément (1997) further explain that moderately anxious learners tend to

underestimate their relative competence, which could encourage them to work harder to learn

the target language than those who do not feel any anxiety. On the other hand, if anxiety

hinders the accomplishment of a task, it is regarded as debilitating, as it may cause the person

to give up completely in order to avoid feeling anxious (Ormrod, 1999).

Scholars, however, disagree on whether anxiety is the cause or effect of poor

performance in the target language. For example, MacIntyre et al. (1997) observed that

language anxiety experienced by the participants in their study was inversely related to their

perceived language proficiency, suggesting that anxiety could result from inadequate mastery of the language. In contrast, Horwitz (2000) argues that the fact that successful language learners also experience anxiety invalidates the belief that anxiety arises from learning difficulties. Yan and Horwitz (2008) also found that the anxiety experienced by their participants contributed to poor academic performance and class participation. This point is interesting and especially pertinent to the present study since one of its aims is to examine the links between FLA and English proficiency and performance (see Section 6.5.1 for further discussion of this issue).

3.3.1.4 Theoretical framework supporting this study

Horwitz et al. (1986), the developers of the FLCAS, which has widely been used to assess anxiety levels among language learners, are recognised as leading pioneers in operationalising the construct of language anxiety. In this section, I discuss Horwitz et al.'s (1986) anxiety model, which has made a valuable contribution to the conceptual framework and design of the present study. The researchers suggest that language anxiety is associated with three constructs: communication apprehension, test anxiety and fear of negative evaluation. Communication apprehension refers to "a type of shyness characterized by fear of or anxiety about communicating with people" (Horwitz et al., 1986, p. 127). Individuals who are generally anxious about verbal communication tend to become anxious when speaking the target language. Horwitz et al. (1986) describe test anxiety as "a type of performance anxiety stemming from a fear of failure" (p. 127), and they explain that it is pertinent to FLA since continuous assessment is commonly used in FL courses. Speaking tests, therefore, are likely to induce both communication apprehension and test anxiety. Finally, fear of negative evaluation refers to "apprehension about others' evaluations, avoidance of evaluative

situations, and the expectation that others would evaluate oneself negatively" (Horwitz et al., 1986, p. 128). Thus, fear of negative evaluation has a wider scope than test anxiety since it concerns not only the teacher's assessment but also peer evaluation. Gregersen and Horwitz (2002) explain that when learners experience this anxiety, they "tend to sit passively in the classroom, withdraw from activities that could increase their language skills, and may even avoid class entirely" (pp. 562–563). Similar to those with communication apprehension, learners who fear negative evaluation tend to avoid interaction or even initiating conversations with others.

The FLCAS consists of 33 statements and uses a five-point Likert scale, with responses ranging from *strongly agree* to *strongly disagree*. It includes statements associated with the three constructs mentioned above: communication apprehension, test anxiety and fear of negative evaluation. The lower the score a learner attains on the scale, the higher his/her anxiety level is. The FLCAS has widely been employed and translated into different languages to assess language anxiety in general and anxiety associated with particular language skills (e.g. Alrabai, 2014; Al-Shuaibi, Hamdan-Mansour & Azzeghaiby, 2014; Chang, 2008; Chang, 2011; Ezzi, 2012; Effiong, 2013; Huang, 2012; Javid, 2014; Liu, 2006; Liu & Jackson, 2008; Wu, 2011). As a result, "the concept of anxiety in second language acquisition has achieved the status of a precise technical notion" (Young, 1994, p. 3).

While the majority of FL researchers accept Horwitz et al.'s (1986) theoretical framework, it has not gone unchallenged. For example, a few researchers (Aida, 1994; Trang, 2012) argue that test anxiety is not an underlying construct of FLA and should be removed from the FLACS since it applies to general learning situations. Moreover, as pointed out in the previous section, some scholars (e.g. MacIntyre et al., 1997; Sparks, Ganschow & Javorsky, 2000) argue that anxiety is a result, rather than a cause, of poor performance. This

issue is controversial since the findings of several studies in different language learning contexts have revealed a negative relationship between language anxiety and performance (See Section 3.3.1.6 below).

Although the assumptions proposed by Horwitz et al. (1986) served as a theoretical framework that directed the current study towards answering its second research question and interpreting its findings, my extensive review of the literature on language anxiety and preliminary discussions with my EFL students raised a few issues that were not assessed by the FLCAS but had the potential to shed some new light on the complex nature of anxiety. There was also the possibility that English learners in Saudi Arabia followed a different pattern than their peers in other international contexts. Consequently, when designing the Anxiety Scale in this study, I borrowed a few items from the FLCAS, developed some and adopted and adapted others from well-established and validated questionnaires in the field, as will be explained in the following chapter. Hence, this study is not limited to using Horwitz et al.'s framework to assess FLA among English learners in Saudi Arabia, but it also extends the model by thoroughly examining learner and instructional factors that could contribute to the anxiety experienced by the students. It is hoped that such findings will expand our knowledge of FLA among Saudi students and raise teachers' awareness of this individual difference among learners in the same classroom.

3.3.1.5 Previous studies on anxiety in EFL learning

In order to understand how learners experience anxiety and react to its effects in the language class, the interaction between personal factors and the classroom environment should be taken into consideration. This is especially important since, as explained in Chapter 1, unlike ESL learners, the majority of EFL learners are exposed to English only in the

classroom. Together with research undertaken in Saudi Arabia, studies involving EFL learners of different ethnic groups (particularly Asian learners) are reviewed below.

In the Saudi context, a small-scale study was carried out by Al-Saraj (2013), who employed a mixed methods design (using a survey, classroom observation and interviews) to examine FLA among 10 Saudi university students. The researcher found that all learners exhibited FLA, and it presented a great challenge for a few of them. More specifically, some students exhibited extremely high levels of anxiety with debilitating effects that caused them to quit the English course. A few factors were reported by a large number of the participants as being some of the main causes of anxiety, such as the teacher, teacher-student interaction and fear of negative evaluation. Al-Saraj (2013) interpreted the finding in light of the recent teaching methods employed by English teachers in Saudi Arabia that were different from what was used in public secondary schools: "Student-teacher interactions were a major source of anxiety for students, and this might have been because the interactions were in the context of unfamiliar expectations and assignments… teachers behaved in ways that were atypical within the Saudi Arabian culture" (p. 18).

Contrary to the aforementioned study, Javid (2014) conducted a quantitative investigation of FLA among 216 students at Taif University in Saudi Arabia, and found that the learners exhibited a moderate degree of FLA. Sources of anxiety were ranked as follows: communication apprehension, general classroom anxiety, fear of negative evaluation and test anxiety. This finding was supported by another large-scale study, namely Alrabai's (2014) research with Saudi learners of English, which also found that most of the learners exhibited a moderately high degree of anxiety. Alrabai (2014) explained that:

> This phenomenon could be attributed to several causes, including the religious, social, and cultural misconceptions usually linked to learning of EFL in Saudi Arabia. Another contributing factor could be the nature of EFL learning/teaching in Saudi Arabia, where the teacher is usually seen as an autocratic figure … a threatening atmosphere in which

learners' errors are not tolerated; the lack of the learners' involvement in class discussion … overcrowded EFL classes ... [and] a ready-made EFL curriculum that often cares for the quantity rather than the quality of the content. (p. 14)

As we can see, both Javid (2014) and Alrabai (2014) conducted quantitative studies with reasonably large samples and used the same scale, FLCAS, to assess anxiety among their participants. In addition, both researchers found that Saudi students had moderate levels of FLA, a finding consistent with that of the present study, while Al-Saraj (2013) reported a relatively high level of anxiety among her participants. Although Al-Saraj's study had the benefit of triangulating data from different sources, caution is necessary when interpreting the results of this study, as its sample size is small (only ten students), which makes it unwise to generalise confidently on the results. Nevertheless, the findings of the above studies are particularly pertinent to the current study, as they provide a useful picture of the potential effects of several classroom factors on the FLA experienced by the students.

Also in the Arab world, Ezzi (2012) and Al-Shuaibi et al. (2014) conducted quantitative studies using translated and adapted versions of the FLCAS to assess anxiety among 163 Yemeni and 488 Jordanian university students, respectively. In line with Al-Saraj's (2013) findings, the researchers found that the majority of the students had high degrees of FLA. Significantly, Ezzi (2012) interpreted this finding by explaining that "the use of communicative methodologies implies greater demands on students to communicate using English and therefore they are highly exposed to anxiety-inducing situations" (p. 71). In a related experimental study, Dahbi (2015) sought to understand Moroccan university students' feelings about taking English tests. The researcher found that most of the participants felt uncomfortable when they learned they would take an English test and preferred to learn the language without taking tests. Before the test, only a small percentage of the students had positive feelings about their performance on the test, while the majority were afraid they

would perform poorly. Sources of anxiety included fear of running out of time and failing the course. Importantly, a good number of the students reported that their anxiety interfered with their thinking and planning. After taking the test, more than half of the students were worried about their scores, and more than third of them were not pleased with their performance. Dahbi (2015) concluded persuasively that this data provided evidence for Wine's (1982) Cognitive-Attention theory of test anxiety, which states that "the negative influence of test anxiety is due to the fact that test-anxious persons divide their attention between personal variables and variables connected to the task. In contrast, non-test-anxious persons are able to focus their attention more on the task itself" (p. 65). This finding matches that of the present study, as test anxiety was found to be a primary source of anxiety to the learners.

As with the majority of the research studies reviewed in this chapter, the above studies are limited by their dependence on quantitative data collection and analysis. Research that combines both quantitative and qualitative methods in a manner similar to the present research would be more appropriate, as Yan and Horwitz (2008) pointed out:

> Although the findings of previous studies point to several potential sources and consequences of language anxiety, their reliance on questionnaires do not allow for an examination of how anxiety interacts with other learner or situational factors to influence language learning. Studies that encourage learner reflection through interviews or diary entries would seem to have the potential to yield a richer understanding of learners' perceptions of how anxiety functions in their language learning, which, in turn, might lead to a clearer understanding of the general role of anxiety in language learning. (p. 153)

Nonetheless, employing reasonably large sample sizes together with valid and reliable scales to collect data made the findings of the above studies potentially significant. Of particular importance to the present study is the need to consider whether the teaching methods employed by EFL teachers in the Arab world contribute to the increased levels of FLA experienced by the students. Secondly, there is a need to investigate the extent to which

test anxiety interferes with students' performance and inhibit their ability to concentrate and recall information.

Still in the Middle East, Rezazadeh and Tavakoli (2009) assessed test anxiety among 110 university students in Iran using Suinn's (1969) Test Anxiety Questionnaire. In contrast to the finding of the present study, the researchers found that only 11.8 per cent of the participants experienced test anxiety. On the contrary, Hashemi's (2011) qualitative investigation, carried out with 60 Iranian students, revealed that most of the participants exhibited a high degree of FLA. Three major sources of anxiety were reported by the students: a strong desire to attain a native-like accent, the classroom environment which emphasised the accurate usage of the language and the course requirement of doing oral presentations in class. On the other hand, participation in cooperative tasks was found to help reduce the students' anxiety. This last finding is particularly relevant to the present study since one of its main goals is investigating the links between learning styles and affective factors, as will be discussed in Chapter 7.

In Turkey, Kayaoğlu and Sağlamel (2013) undertook a qualitative study with 30 university students. In line with the majority of the other studies conducted in the Middle East, the analysis of the interview data showed that most of the learners found English the most anxiety-provoking course and attributed their anxiety to the fact that English was a FL to them and consequently, they felt they were not able to express their ideas clearly in it.

Turning to the East Asian context, Liu (2006) conducted a mixed methods study, employing a questionnaire modified from the FLCAS, observations, journals and interviews to examine FLA among 547 Chinese university students. Data analysis showed that a large percentage of the learners at each proficiency level were anxious about speaking English. More specifically, being called on to respond to a question in class was a major source of

anxiety for the learners, while participating in group activities and exposure to spoken English helped ease the learners' anxiety when communicating in it. In a later study, Liu and Jackson (2008) carried out a quantitative study with 547 Chinese university students, using a modified version of the FLCAS, and found that more than one third of the learners suffered from FLA during their English classes. Confirming Horwitz et al.'s theoretical assumptions (discussed in Section 3.3.1.4 above) the students were afraid of negative evaluation, tests and speaking in public. Importantly, Liu and Jackson (2008) propose that:

> Reducing students' anxiety and enhancing their participation in English class to improve their learning of English may be possible if teachers discuss with their students in the very first lesson(s) the significance of speech communication in class and share with them the feeling of anxiety experienced by many people when they learn an FL. If aware of these two issues, students may consciously take steps to become more active and confident in their English class; they also may be more willing to risk using the language more. (p. 82)

Another influential study was undertaken by Yan and Horwitz (2008), who interviewed 21 Chinese university students about their feeling of anxiety when learning EFL. Findings showed that FLA was directly influenced by such factors as comparison with peers, learning strategies and language learning interest. This finding is particularly relevant to the present study since a few participants reported that comparison with peers was a major source of anxiety for them, as will be discussed in Chapter 6. Moreover, the factors that indirectly influenced anxiety included regional differences, test types, gender, class arrangement, teacher characteristics, parental influence and language aptitude (Yan & Horwitz, 2008, p. 173). The researchers concluded that "language anxiety exists within a complex network of learning factors and that the goal of lowering students' language anxiety cannot be achieved without also addressing a number of these other factors" (p. 174). More recently, Huang (2012) used the FLCAS to examine FLA among 121 Chinese university students and found that 68 per cent of the learners experienced a moderate level of anxiety.

Surprisingly, an examination of the findings of the above studies with different research designs (i.e. quantitative, qualitative and mixed methods) reveals that similar to their peers in the Middle East (e.g. Saudi Arabia, Yemen, Jordan, Iran and Turkey), the majority of Chinese university students experience anxiety when learning English. Significantly, the evidence provided by these studies suggest that particular attention should be paid to the social (e.g. parental influence) and classroom (e.g. the teacher and peers) variables involved in language learning, as they have been found to play a crucial role in influencing the anxiety levels among the learners.

In Southeast Asia, a large number of studies (Andrade & Williams, 2009; Chang, 2008; Chang, 2011; Effiong, 2013; Huang, Eslami & Hu, 2010; Wu, 2010) also found that the majority of Asian students experienced high levels of FLA when learning English. Andrade and Williams (2009), for example, undertook a quantitative investigation using an adapted and translated version of Matsumoto, Kudoh, Scherer and Wallbott's (1988) questionnaire. Data analysis showed that the majority of the students experienced anxiety, and for a few of them, the effects were debilitating. In his mixed methods study, Effiong (2013) used a Japanese version of the FLCAS together with classroom observations and interviews to examine FLA anxiety among 142 Japanese university students. Data analysis showed that Japanese students had remarkably higher anxiety levels than their other Asian peers (such as Chinese EFL learners). Effiong (2013) explained this finding in light of the cultural differences between Japan and the rest of Asia together with the curricula and instructional methods used in the Japanese educational institutions. More specifically, Japanese students are not accustomed to speaking actively in class, which makes them apprehensive when asked to do that in a FL learning context. Anxiety could also arise when the students have difficulty comprehending the material or when the class is fast paced. Wu (2010) also used the FLCAS

together with interviews to examine FLA among 66 Taiwanese students and found that the

majority of them exhibited high degrees of anxiety in their English classes. Significantly,

students who used English to communicate outside the classroom for more than 15 hours a

week reported lower levels of anxiety than those who did not use English frequently. In a

study of 191 university students learning English in Taiwan using a revised version of the

FLCAS, Chang (2011) found that the participants felt more anxious when they spoke English

inside class than outside it and that giving individual presentations made them more anxious

than participating in group presentations. This finding is of particular significance to the

present study, more specifically to its third research question which attempts to investigate the

relationship between learning styles and affective factors (see Chapter 7 for further discussion

of this issue).

Surprisingly, a common finding obtained from the studies reviewed in this section is

that EFL learners from different cultural backgrounds experienced relatively high levels of

FLA. Despite the fact that the findings revealed several potential sources of FLA, the

dependence of some studies on quantitative surveys (Alrabai, 2014; Andrade & Williams,

2009; Al-Shuaibi, et al., 2014; Chang, 2008; Chang, 2011; Dahbi, 2015; Ezzi, 2012; Hashemi,

2011; Huang, 2012; Huang et al., 2010; Javid, 2014; Liu & Jackson, 2008; Rezazadeh &

Tavakoli, 2009) did not allow for an exploration of the manner in which anxiety interacted

with other learner or contextual variables to impact the learning process. On the other hand,

studies that incorporated a qualitative element such as interviews or observations (e.g. Al-

Saraj, 2013; Effiong, 2013; Kayaoğlu & Sağlamel, 2013; Liu, 2006; Wu, 2010; Yan &

Horwitz, 2008) provided a more detailed picture of the key role that anxiety played in

language learning. More specifically, the sources of anxiety which were identified in the

above studies included: personal and interpersonal issues such as comparison with peers,

public speaking, fear of negative evaluation, fear of making mistakes and tests. Anxiety was also found to be influenced by the teacher's characteristics, teaching methods, teacher-student interaction and the learning context. What makes the present research different from the studies reviewed above is that it attempts to not only identify the associations between certain individual characteristics and FLA but also to develop a profile which illustrates the manner in which anxiety operates with learner and contextual variables to influence the language learning process. In addition, this study aims to extend the research on FLA among Arab learners of English by providing a detailed picture of the anxiety experienced by EFL learners in Saudi Arabia.

3.3.1.6 The relationship between anxiety and English language proficiency and performance

Previous studies have extensively investigated the association between FLA and success in FL learning, and contradictory findings have been reported. Whereas the majority of the studies have found a negative impact of anxiety on language learning (e.g. Chen & Chang, 2009; Ebrahimi, 2013; Hashemi, 2011; Huang, 2012; Liu, 2006; Liu & Jackson, 2008; Liu & Ni, 2015; Makrami, 2010; Naghadeh, Naghadeh, Naghadeh & Aminpour, 2014; Rezazadeh & Tavakoli, 2009; Serraj & Noordin, 2013; S. Wang, 2010; Wu, 2011), the benefits of facilitative anxiety have also been observed (e.g. Al-Shuaibi et al., 2014; Park & French, 2013).

In the Saudi context, a large-scale quantitative study was undertaken by Makrami (2010), who investigated the affective factors that intervened with learning English among 545 students at Jazan University in Saudi Arabia. Among other purposes, the study aimed to examine anxiety among the participants and to explore how it correlated with achievement.

Using a translated version of Gardner's (1985) Attitude/Motivation Test Battery (AMTB), Makrami (2010) found a significant negative correlation between anxiety and final scores on the English module. In a related context, Rezazadeh and Tavakoli (2009) reported a negative relationship between test anxiety and course scores among Iranian learners of English. It was observed that the more anxious the students were about testing, the lower the scores they received. These findings were supported by several other studies, which found a negative correlation between FLA and listening comprehension scores (e.g. Chen & Chang, 2009; Hashemi, 2011; Naghadeh et al., 2014; Serraj & Noordin, 2013; S. Wang, 2010), reading comprehension scores (e.g. Huang, 2012; Wu, 2011), oral performance (Ebrahimi, 2013) and writing (Liu & Ni, 2015). In this regard, Chen and Chang (2009) explain that:

> Anxiety causes worry, and worry always impairs performance on tasks requiring high attention or short-term memory. In other words, FL anxiety consumes the working memory's processing resources, leaving less capacity for cognitive tasks. If the task requires a large temporary storage capacity, the learning of anxious learners will be impeded …. Moreover, students with higher linguistic ability are less anxious and perform better than students with lower linguistic ability. (pp. 740–741)

Ebrahimi (2013) further added that both learner factors and learning challenges (e.g. public speaking, fear of making mistakes or failing the course, difficulty expressing one's opinions and having a strict teacher) can contribute to the feeling of anxiety in the classroom. Likewise, FLA was also found to negatively correlate with English language proficiency (Liu, 2006) and self-rated proficiency (Liu & Jackson, 2008). These finding are supported by the results of this study, which revealed a significant negative relationship between learners' scores on the Anxiety Scale and their performance in the English module (as measured by their total scores on the English module). The present study also found the learners in the middle proficiency group to be generally more anxious than their peers in the high proficiency group. By providing a useful picture of the potential link between these two important variables, the

above findings give further support to the belief that anxiety can play a crucial role in the success or failure of the language learning process (Horwitz, 2000).

Contrary to the aforementioned research, Al-Shuaibi et al.'s (2014) study with university students in Jordan (reviewed in Section 3.3.1.5 above) found a significant positive relationship between the participants' GPA and their scores on the three constructs of anxiety as well as on the whole FLCAS. The strongest correlation was obtained between GPA and fear of negative evaluation. That was followed by test anxiety and communication apprehension. Al-Shuaibi et al. (2014) interpreted these findings in light of the learners' psychological well-being: "Distinguished students may experience a high level of self-awareness; their self-esteem and perception are closely related to the process of achievement. This causes students to be more sensitive to negative evaluation and more concerned about communication apprehension for fear of committing errors" (p. 202). Supporting these findings, Park and French (2013) found that highly anxious learners earned better scores than those with low anxiety. This finding led the researchers to argue that the former group were experiencing facilitating (instead of debilitating) anxiety, which caused them to work harder and consequently, enhanced their performance.

To sum up, the research reviewed in this section has indicated no consistent link between FLA and learning success. Since anxiety is a multidimensional construct, several learner and situational factors could have intervened in the process. Hence, a more thorough investigation of the role of these variables is needed. This study attempts to fill this gap since, to the best of my knowledge, no large-scale study has employed a mixed methods design comprising both quantitative and qualitative methods to investigate FLA in the Arab world in a thorough manner that takes into consideration several learner and classroom factors.

3.3.2 Motivation

This section provides an overview of motivation and its major definitions that are relevant to language learning. Rather than providing a chronological review of all major L2 motivation models and classification systems, I discuss a few significant issues that are pertinent to my research and provide a detailed discussion of the theoretical framework underlying the present research. Finally, empirical studies that are significant to the methodology and interpretation of the findings of this study are reviewed.

3.3.2.1 Overview of motivation in language learning

As explained in Chapter 1, L2 motivation is considered a key affective factor that contributes to enhancing language proficiency and achievement. Almost fifty years ago, Corder (1967) maintained that "given motivation, it is inevitable that a human being will learn a second language if he is exposed to the language data" (p. 164). Rubin (1975) also considered motivation an essential characteristic of the good language learner. Gardner (1985) later described motivation as one of the most effective factors influencing the L2 learning process and more recently, Dörnyei (2001a) emphasised the significance of motivation by pointing out that "99 per cent of language learners who really want to learn a foreign language (i.e. who are really motivated) will be able to master a reasonable working knowledge of it as a minimum, regardless of their language aptitude" (p. 2). By the same token, even skilled individuals are unlikely to succeed in L2 learning if they lack adequate motivation (Dörnyei, 2001b). Hence, it can be concluded that "motivation is often seen as the key learner variable because without it, nothing much happens" (Cohen & Dörnyei, 2002, p. 172).

The field of L2 motivation was established in the late 1950s by the two Canadian social psychologists, Gardner and Lambert, who investigated the impact of several cultural and

social factors on individuals' motivation to learn the language of another community. L2 motivation research continued to be influenced by the social psychological approach of Gardner and his colleagues until the 1980s. During that time, the model underwent a few revisions in order to examine the social and educational aspects of motivation and their influence on language learning. That was also driven by Dörnyei and Ottó's (1998) theorisation of motivation as a complex and dynamic process that can increase or decrease in intensity over time.

3.3.2.2 Prominent definitions of motivation

The term motivation is generally used to describe a drive that directs an individual towards a certain goal (Pintrich & Schunk, 2002). It is generally challenging to give a straightforward definition of motivation since it is a complex construct, and there is considerable debate about its exact nature and what aspects of it should be emphasised.

White (1977), for example, describes motivation as "the processes involved in arousing, directing and sustaining behaviour" (p. 2), and Brown (1980) considers motivation "an inner drive, impulse, emotion or desire that moves one to a particular action" (p. 112). The first influential definition of L2 motivation was proposed by Gardner (1985), who defines it as "the combination of effort plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language" (p. 10). In this definition, Gardner associates motivation with the constructs of effort, desire and attitudes as he believes they are fundamental to any language learning endeavour.

In the 1990s, however, more elaborate definitions of motivation were put forth by other leading pioneers in the field. Woolfolk (1993), for instance, points out that "the study of motivation is essentially a study of how and why people initiate actions directed towards

specific goals and persist in their attempts to reach these goals" (p. 361). Williams and Burden (1997) also suggest that motivation may be interpreted as "a state of cognitive and emotional arousal, which leads to a conscious decision, and which gives rise to a period of sustained intellectual and/or physical effort in order to attain a previously set goal" (p. 121). Adding a temporal dimension to motivation, Dörnyei (1998) depicts it as a process and regards it as a powerful, driving force that determines the whole course of action from selection to accomplishment of goals. Dörnyei points out that motivation refers to the "process whereby a certain amount of instigation force arises, initiates action, and persists as long as no other force comes into play to weaken it and thereby terminate action, or until the planned outcome has been reached" (p. 118). More recently, Ushioda (2008) explains that motivation describes "what moves a person to make certain choices, to engage in action, and to persist in action" (p. 19).

To sum up, numerous attempts have been made to conceptualise motivation in general and L2 motivation in particular, reflecting major shifts in the field. It could be concluded that motivation initiates from several different sources (e.g. intellectual and psychological factors), empowers individuals and directs them towards achieving their goals. One of the mains aims of this research is to assess Saudi students' motivation to learn English and to explore the factors that could influence it.

3.3.2.3 Major types of motivation and the theoretical framework supporting this study

Dörnyei and Ushioda (2011) explain that research on L2 motivation has grown independently of work on general learning motivation, as it was prompted by a necessity to account for the various cognitive, affective, behavioural and social elements that learning a new language system involves. Despite the fact that different motivation models provide

different accounts of learners' behaviours, they generally agree that motivation influences three essential components of one's behaviour: "the choice of a particular action, the persistence with it, [and] the effort expended on it. In other words, motivation is responsible for why people decide to do something, how long they are willing to sustain the activity, how hard they are going to pursue it" (Dörnyei, 2001a, p. 8).

Among the most influential of the early works on L2 motivation was Gardner and Lambert's (1972) socio-educational model, which focuses on how individuals view the target language and its community. This model distinguishes two types of motivation: integrative and instrumental orientations. Integrative orientation refers to a desire to learn a language in order to communicate with its members and adapt to their culture. Instrumental orientation, on the other hand, is defined as learning a language for some practical reasons such as getting good scores, pursuing studies overseas or improving one's career opportunities. The researchers were the first to point out that learning an L2 is different from learning other academic subjects as it "involves imposing elements of another culture into one's own life space" (Gardner & Lambert, 1972, p. 193). Although the socio-educational model has been influential in the L2 motivation literature for several decades, its core concept, integrativeness, has come under attack by a few scholars, such as Dörnyei (2005) and Norton (2013). Opponents point out that in a globalised world, a large percentage of individuals learn an L2 in order to communicate with other foreigners. This clearly depicts the status of English, which has become an international language and consequently, become gradually independent of its native speakers and their culture (Csizér & Dörnyei, 2005). The socio-educational model has also been criticised for not taking into consideration the influence of the classroom environment on L2 motivation, which has led several scholars to call for a "a more practitioner-validated, classroom-based concept of motivation" (Ushioda, 2008, p. 20).

Consequently, researchers have started to broaden their paradigms, and research on L2 motivation has significantly widened. In fact, theories such as self-determination theory (SDT), achievement motivation theory, goal-setting theory, attribution theory, expectancy-value theory, the process-oriented model and the L2 motivational self-system have all made valuable contributions to our understanding of motivation. It is beyond the scope of this study to review all these theories. Of particular interest to the present research is SDT (Deci & Ryan, 1985), which distinguishes between intrinsic motivation (IM) and extrinsic motivation (EM) on the basis of different degrees of regulation (i.e. the ability to exercise control over one's behaviour). This is because the theory identifies the sources and outcomes of individuals' endeavours and the circumstances that support or hinder them, as will be explained in the subsequent paragraphs.

SDT is concerned with the "volitional or self-determined behaviour and the social and cultural conditions that promote it" (Ryan, 2009, p. 1), and it distinguishes between different types of IM and EM. IM refers to "the doing of an activity for its inherent satisfactions rather than for some separable reason. When intrinsically motivated, a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards" (Ryan & Deci, 2000, p. 56).

Vallerand, Blais, Brikre and Pelletier (1989, cited in Vallerand, 1997) identify three subtypes of IM:

1. Knowledge: performing an activity for the inherent pleasure and satisfaction of acquiring knowledge or exploring new ideas.

2. Accomplishment: the feeling related to mastering a task, achieving a goal or overcoming a challenge and feeling fulfilled.

3. Stimulation: performing an activity "in order to experience pleasant sensations associated mainly with one's senses", such as seeking pleasure, fun or excitement (Vallerand, 1997, p. 280).

What these three subcategories of IM have in common is the sense of satisfaction that learners obtain from performing the task at hand. Indeed, Deci and Ryan (1985) propose that IM is promoted when three basic psychological needs are satisfied:

1. Autonomy: viewing the learning task as being self-directed rather than externally manipulated.

2. Competence: perceiving oneself as being capable of achieving required goals and avoiding undesirable consequences.

3. Relatedness: connecting with the immediate community and considering oneself part of it (Deci & Ryan, 1985).

Deci (1992) explains that individuals with a high sense of self-determination perform a task "with a full sense of wanting, choosing, and personal endorsement" (p. 44). van Lier (1996), however, points out that even when learners feel autonomous, competent and related to an activity, their IM alone is not enough to sustain the learning process: "Most teachers and parents will attest to the prevalent view that children and students will not move with sufficient enthusiasm and alacrity towards the goals of exemplary citizenship and outstanding academic achievement, if guided by nothing more than intrinsic motivation" (p. 110).

In contrast to IM, EM encourages a person to perform an action in order to earn a reward or avoid punishment rather than for pleasure or enjoyment. It is "a construct that pertains whenever an activity is done in order to attain some separable outcome" (Ryan & Deci, 2000, p. 60). Deci and Ryan (1985) categorise EM into four subtypes, based on the degree of self-determination they involve through the processes of *internalisation* and

integration. According to Ryan and Deci (2000), "internalization refers to people's 'taking in' a value or regulation, and integration refers to the further transformation of that regulation into their own so that, subsequently, it will emanate from their sense of self" (p. 71). The subtypes of EM are:

1. External regulation: activities controlled by external demands, such as obtaining a reward (e.g. marks or praise) or avoiding punishment (e.g. failing a course). Hence, this is the least self-determined category of EM.

2. Introjected regulation: occurs when people perform an action under pressure or externally imposed rules such as avoiding shame or guilt or gaining people's respect.

3. Identified regulation: occurs when people regard a specific behaviour as valuable and adopt it as their own. Subsequently, they carry it out with a great degree of autonomy and do not feel pressurised to perform it.

4. Integrated regulation: occurs when identified regulation becomes embraced as part of one's own interests and beliefs. Hence, this is the most self-determined category of EM. Since behaviours are still performed for their external value rather than their inherent worth, integrated regulation belongs to EM, instead of IM (Deci & Ryan, 1985).

The third category proposed by Deci and Ryan (1985) is amotivation, which refers to the state of lacking any motivation to perform an act. In this case, individuals have no motive for carrying out a task, and they are likely to quit.

Pittan, Boggiano and Ruble (1983) caution that learners whose main motive in performing a task is extrinsic do not often exert adequate effort when undertaking it, which may have adverse effects on their learning. On the other hand, learners who are driven by IM are more likely to attain their objectives and achieve higher proficiency (Dörnyei, 1990). Other scholars argue that IM is not always the most appropriate path to learning success. For

example, when a task does not capture learners' interest, EM becomes more effective to achieve the learning goals (Vallerand, Pelletier & Koestner, 2008). Thus, IM and EM could best be viewed as operating in conjunction with each other to promote learning (van Lier, 1996).

The view of motivation adopted in the present study is based on the above assumptions, and the types of motivation exhibited by the participants are examined in order to assess their relevance to the participants' learning goals. According to Deci and Ryan (1985), the different categories of motivation fall on a continuum, depending on the degree of control or autonomy involved in each of them. It starts with the state of amotivation on the left, followed by the four categories of EM in the middle and finally IM on the right. This is illustrated in figure 3.1 below.
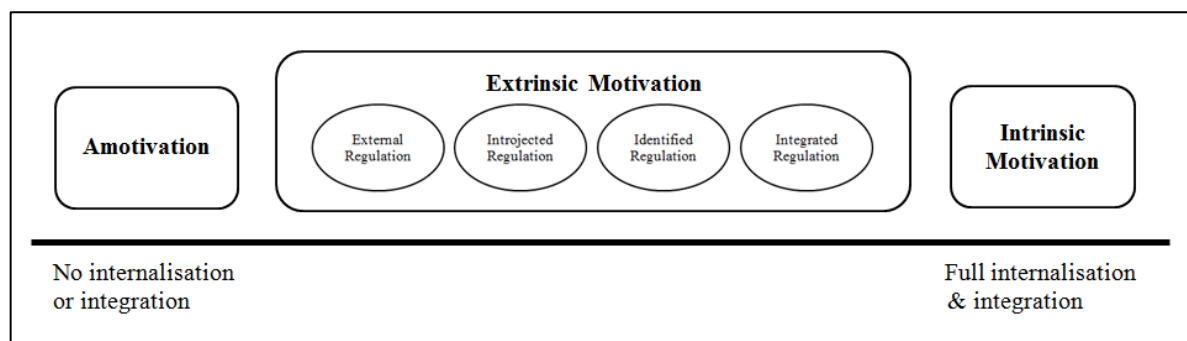
Figure 3.1. Motivation continuum in SDT (Adapted from Ryan & Deci, 2000, p. 61).

Ryan and Deci (2000) explain that the motivation continuum demonstrates the process of motivational change; however, individuals do not necessarily progress through all the stages and may proceed in different directions. The researchers explain that "one does not have to progress through each stage of internalization with respect to a particular regulation; indeed, one can initially adopt a new behavioral regulation at any point along this continuum depending upon prior experiences and situational factors" (Ryan & Deci, 2000, pp. 62–63).

For instance, learners may decide to participate in a task in anticipation of a good score on the course (i.e. external regulation); however, the activity may stimulate their interest, and consequently, they find themselves intrinsically motivated to complete it. Thus, they are likely to skip the other categories of EM and go directly to IM. Moreover, an individual can have a number of different motives for learning a language although a few of them may be of greater importance than the others (Noels, 2001). Nonetheless, even when internalisation and integration are involved in the process, "externally-imposed regulation always maintains its extrinsic identity because it is not innate and is not done for simple pleasure or interest, and is externally imposed" (Murray, 2005, p. 15).

Ryan and Deci (2000) further suggest that the social environment can have significant effects on supporting IM and promoting the internalisation and integration processes involved in EM: "Social contextual conditions that support one's feelings of competence, autonomy, and relatedness are the basis for one maintaining intrinsic motivation and becoming more self-determined with respect to extrinsic motivation" (p. 65).

Around the beginning of the 21st century, Noels, Pelletier and Clement (1999) started to implement the principles of SDT in the L2 learning field by examining the impact of the different types of motivation on learners of French in Canada. The researchers found positive relationships between IM and identified regulation on the one hand and the participants' desire to carry on their learning of French.

Moreover, it should be pointed out that a few researchers argue that integrative orientation can be connected with IM and that instrumental orientation is equivalent to EM (Dickinson, 1995). Nevertheless, I agree with Gardner and Tremblay's (1994) view that integrative and instrumental orientations denote individuals' ultimate aims in learning an L2, instead of having an inherent interest in the activity itself. Hence, these two types of

orientations could be related to EM. In addition, the two classification systems relate to different learning perspectives: IM involves the task and the learning context, while integrative orientation is related to social attitudes towards the L2 culture and a desire to interact with its speakers (MacIntyre, Clément, Dörnyei & Noels, 1998).

The SDT framework is particularly significant to this research, as it illustrates the gradual internalisation of external motives and thus, considers motivation a process, instead of a static state. This is consistent with Dörnyei and Ushioda's (2011) view of motivation as "the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised and (successfully or unsuccessfully) acted out" (p. 9). Moreover, Brophy (1999) argues that SDT is the most influential and significant work that depicts IM in the classroom, and Noels, Pelletier and Vallerand (2000) maintain that "SDT offers a parsimonious, internally consistent framework for systematically describing many different orientations in a comprehensive manner" (p. 35).

In 2000, Noels, Pelletier, Clément and Vallerand developed the Language Learning Orientations Scale: Intrinsic Motivation, Extrinsic Motivation, and Amotivation (LLOS - IEA) in order to assess three types of IM (knowledge, accomplishment and stimulation), three types of EM (external regulation, introjected regulation and identified regulation) and amotivation. The LLOS-IEA is a 7-point scale that asks students to rate the extent to which the suggested reasons correspond with their own reasons for learning an L2. Responses range from 1 (Does not correspond at all) to 7 (Corresponds exactly), which means that a high score on the scale reflects a strong agreement with the suggested reasons. Guided by the theoretical assumptions of the SDT, I have included a few items from the LLOS-IEA in the Motivation Scale used in the present study, as will be explained in the following chapter.

3.3.2.4 Previous studies on motivation in EFL learning

This section reviews previous research that aimed to assess the levels and types of motivation exhibited by EFL learners in different parts of the world, the factors that influence it and its possible effects on language learning. As pointed out previously, only recent studies (i.e. those conducted in the last ten years) that involved EFL learners at a university level are included in the review. Hence, it is out of the scope of this study to review research undertaken in ESL, e-learning, school and postgraduate contexts. In the following section, I discuss four studies conducted to explore the motivation of English learners at different universities in Saudi Arabia.

To begin, Javid et al. (2012) attempted to examine the main types of motivation exhibited by 709 Saudi students at Taif University in Taif using a self-developed questionnaire. Findings indicated that the learners exhibited higher degrees of EM than IM to learn the English language. The researchers interpreted this finding by suggesting that "the main objective of EFL learners is utilitarian because they have to study English either to qualify for their major subjects of study or to achieve better job opportunities after finishing their university degrees" (p. 292).

A relatively recent, small scale study was carried out by Aldosari (2014), who used an adapted version of Lo Castro's (2000) questionnaire to investigate the motivation levels of 50 Saudi students at King Khalid University in Abha. Similar to Javid et al.'s findings above, results showed that the learners were instrumentally (i.e. extrinsically) motivated to learn English. They wanted to learn English in order to earn good scores, go overseas, pass the course, and watch English films. Only a very small number of the participants were found to be integratively motivated to learn the language.

Al-Sharief (2013) examined the motivation of 365 Saudi students at Umm Al-Qura University in Makkah using Green's questionnaire together with a self-developed demotivation questionnaire. Interestingly, he found that the majority (90%) of the participants were motivated to learn English. Similar to Javid et al.'s (2012) and Aldosari's (2014) findings above, the students were only extrinsically motivated to learn the language. However, Al-Sharief (2013) reported that none of the participants was motivated by external regulation and that a large number of them were motivated by integrated or identified regulation. Another significant finding was that the majority of the students reported favourable attitudes towards English and its native speakers' culture and they expressed favourable views of their English teachers. In contrast, the learning environment, instructional materials and teaching methods were found to be demotivating for the students. This finding is of particular importance to the present study, as one of its objectives is to assess the influence of the classroom environment on the learners' motivation (See Section 6.4.2 in Chapter 6 for a discussion of this issue).

In contrast to the above studies, Elsheikh, et al. (2014) developed a questionnaire to examine motivation to learn English among 100 Saudi students at four branches of Taif University. Data analysis revealed that more than half of the participants were learning English only because it was an obligatory module (i.e. they were motivated by external regulation).

It should be pointed out that the above studies benefited from translating and pilot testing their questionnaires in order to assess their reliability before administering them to the main participants. On the other hand, they were limited in that the analyses they offered were wholly quantitative, which did not facilitate the exploration of the impact of different types of motivation on the participants' learning. In addition, caution is required when interpreting the

findings of these studies. Whilst three of them employed adequate sample sizes, Aldosari's (2014) research was limited by the small number of its participants. Nonetheless, these studies raised a few issues that are of consequence to the present research. First, there is a need to consider the extent to which certain types of motivation are predominant among the participants of this study. There is also a need to examine the extent to which certain personal and/or environmental factors have an impact on the participants' motivation to learn English.

Let us now look at some motivation research carried out in the rest of the Arab world and the Middle East in general in order to compare and contrast the types and levels of motivation of the EFL learners there with those of the Saudi learners mentioned above. To begin, Al-Tamimi and Shuib (2009) carried out a small-scale study in order to identify Yemeni students' motivation and attitudes towards learning English. A questionnaire adapted from Gardner's (1985) AMTB and Cooper and Fishman's (1977) Personal Motivational Construct was distributed to 81 students. Interviews were then carried out to complement and explain the data obtained from the questionnaire. In congruence with most of the findings discussed above, instrumental motivation (i.e. EM in SDT) such as considering English a university requirement, using English to carry out tasks efficiently and learning English to further one's studies received the highest mean score. Personal motives (i.e. IM in SDT), such as reading English books and enhancing one's status among friends came as the second source of motivation. On the other hand, integrative motivation was found to have the least impact on the students' learning. Al-Tamimi and Shuib (2009) attributed these findings to the fact that although the participants of their study regarded English as having a significant effect on their lives, they wanted to be "bilingual but not bicultural" (pp. 44–45).

In contrast to the majority of the studies reviewed in this section, one of the strengths of Al-Tamimi and Shuib's (2009) research was the triangulation of quantitative and qualitative

methods. Interviews were conducted to support the questionnaire findings and to provide a more comprehensive picture of the students' experiences. Nevertheless, the researchers provided no information on the validity or reliability of their modified questionnaire, and therefore, the findings of their study cannot be appropriately evaluated. Such issues can be addressed by computing the internal consistency and test-retest reliability of the questionnaire, as will be discussed in Chapter 4.

Gardner's (1985) socio-educational model was also adapted by Al Rifai (2010), who examined the attitudes, motivation and difficulties involved in learning English among 107 university students in Kuwait and the factors that influenced their motivation to learn it. Al Rifai designed a five-point Likert type questionnaire that consisted of seven sections. Data analysis revealed that high levels of integrative and instrumental motivation (i.e. EM in SDT) were displayed by the students. Additionally, factors such as the classroom environment and teachers' attitudes towards the students were found to have positive effects on motivation. It should, however, be pointed out that caution is necessary when interpreting the results of this study, as no information was provided on sample selection or data collection procedures. In the absence of adequate details, it could be difficult to assess the validity and reliability of the findings. This issue has been avoided in the present study by providing comprehensive information on the selection of the participants and the steps followed for the collection of both quantitative and qualitative data (see Sections 4.5 and 4.7 in Chapter 4).

At around the same time, Dwaik and Shehadeh (2010) developed a questionnaire to investigate the motivation of 127 university students in Palestine. In line with the results of the other Arab studies reviewed in this section, the motivation patterns dominant among Palestinian students were found to be extrinsic in nature. Significantly, the researchers conducted qualitative interviews with some students to explore this result and found that they

were learning the English language only because it was a required module. Thus, no participant was intrinsically motivated to learn it. Regarding the students' academic discipline, findings revealed a strong desire among engineering students to learn English. Dwaik and Shehadeh (2010) interpreted this observation in light of the scientific nature of this discipline. More specifically, as a large number of advanced resources in engineering are written in English, the students needed to learn the language in order to enhance their understanding and expand their knowledge of the field.

A relatively recent study was conducted by Alzubaidi, Aldridge and Khine (2016), who attempted to investigate the links between motivation and the learning environment among 994 university students in Jordan. The What Is Happening In this Class? (WIHIC) questionnaire was utilised to investigate the learners' views of their English class and the Engagement in English Language Learning and Self-Regulation Survey (EELLS) was used to examine L2 motivation. Data analysis showed positive relationships between the learners' motivation and their views of the learning milieu (namely, understanding the assigned tasks, working in a supportive environment and receiving equal opportunities to take part in class discussion). This raises an important issue in relation to one of the aims of the present study. In particular, it suggests that an area that requires attention is the influence of the learning environment on students' motivation and the need to assess classroom procedures and their roles in enhancing or reducing learners' involvement in the English class. In the same line, Boekaerts and Cascallar (2006) suggest that "researchers and teachers focus simultaneously on the students' self-regulation of the learning and motivation process as well as on the environmental triggers that affect these processes" (p. 202). Since there is scarcity in previous research that has investigated the impact of the learning context on L2 motivation in the Arab world, this research attempts to fill the gap by identifying a few important aspects of the

learning environment (e.g. the teacher and the tasks that the learners engage in when learning English in class) that could significantly impact motivation.

Before moving on, it is important to point out that, similar to the approach employed in the present research, all quantitative studies presented in this section employed survey questionnaires that were translated into the participants' native languages. This is necessary in order to avoid misunderstanding of the questionnaire items and consequently, to increase the accuracy of the responses. In addition, all questionnaires were piloted with a good number of participants and were found to have acceptable to high reliability.

Now let us examine a few motivation studies that were undertaken in the rest of the Middle East, more specifically, in Iran and Turkey. A significant quantitative study in this respect was undertaken by Chalak and Kassaian (2010), who used Gardner's AMTB to collect data from 108 Iranian learners of English. In contrast to the Arab participants in the studies discussed above, findings showed that Iranian students learned English for both instrumental and integrative reasons (i.e. EM, as explained in Section 3.3.2.3). They regarded English as being important in different aspects in life, and they had positive attitudes towards native English speakers.

Similar results were reported by Mehrpour and Vojdani (2012) in their study of 238 university students in Iran. The researchers found that EM was prevalent among the learners, as some of them were instrumentally motivated to learn English, while the others were integratively motivated to learn it. Examples of the learners' motives to learn English were: passing international tests of English, immigrating to English speaking countries, using computers and the Internet and acquiring knowledge about the culture of the English speaking communities. Mehrpour and Vojdani (2012) explain these findings by pointing out that "it seems that nowadays many individuals in Iran learn English not because they wish to become

bilinguals or have a love of the language, but rather because they want to have access to such things as scientific and technological information, global economics, and higher education" (p. 49). In line with the above studies, Bektaş-Çetinkaya and Oruç (2010) used a questionnaire adopted from Dörnyei's (2001) and found that Turkish students exhibited moderate levels of EM to learn the English language. Their need for getting a good job fell in the instrumental motivation category, whereas their need for having international friends belonged to integrative motivation.

In the East Asian context, the majority of Chinese university students were also found to be extrinsically motivated to learn English, as reported by Y. Wang (2010). Academic discipline and residing abroad were found to have no influence on L2 motivation, while having a family member with some proficiency in the English language was found to positively influence the learners' motivation. Y. Wang (2010) interpreted these results by suggesting that significant others act as "role models" and motivated those learners to get more involved with their English learning. Moreover, learners who often used English to communicate outside the classroom setting showed a higher degree of motivation than their peers who did not use it. This finding is supported by the data obtained from the present research, as will be discussed in Chapter 6. According to Y. Wang (2010), having the opportunity to use English in real-life situations made the learners appreciate the importance of the language and aroused their interest to learn it.

In congruence with the above findings, Liu (2007) and Chen (2014) found that the majority of their Chinese participants were extrinsically motivated to learn English. They reported instrumental reasons to learn it such as passing English tests, pursuing higher studies and getting a good job in the future. As with the participants of this study, those majoring in science had a higher level of motivation than humanities students. Chen (2014) explained this

finding by pointing out that science students needed the English language to learn about the latest developments in their academic disciplines (p. 55).

Interestingly, unlike the above Chinese studies, Pan at al. (2010) reported that most of their 50 Chinese participants were both intrinsically and extrinsically motivated to learn English. Intrinsic motives included: admiration for the English language and the lifestyle and culture of English-speaking communities and a desire to expand their knowledge about the world. Similar to other EFL learners in the different contexts discussed above, the students' extrinsic motives included: passing English tests, pursuing higher studies abroad, travelling overseas and securing a good job. It should, however, be pointed out that a major shortcoming of Pan et al.'s (2010) study is its small sample size, which did not allow the generalisation of its findings.

To sum up, the research discussed above maps a significant area of cross-cultural similarities and differences in the motivation exhibited by learners in different EFL contexts. In fact, the large number of studies reviewed in this section provides a useful benchmark with which to compare the findings of the present study. This also suggests a need to explore the effect of the learning environment on learners' motivation, as this could ultimately influence the success of the language learning process. This will be discussed in further detail in Chapter 6.

3.3.2.5 The relationship between motivation and English language proficiency and performance

Since motivation plays a crucial role in the language learning process, several researchers have attempted to investigate its precise relationship to success in language learning. While some studies have found English proficiency or achievement to be positively

influenced by motivation, other studies have reported no statistically significant relationship between these two variables.

To begin, Makrami's (2010) large-scale study (reviewed in Section 3.3.1.6 above) sought to explore how achievement correlated with the different motivation levels of the students. Findings revealed that a significant positive correlation existed between the learners' motivation and achievement in a general English course. This was consistent with Al Rifai's (2010) study of Kuwaiti learners of English (reviewed in the previous section) which found that the students whose English proficiency levels were above average were significantly more motivated to learn English than those with average proficiency.

Similarly, Liu (2007) found that the motivation of her Chinese participants positively correlated with their English language proficiency. More specifically, the more instrumentally motivated the students were to learn English, the higher the scores they achieved on English proficiency tests. Liu (2007) pointed out that:

> The rapid development of economy in China in recent years has yielded an increasingly high demand for university graduates with high English competency in various fields such as education, market, business and science and technology. Meanwhile, perhaps due to limited contact with English native speakers or the target language, the students were more instrumentally rather than integratively motivated to learn English. (p. 139)

This was consistent with two studies by Zheng (2010) and Srichanyachon (2012) carried out with Chinese and Thai students, respectively. Data analysis in both studies showed that motivation positively influenced achievement. Students who had a high level of motivation to learn English were more academically successful compared to their peers.

On the other hand, a few studies found different links between the different types of motivation and English proficiency. For example, Wang's (2008) study found two types of IM (knowledge and accomplishment) to correlate positively with English achievement (as measured by the students' scores on their final English test), while external Regulation

correlated negatively with the test scores. Wang (2008) provided interesting interpretations of these findings. He argued that students with high IM were dedicated to learning English and were autonomous learners, who devoted their time and efforts to language learning and employed appropriate strategies that led to successful learning outcomes. On the other hand, students motivated by external regulation learned English mainly because of external factors such as passing their English tests. Hence, if they did not receive immediate rewards, they were not likely to persist in English learning (Wang, 2008, p. 643).

A few of Wang's (2008) findings were supported by Pan et al.'s (2010) study (reviewed in the previous section) which found learners in advanced English classes to be more intrinsically motivated to learn English than those in other classes. This may indicate that IM can cause learners to be more involved and determined to carry out learning tasks, which can facilitate their achievement of the learning goals (Vansteenkiste, Lens & Deci, 2006).

3.3.3 Self-efficacy

In the following sections, I present a number of significant definitions of self-efficacy and explain its relationships with similar terms. I then discuss two major types of self-efficacy that are particularly relevant to FL learning. This is followed by a description of the theoretical model on which this study is based. Lastly, I provide a review of recent studies that have examined self-efficacy among EFL learners and discuss their significance and relevance to the present research.

3.3.3.1 Overview of self-efficacy in learning

Researchers have long held that learners' beliefs about themselves can have a significant influence on their behaviour (Schunk & Pajares, 2009). Self-efficacy is commonly

associated with the Canadian psychologist Albert Bandura and has developed from his (1986) social cognitive theory (SCT). The researcher proposes that individuals' judgments of their competence to perform a given task (i.e. their self-efficacy beliefs) can predict their ability to accomplish that task. Hence, self-efficacy refers to "the judgments of what one can do with whatever skills one has" (Bandura, 1986, p. 391). Accordingly, different individuals with similar abilities or the same individual in different circumstances may behave in different ways. In addition, self-efficacy beliefs are both task-dependent and context-dependent, as they involve specific decisions about specific situations (Zimmerman & Cleary, 2006). For example, a learner may feel more self-efficacious when learning English in a collaborative setting than when learning it individually or may feel less self-efficacious when speaking in English than when writing in it.

Previous research on self-efficacy has found this affective factor to be a strong predictor of behaviour (Bandura, 2006; Bong, 2006; Ehrman, 1996; McCollum, 2003; Pajares, 1996; Schunk & Miller, 2002). In fact, similar to the impact of motivation, perceived self-efficacy can influence the actions individuals take, the efforts they are willing to make and the degree of persistence they show when they encounter challenges (Bandura, 1997; Pajares, 2006). Therefore, one of the objectives of the present study is to examine the beliefs that Saudi university students hold about their ability to learn the English language and the ways in which these beliefs impact their learning behaviour.

3.3.3.2 Prominent definitions of self-efficacy

Some scholars have proposed general definitions of self-efficacy, while others have preferred to define the construct according to the domain or task involved. One of the most frequently cited definitions of self-efficacy, which is also adopted in the current study, is the

one proposed by Bandura (1986). It describes self-efficacy as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performance. It is concerned not with the skills one has but with the judgments of what one can do with whatever skills one possesses" (p. 391). Graham and Weiner (1995) also share this perspective by emphasising that self-efficacy is "an ability construct … that refers to individuals' beliefs about their capabilities to perform well" (p. 74). Hence, it describes those beliefs that could be strong indicators of performance. A similar definition was proposed by another pioneer in self-efficacy research, Schunk (1996) who suggests that self-efficacy beliefs describe "personal beliefs about one's capabilities to learn or perform skills at designated levels" (p. 360). Oxford and Shearin (1994) explain the reflective essence of this construct by stating that "self-efficacy is one's judgment of how well one can execute courses of action required to deal with prospective situations. It focuses on one's ability, creativity, adaptability, and capacity to perform in a particular situational context" (p. 21).

Some researchers (e.g. Bandura, 1997; Bong, 2006; Pajares, Miller & Johnson, 1999; Zimmerman & Cleary, 2006) even argue that individuals' assessment of their ability can influence their performance to a larger extent than their actual ability. Thus, learners with low ability but high self-efficacy can achieve better than those who have good ability but low self-efficacy. That is because the latter group are likely to avoid tasks they do not believe they are capable of carrying out satisfactorily to the end.

It is also necessary to point out that although the terms *self-efficacy*, *self-esteem*, *self-concept* and *self-confidence* are sometimes used interchangeably, they considerably differ theoretically. To begin, self-esteem pertains to individuals' positive and/or negative thoughts about themselves, which are influenced by such factors as cultural stereotyping and societal perceptions. Bandura (1997) explains that individuals may have a low sense of self-esteem

when they do not meet the expectations of other members of the society and points out that "self-esteem arises from personal competence; people derive pride from fulfilling their standards of merit. They experience self-satisfaction for a job well done but are displeased with themselves when they fail to measure up to their standards of merit" (p. 12).

Rather than reflecting a judgment of one's ability to perform a given task, self-concept indicates an overall belief about one's self-worth or value (Pintrich & Schunk, 2002). In addition, unlike self-efficacy, self-concept is neither a powerful predictor of behaviour nor is it influenced by contextual factors, since it is not associated with a particular domain or task (Bandura, 1997). In fact, individuals' self-efficacy beliefs can foster the development of positive self-concept, as their appraisal of their ability to achieve certain learning goals eventually impacts their overall self-evaluation (Bong & Skaalvik, 2003).

Moreover, Dörnyei (2001a) illustrates the difference between self-efficacy and self-confidence by pointing out that "self-efficacy is always specific to a concrete task whereas self-confidence is usually used to refer to a generalized perception of one's coping potentials, relevant to a range of tasks and subject domains" (p. 56). In other words, self-confidence pertains to individuals' estimate of their overall ability to perform a variety of behaviours appropriately. For this reason, Pajares et al. (1999) maintain that self-efficacy is a stronger predictor of learning success or failure than self-confidence.

3.3.3.3 Major types of self-efficacy

While self-efficacy can significantly impact the behaviour of individuals, "this does not mean that they can accomplish tasks beyond their capabilities simply by believing that they can. Competent functioning requires harmony between self-beliefs on the one hand and possessed skills and knowledge on the other" (Pajares, 2006, p. 342). Learners can more

accurately estimate their ability to carry out a certain task successfully when they are familiar with that task. This has led scholars (e.g. Schunk, 1996; Zimmerman, Bandura & Martinez-Pons, 1992) to differentiate between self-efficacy for performance and self-efficacy for learning.

When learners are required to perform a previously learned task, they often develop self-efficacy for performing the task by referring to their previous accomplishments. Hence, self-efficacy for performance is defined as an individual's belief in his/her ability to perform a certain behaviour using the skills he/she possess (Schunk, 1996), and this belief can often predict the individual's success more strongly than his/her actual skills (Bandura, 1997; Bong, 2006; Pajares et al., 1999; Zimmerman & Cleary, 2006). On the other hand, when the behaviour is unfamiliar to the learners, they lack the knowledge required to judge what skills are needed to perform it, and hence, they are not likely to able to judge their ability to succeed in it. In this case, learners estimate their competence according to their perceived abilities for self-regulatory learning. Thus, self-efficacy for learning refers to an individual's belief in his/her ability to learn new skills (Schunk, 1996).

Zimmerman and Bandura (1994) have cautioned that since some educators are not aware of the distinction between self-efficacy for performance and self-efficacy for learning, they erroneously assess the former in relation to academic achievement by collecting data about novel tasks for which learners have not yet developed the required skills. Therefore, in order to accurately examine this link in the present study, I assessed the learners' self-efficacy for performance in the middle of the academic year (i.e. when they were already familiar with the relevant learning tasks).

3.3.3.4 Theoretical framework supporting this study

Self-efficacy theories attempt to explain not only the extent to which individuals have confidence in their ability to carry out a certain behaviour but also the way in which that sense of confidence eventually impacts their success at performing the behaviour. As pointed out in Section 3.3.3.1 above, self-efficacy is a fundamental element of Bandura's (1986) SCT, which guided the conceptualization and development of the present study. This theory was originated from the social learning theory (SLT), which was developed in the last quarter of the 19th century. According to Bandura (1997), SCT is "a comprehensive theory that explains within a unified conceptual framework, the origins of efficacy beliefs, their structure and function, the processes through which they produce diverse effects, and their modifiability" (p. 10). Bandura further explains that his theory offers guiding principles to help individuals increase their control over their lives. That is because, as pointed out above, individuals' beliefs about their ability to execute certain behaviour can strongly determine their decisions about whether or not to perform that behaviour (Bandura, 1999).

Moreover, Bandura (1997) proposes a mutual relationship between self-efficacy and causal attributions. He explains that highly efficacious individuals often attribute negative outcomes to insufficient effort, while those with low self-efficacy tend to attribute them to lack of ability. Consequently, success is likely to enhance individuals' sense of efficacy if they attribute it to an internal cause, such as effort or ability, and the opposite is true for failure. These assumptions proved useful in interpreting the findings of the Self-efficacy Scale used in the current research, as will be discussed in Chapter 6.

It should also be pointed out that Bandura developed several questionnaires to assess self-efficacy for such issues as problem-solving, pain management, exercise and eating habits. To my knowledge, none of Bandura's questionnaires was concerned with L2 learning. Thus, I

designed my own scale to examine self-efficacy among Saudi learners of English in line with Bandura's theoretical framework mentioned above. Further details about this scale are provided in the following chapter.

3.3.3.5 Previous studies on self-efficacy in EFL learning

Existing research on self-efficacy beliefs provides sufficient evidence that they play an important role in the language learning process; nonetheless, only a few studies have been carried out on self-efficacy in the EFL learning field. Besides, to the best of my knowledge, such research has not been carried out in the Saudi context yet. Since learners' judgements of their ability to execute specific behaviours can predict their performance (see Section 3.3.3.1 above), an examination of self-efficacy in language learning among EFL learners in Saudi Arabia is necessary. The findings can be utilised to assist learners not only to identify their self-efficacy beliefs but also to assess their influence on English language performance.

To begin, Heidari, Izadi and Ahmadian (2012) used a Persian self-efficacy beliefs survey, adapted from a questionnaire developed by Nezami, Schwarzer and Jerusalem (1996), to investigate the self-efficacy beliefs of 50 university students in Iran. Data analysis revealed that the learners possessed a high sense of self-efficacy. A similar finding was also found by Tilfarlioğlu and Cinkara's (2009) in their quantitative study of 175 EFL learners in Turkey.

Last but not least, a different research design was employed by Magogwe (2006), who carried out a mixed methods study to assess self-efficacy for English language learning among 137 Botswana university students. The Morgan-Jinks Student Efficacy Scale (MJSES) was used to collect quantitative data. That was followed by interviews with 24 participants selected from those who had participated in the questionnaire phase. Findings revealed that the learners felt moderately self-efficacious about learning English. More specifically, they

believed they were able to learn English well but had average proficiency when using it for oral communication. The researcher speculated that the learners believed in their ability to learn English well because they were capable of passing their English tests, while their moderate level of self-efficacy in speaking English could be attributed to their limited use of English for daily communication. Equally important, the students may not have been provided with sufficient opportunities to practice speaking the language in the classroom, especially when a good number of teachers were using traditional lecturing. Consequently, the students did not develop the required confidence to speak in the target language. In contrast to all self-efficacy studies reviewed above, Magogwe's (2006) study benefits from triangulating quantitative and qualitative data. Similar to the methodology adapted in this study, the advantages of one approach can balance the weaknesses of the other, leading to more valid conclusions.

3.3.3.6 The relationship between self-efficacy and English language proficiency and performance

Although a large number of studies have indicated that self-efficacy beliefs can significantly influence learners' behaviour, the impact of self-efficacy on language learning and use has received relatively little attention in the Arab world. A few existing studies, however, have been conducted in other EFL learning contexts and attempted to assess self-efficacy for specific language skills such as reading and listening comprehension (e.g. Chen, 2007; Naseri & Ghabanchi, 2014; Naseri & Zaferanieh, 2012; Rahimi & Abedini, 2009). Other studies have been undertaken to examine possible links between self-efficacy and general English language proficiency and/or performance (e.g. Magogwe, 2006; Tilfarlioglu

& Ciftci, 2011; Tilfarlioğlu & Cinkara, 2009). Importantly, all these studies have found that self-efficacy positively and significantly influences the language learning process.

Tilfarlioğlu and Cinkara's (2009) study, for example, revealed that Turkish students' scores on self-efficacy correlated significantly with their English proficiency. Proficient students had high levels of self-efficacy, and vice versa. In addition, a significant positive correlation was found between the participants' self-efficacy beliefs and their GPA. The researchers provided two possible interpretations of these findings. First, they proposed a "cyclical relationship between self-efficacy and achievement. Students with high self-efficacy tend to be more successful and successful students tend to have higher self-efficacy beliefs" (Tilfarlioğlu & Cinkara, 2009, p. 136). The researchers also argued that when EFL students hold positive self-efficacy beliefs, they are likely to develop high IM and low anxiety levels and eventually, succeed in achieving their learning goals.

A more recent, smaller-scale study was carried out in a similar context by Tilfarlioglu and Ciftci (2011) using a self-developed self-efficacy questionnaire to assess the influence of self-efficacy on academic success among 250 university students in Turkey. In agreement with Tilfarlioğlu and Cinkara (2009)'s findings above, data analysis revealed a positive relationship between the two variables. Learners with higher self-efficacy were more successful in language learning than those with lower self-efficacy. These finding supported the researchers' argument that "individuals' self-efficacy beliefs have a significant effect on how they think, feel, motivate themselves and take actions. These beliefs can increase or diminish their success in every field of their lives" (Tilfarlioglu & Ciftci, 2011, p. 1285). It should, however, be pointed out that the researchers made no mention of the criteria they used to assess academic success of the students anywhere in their study.

Significantly, Magogwe's (2006) study of EFL learners in Botswana (reviewed in Section 3.3.3.6 above) also found that advanced and intermediate learners had a moderate level of self-efficacy, which was marginally higher than that of early learners of English. An unexpected result, however, was that a few advanced learners were found to have a low sense of self-efficacy. The researcher explained the last finding in light of a common personality characteristic in the Botswana society: individuals prefer to be modest when talking about their ability in an attempt to avoid being described as arrogant.

With regard to English language performance, Rahimi and Abedini (2009) carried out a small-scale quantitative study with 61 Iranian learners of English to investigate the role that self-efficacy plays in performance in a listening comprehension test. The researchers designed a self-efficacy scale and adopted a listening test from a TOEFL book to assess the participants' performance in listening comprehension. Data analysis revealed a significant positive relationship between the learners' self-efficacy beliefs and their scores on the listening test. A high level of self-efficacy had a positive impact on the learners' listening performance, and vice versa.

Significantly, this finding was supported by two larger-scale quantitative studies conducted to examine the impact of self-efficacy on Iranian students' achievement on a reading comprehension test. Using Ghonsooly and Elahi's (2011) Reading Self-Efficacy Questionnaire and the reading comprehension section of the Michigan proficiency test, both Naseri and Zaferanieh (2012) and Naseri and Ghabanchi (2014) found a significant positive relationship between the students' self-efficacy scores and their reading comprehension scores.

Likewise, a study of 277 Taiwanese university students by Chen (2007) found a strong, positive relationship between the students' sense of self-efficacy and their performance on a

listening comprehension test. Results also showed that self-efficacy was a strong predictor of performance, indicating that the students' achievement could be enhanced if they had a good self-efficacy level when carrying out listening comprehension tasks. As Chen (2007) points out, learners' beliefs that they possessed the abilities needed to accomplish listening comprehension tasks successfully lead them to become more interested in learning listening skills and more confident when encountering challenges in language learning, which had desirable effects on their performance.

3.4 Components of the affective factors profile of Saudi learners of English

As mentioned in Chapter 1, a main objective of this study is to design valid and reliable scales that accurately and comprehensively assess three major affective factors: anxiety, motivation and self-efficacy. These scales also take into consideration the distinctive cultural and social characteristics of Saudi learners of the English language. The results of the scales are then presented together as an affective factors profile of the learners, which comprises three major dimensions as follows:

1. Anxiety (General Classroom Anxiety, Communication Apprehension, Test Anxiety and Fear of Negative Evaluation): based on the theoretical assumptions of Horwitz et al.'s (1986) FLCAS.

2. Motivation (IM: Knowledge, Accomplishment and Stimulation and EM: External Regulation, Introjected Regulation and Identified Regulation): based on the theoretical assumptions of Deci and Ryan's (1985) SDT.

3. Self-efficacy: based on the theoretical assumptions of Bandura's (1986) SCT.

Details of the validity and reliability of these scales and the steps followed to develop them are provided in Chapter 4.

3.5 Chapter summary

This chapter discussed and critically reviewed three major affective factors (anxiety, motivation and self-efficacy) that were found to play a crucial role in influencing the language learning process. Prominent definitions, classifications and theoretical models of these factors that were of particular importance to this study were thoroughly examined. Finally, previous empirical studies on the impact of these affective factors on English language learning were reviewed, and their relevance to the present research was highlighted. In most cases, due to conflicting findings across studies and limited methods, there is a need for a more thorough investigation of these factors, especially in the Arab world. This study attempts to fill this gap, as will be explained in the following chapter.

Chapter 4: Methodology

4.1 Introduction

In this chapter, I describe the research design of the present study and provide a rationale for using a mixed methods approach to address the research questions set out in Chapter 1. I then present the data obtained from the pilot study and use it to evaluate the validity and reliability of the research instruments. In addition, I thoroughly describe the instruments used in the current study which are: a demographic information questionnaire, a survey questionnaire developed to examine language learning styles, another survey questionnaire developed to assess affective factors in language learning and semi-structured interviews. Next, I provide information on the target population and the method used to select the main study sample. This is followed by a discussion of the ethical issues taken into consideration when conducting this research. Finally, I illustrate the data collection procedures and the techniques used in analysing the data.

4.2 Research design

As explained in Chapter 1, the present study aimed to investigate the language learning styles that Saudi learners of English preferred to use, the affective factors (anxiety, motivation and self-efficacy beliefs) that impacted their learning experiences and the relationship between each of these variables and English language proficiency and performance. Since the ultimate goal of this study was to provide an optimal learning environment for the students, this research was guided by the philosophical assumptions of the pragmatic paradigm. Pragmatism was introduced by Charles Sanders Peirce in the 1870s, and it stipulates that "knowledge claims arise out of actions, situations and consequences rather than antecedent

conditions (as in postpositivism). There is a concern with applications – 'what works' – and solutions to problems …. Instead of methods being important, the problem is most important, and researchers use all approaches to understand the problem" (Creswell, 2003, p. 11). In order to obtain an in-depth understanding of the influence of the above-mentioned variables on the students' learning experiences, let us examine the three aspects that Guba and Lincoln (1994, p. 108) suggested for research paradigms:

A. The ontological aspect

Ontology is concerned with the question "what is the form and nature of reality and therefore, what is there that can be known about it?" (Guba & Lincoln, 1994, p. 108). Due to the nature of the pragmatic paradigm, which is interested in finding solutions to problems, the present research was less concerned with investigating what reality was and more focused on what worked best for the students (Harvard University, 2008). More specifically, this research was interested in addressing the students' concerns with regard to learning styles and affective factors and using the findings to provide suggestions to help the students overcome those challenges. Accordingly, the ontological aspect of this research varied and was not restricted to a specific type of reality. As we saw in Chapters 2 and 3, the constructs of learning styles and affective factors are well-established in the language learning literature (i.e. a realist view). Nevertheless, they were investigated in this study among a specific population and within a specific context (university students learning English in Saudi Arabia), which indicated that humans played a significant role in constructing that reality (i.e. a relativist view).

B. The epistemological aspect

Epistemology addresses the question "what is the nature of the relationship between the knower or would-be knower and what can be known?" (Guba & Lincoln, 1994, p. 108). It is concerned with the distinction between subjectivity and objectivity, i.e. whether the research process and results are influenced by the researcher's values, interests, previous experiences, and so on. Pragmatism accepts "different viewpoints and works to reconcile those perspectives through pluralistic means" (Harvard University, 2008). In the current study, closed-ended survey questionnaires were used to gather information about the students' learning styles and affective states. Since the questionnaire data was analysed statistically, we could argue that objective information was obtained from the results. Nonetheless, according to Richards (2009), the human factor was present in the selection of the questionnaire items as well as in the responses provided to them (e.g. if a participant twisted the truth for reasons such as social desirability). In addition, semi-structured interviews were conducted to add the insights necessary to inform theory and practice. Those interviews provided "indirect information filtered through the views of the participants" (Creswell, 2003, p. 186). In this way and according to the pragmatic paradigm, the present research combined both objective and subjective perspectives on knowledge.

C. The methodological aspect

Methodology is concerned with the question "how can the inquirer go about finding out whatever he or she believes can be known?" Creswell (2003) eloquently explains that "pragmatism opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis in the mixed methods study" (p. 12). In light of this view, the present study benefited from employing a mixed

methods approach which combined quantitative and qualitative data collection and analysis, as will be explained in the following section.

4.2.1 The mixed methods approach

The notion of mixed methods or *triangulation* was introduced in the late 1950s by Campbell and Fisk, who used a *multi-method matrix* to mix different types of data and maintained that "validity always requires multiple methods and multiple data sources" (Drisko, 2011). A mixed methods approach is defined by Creswell (2003) as:

> The one in which the researcher tends to base knowledge claims on pragmatic grounds (e.g. consequence-oriented, problem-centred, and pluralistic). It employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems. The data collection also involves gathering both numeric information (e.g. on instruments) as well as text information (e.g. on interviews) so that the final database represents both quantitative and qualitative information. (p. 18)

Triangulating qualitative and quantitative designs is more advantageous than using either approach alone, as it offers researchers an opportunity for using different types of measures to better understand a phenomenon (Calfee & Sperling, 2010; Dörnyei, 2001a; Johnson & Onwuegbuzie, 2004; Spitzlinger, 2011). Dörnyei (2001a), for example, points out that "a combination of quantitative designs and qualitative designs might bring out the best of both approaches while neutralizing the shortcomings and biases inherent in each paradigm" (p. 242). Accordingly, research that combines quantitative and qualitative approaches is likely to provide stronger evidence than research that depends on one approach only. Moreover, Spitzlinger (2011) explains that mixed methodology is "particularly suitable when researchers are interested in both, developing a detailed view of meaning of a phenomenon (in-depth qualitative analysis of a limited number of cases), and generalising the findings (quantitative methods)" (p. 6).

Johnson and Onwuegbuzie (2004, p. 21) compiled a comprehensive list of the advantages and limitations of the mixed methods approach, which included the following:

Advantages

• It could answer a broader and more complete range of research questions because the researcher is not confined to a single approach.

• A researcher could use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study.

• It could provide stronger evidence for a conclusion through convergence and corroboration of findings.

• It could add insight and understanding that might be missed when only a single method is used.

Limitations

• It could be difficult for a single researcher to carry out both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently.

• Researchers have to learn about multiple methods and approaches and understand how to mix them appropriately (Johnson & Onwuegbuzie, 2004, p. 21).

It is fairly apparent that the numerous strengths of the mixed methods approach outweigh its weaknesses. Accordingly, triangulating quantitative data (from three questionnaires) and qualitative data (from semi-structured interviews) was considered an appropriate choice for the present research to achieve its intended objectives. In fact, my review of the literature on learning styles and affective factors revealed that the mixed methods design was utilised by numerous large-scale studies in both fields (e.g. Dwaik & Shehadeh, 2010; Effiong, 2013; Liu, 2006; Magogwe, 2006; Phantharakphong, 2012).

The concurrent triangulation strategy

The specific strategy of inquiry used in this research was the *concurrent triangulation approach*, which Creswell (2003) described as:

> The quantitative and qualitative data collection is concurrent, happening in one phase of the research study. Ideally, the priority would be equal between the two methods …. This strategy usually integrates the results of the two methods during the interpretation phase. This interpretation can either note the convergence of the findings as a way to strengthen the knowledge claims of the study or explain any lack of convergence that may result. (p. 217)

The steps followed in this strategy are illustrated in Figure 4.1 below.
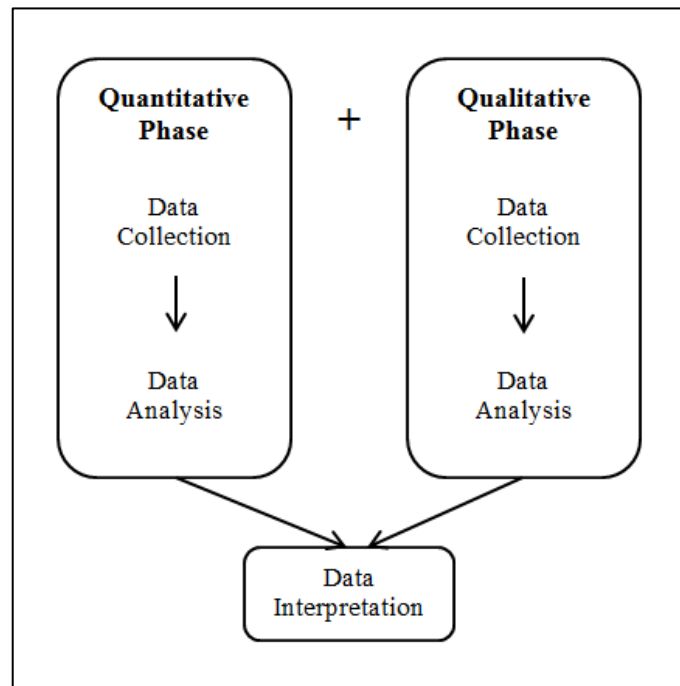
Figure 4.1. The concurrent triangulation strategy
(Adapted from Creswell, 2003, p. 214).

Thus, the current research consisted of two separate phases. The quantitative phase included the administration and statistical analysis of three questionnaires: the Demographic Information Questionnaire (DIQ), the Language Learning Styles Questionnaire (LLSQ) and

the Affective Factors in Language Learning Questionnaire (AFLLQ). The qualitative phase involved conducting and thematically analysing semi-structured interviews with 20 participants. Finally, both types of data were integrated in the interpretation phase in order to provide richer insights into the students' learning styles and affective states. Conclusions were then drawn from the findings. Details about data collection and analysis are provided later in this chapter. In the following sections, I explain the two main quantitative and qualitative approaches employed in the present study.

4.2.2 Survey research

The purpose of the survey design is to generalise from a sample to a population in order to draw inferences about the population attributes, beliefs, values, preferences, needs, and so on (Babbie, 1990; Fowler, 2013). Surveys are desirable for their ability to help researches collect large amounts of information from a large number of people in a relatively short amount of time. In the current study, this design proved efficient in terms of the time and effort needed to identify the learning styles and affective states of university students learning English in Saudi Arabia. It provided adequate breadth of coverage which made it possible to address each of the three learning styles (perceptual styles, peer collaboration and TA) and the three affective factors (anxiety, motivation and self-efficacy) investigated in this study and their influences on the students' learning experiences. The surveys were cross-sectional (i.e. administered at a single point in time), and three closed-ended questionnaires were used to collect the required data. These questionnaires are described in detail in Section 4.3.1 in this chapter.

4.2.3 Grounded theory

The origin of the grounded theory can be traced back to the two sociologists Barney Glaser and Anselm Strauss, when they published their 1967 book *The Discovery of Grounded Theory: Strategies for Qualitative Research* and argued that researchers should "discover theory from data" rather than focusing their efforts on collecting data for the purposes of testing hypotheses or confirming existing theories (p. 1). As its name implies, grounded theory describes "a general methodology for developing theory that is grounded in data systematically gathered and analysed" (Strauss & Corbin, 1994, p. 273). As explained in Chapter 1, some of the challenges that I encountered when carrying out the present study were the lack of previous research on the TA and self-efficacy beliefs of English learners in Saudi Arabia and the scarcity of studies investigating the links between learning styles and affective factors in language learning. Therefore, since the existing theoretical frameworks for the above phenomena were limited, grounded theory was the most appropriate strategy to study them. In fact, the following research questions were shaped by grounded theory as their main strategy of inquiry:

> Q1b. What elements in the classroom influence the learners' preferences for these learning styles?
>
> Q2b. What elements in the classroom influence the learners' experiences with these affective factors?

The open-ended format of these questions reflected their exploratory nature, as they were grounded in the lived experiences of the participants and thus, offered the opportunity for greater disclosure. In-depth interviews were used to collect data in accordance with the grounded theory guidelines. While developing a brand new theory was not the aim of the present study, the ground theory approach was particularly helpful in providing new insights

than could not have been obtained from the survey questionnaires alone. More specifically, it facilitated the exploration of several personal and classroom factors that had influenced the learners' preferences for certain learning styles and their affective states. It also helped to expand our knowledge of the associations between learning style preferences and affective factors and their possible relationships with English language proficiency and performance. Further details about the interviews conducted in this study, data collection procedures and data analysis are provided later in this chapter.

4.3 Instruments

As mentioned earlier in this chapter, the present study combined both quantitative and qualitative measures. First, I developed a total of three questionnaires in this study:

1. The DIQ;

2. The LLSQ; and

3. The AFLLQ.

Additionally, in order to gain deeper insight into the participants' learning experiences and to provide a rich interpretation of the questionnaire results, semi-structured interviews were conducted with a small sample of the students. The advantages of using these two methods are eloquently summarised by Drever (1995): "Interviews can provide depth of explanation within a particular context, while questionnaires paint a broad though possibly superficial picture" (p. 8). The following sections provide detailed descriptions of all measures used in this study.

4.3.1 Questionnaires

Brown (2001) defines questionnaires as "any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers" (p. 6). The advantages and limitations of using questionnaires in research have been discussed by numerous researchers in different fields (e.g. Dörnyei, 2003b; Elliott & Bempechat, 2002; Gillham, 2007; Muijs, 2004; Walliman, 2005). Gillham (2007, pp. 6–8), for example, compiled a succinct but comprehensive list of the pros and cons of questionnaires which included the following:

Advantages

- Easy to get information from a large group of people very quickly.

- Analysis of answers to closed questions is straightforward.

- Respondents' anonymity protected.

- Lack of interviewer bias.

- Standardisation of questions.

Limitations

- Problems of data quality (completeness and accuracy).

- The need for brevity and relatively simple questions.

- Misunderstandings cannot be corrected.

- Question wording can have a major effect on answers.

- Impossible to check seriousness or honesty of answers (Gillham, 2007, pp. 6–8).

The above shortcomings were addressed in the present research by taking the following measures:

1. The purpose of the questionnaires was explained to the students together with the importance of providing honest answers to the questionnaire items in order to achieve the desired outcomes regarding the improvement of English language instruction in Saudi Arabia.

2. All questionnaires were translated into the participants' mother tongue, Arabic.

3. Semi-structured interviews were carried out in order to provide rich explanations and interpretations of the questionnaire results.

Indeed, questionnaires have successfully been employed by a large number of studies to collect data about learning styles and affective factors in language learning (e.g. Alkhatnai, 2011; Al-Shuaibi et al., 2014; Dahbi, 2015; Elsheikh et al., 2014; Erten & Topkaya, 2009; Javid et al., 2012; Li, 2012; Sa'dabadi, 2014; Tilfarlioğlu & Cinkara, 2009). Nonetheless, existing learning style and affective factors questionnaires did not provided sufficient coverage of the different issues that this study was keen to investigate. This motivated me to attempt to develop a comprehensive as well as psychometrically sound set of assessment tools of these variables. I used my knowledge of the Saudi culture, EFL teaching experience and previous discussions with my students in developing the majority of my questionnaire items. In addition, I adopted and/or adapted a few items from internationally recognised instruments in the learning style and affective factors field.

Since the purpose of using questionnaires in the current research was to assess the students' learning styles and affective states and to collect specific data on the factors that influenced them as well as their possible impact on the learning process, a Likert scale was selected as the most appropriate measurement scale for this study. It was used to sum the scores for each response option and generate a total score for each student. That was found to be useful because a Likert scale built in "a degree of sensitivity and differentiation of response, whilst still generating numbers" (Cohen, Manion & Morrison, 2011, p. 386). In

order not to mix different rating scales within the questionnaires, the same type of scale (a five-point Likert scale, with labels attached to each point on the scale) was used as a unified measurement scale for all questionnaire items. This facilitated comparisons of the different data sets and helped to avoid respondent fatigue or confusion. Participants were asked to use the scale to rate the degree to which they agreed or disagreed with each statement and responses were rated from 1 (strongly disagree) to 5 (strongly agree). It should be pointed out that the original Likert scale also included five categories, which helped to provide enough points of discrimination for the participants without requiring them to make very fine distinctions among the options. This type of scale has been widely and successfully utilised in previous learning style and affective factors studies (e.g. Alrabai, 2014; Al-Shuaibi et al., 2014; Al-Tamimi & Attamimi, 2014; Chen & Chang, 2009; Ezzi, 2012; Javid, 2014; Naseri & Zaferanieh, 2012; Rahimi & Abedini, 2009; Salehi & Bagheri, 2011; Seifoori & Zarei, 2011).

Further, the three questionnaires developed in this study were distributed to the participants in their native language, Arabic. This was especially important in helping to reduce the possibility of misinterpreting the questionnaire contents and ultimately, to increase the accuracy of the responses. Translation of questionnaires has effectively been employed in previous research on learning style and affective factors (e.g. Al-Shuaibi et al., 2014; Andrade & Williams, 2009; Erten & Topkaya, 2009; Ezzi, 2012; Kamran, 2011; Makrami, 2010; Phantharakphong, 2012; Salehi & Bagheri, 2011; Zhang & Evans, 2013).

Since a few of the questionnaire items were borrowed from well-established questionnaires, it was prudent to write the questionnaires in English first and then to translate them into Arabic. As Harknes and Schoua-Glusberg (1998) point out, translation of questionnaires is considered "the most frequently adopted approach" as it is "the only means to ensure item equivalence and scalar equivalence" (p. 92). Next, in order to check the

accuracy of the translation, a back translation into English was performed by an expert translator. This process consisted of the following steps:

> A bilingual translator or group of translators makes an initial translation from the source version into the target version. Next, another bilingual translator or group translates this material back into the source language. These back-translators should not have had access to the original source version before conducting the back-translation. The back-translated version and the source version then are compared to check for equivalence of meaning. If the two versions are not identical, the back-translation process is repeated iteratively until no mistakes in meaning are found. (Su & Parham, 2002, p. 582)

Accordingly, the English and Arabic versions of the questionnaires were checked by another translation expert, who made a few minor modifications in style and then approved the final Arabic and English versions as being equivalent.

As pointed out above, when developing the LLSQ and AFLLQ, some items were adopted from well-known questionnaires, while others were adapted. The adaptations were made for one or more of the following reasons:

1. In order to avoid ambiguity and make the items more focused on English language learning situations, phrases such as *second language*, *foreign language* and even the word *language* were replaced with *English.*

2. Adverbs of frequency such as *usually* and *often* were deleted from the statements as they could "make the items unclear" (Dörnyei, 2003b, p. 54).

3. Contracted forms, such as *I'm* and *don't* were changed to their full forms for the sake of consistency among the questionnaire statements.

4. Some minor rephrasing was made to a few items to make them match their Arabic equivalences, as suggested by the expert translator who checked the English and Arabic versions of the questionnaires.

Importantly, Dörnyei (2003b) points out that even if the scales from which the items are borrowed have established validity and reliability, these should be calculated again for the

newly constructed scales. As will be explained in Sections 4.4.2.1 and 4.4.2.2 below, all the scales and subscales used in the current study were found to be valid and reliable. In the following sections, I present detailed descriptions of the three questionnaires developed for this study.

4.3.1.1 The DIQ

The DIQ is a 13-item questionnaire designed to collect some background data about the learners. Most of the questions were closed-ended with 2–5 response options. First, the students were asked to specify their gender, age and track of study. Then, information about their English language learning was requested, including when they started to learn English, their English proficiency level (as determined by the English class they were attending at that time), the number of hours they spent each week on studying English, if they had ever resided in an English-speaking country and if they knew any FL other than English. In the next set of questions, information about parents' educational levels and knowledge of English was collected (see Appendix A for the English and Arabic versions of this questionnaire).

The DIQ produced a descriptive profile of the learners that facilitated the understanding of how their backgrounds shaped their language learning experiences. Besides, information about parents' educational and English proficiency levels helped to examine the extent to which the home environment could have implications for the students' learning style preferences and affective states. The information gained from this questionnaire was used in conjunction with the data obtained from the LLSQ and AFLLQ to answer research questions 1a and 2a in the present study:

Q1a. Do these learning style preferences differ according to the learners' demographic characteristics? (In this study, 12 demographic characteristics are examined).

Q2a. Do these factors differ according to the learners' demographic characteristics?

Lastly, the learners' English proficiency levels together with their final scores on the English module (provided by their teachers) were used as measures of their proficiency and performance, respectively, when addressing research questions 1c and 2c:

Q1c. What is the relationship between the learning style preferences of the learners and their English language proficiency and performance?

Q2c. What is the relationship between the affective factors that influence the learners and their English language proficiency and performance?

4.3.1.2 The LLSQ

This survey instrument was developed to explore how Saudi learners preferred to learn the English language. More specifically, it was used to investigate the first research question posed in this study:

Q1. What learning styles do Saudi learners of English prefer to use?

In addition, the results of this questionnaire together with those obtained from the AFLLQ were used to address the third research question investigated in this study:

Q3. What is the relationship between the learning style preferences of Saudi learners of English and the affective factors influencing them?

The LLSQ consisted of 40 statements comprising the following three scales:

A. The Perceptual Learning Styles Scale (20 items);

B. The Peer Collaboration Scale (10 items); and

C. The Tolerance of Ambiguity Scale (10 items).

As explained above, I developed a few of the questionnaire items and adopted and adapted others from well-established existing instruments (see Appendix B for the English and Arabic versions of this questionnaire).

A. The Perceptual Learning Styles Scale

As explained in Section 2.8.1.1 in Chapter 2, since the VARK questionnaire did not address language-related issues, I designed the Perceptual Learning Styles Scale utilised in the present research according to the VARK classification system and used my knowledge of the literature (especially those issues that were relevant to the concerns of my students) in developing the questionnaire items. I also borrowed a few items from existing and validated questionnaires in the field, namely Cohen, Oxford and Chi's (2002) Learning Style Survey (LSS) and Reid's (1984) PLSPQ. The LSS is an improved version of Oxford's (1991) Style Analysis Survey (SAS). It consists of 110 items grouped into 11 sections, such as How I Use My Physical Senses, How I Expose myself to Learning Situations, How I Handle Possibilities, How I Deal with Ambiguity and with Deadlines and How I Receive Information. The PLSPQ consists of 30 statements assessing six learning style preferences: visual, auditory, kinaesthetic, tactile, group learning, and individual learning. Both LSS and PLSPQ were widely and successfully used by previous studies on language learning styles (e.g. Alkhatnai, 2011; Cesur & Fer, 2009; Corbitt, 2012; Li, 2012; Salehi & Bagheri, 2011; Seifoori & Zarei, 2011; Shi, 2011).

Thus, the Perceptual Learning Styles Scale developed in the present study consisted of four subscales and 20 items as follows:

1. The Visual Learning Style Scale: I developed all the items that assessed this style (items No. 3, 6, 13, 16, 17). An example item from this subscale is: "I prefer to learn new information using visual aids such as pictures, charts and maps."

2. The Aural Learning Style Scale: I developed two of the items (items No. 21, 27) and borrowed two items from the LSS (items No. 20, 35) and one item from the PLSPQ (item No. 26). Those items were used verbatim, except for a slight modification to item 35, which originally was "I can understand what people say even when I cannot see them." In order to make the statement more relevant to educational contexts, it was modified to "I can understand what my teacher says even when I do not look at him/her".

3. The Read/Write Learning Style Scale: I developed four of the items (items No. 1, 7, 31, 32) and adopted one item from the LSS (item No. 12). An example item from this subscale is: "I like to summarise text material and make lists of new vocabulary to better recall them."

4. The Kinaesthetic Learning Style Scale: I developed three of the items (items No. 2, 9, 19) and adopted one item from the LSS (item No. 4) and another one from the PLSPQ (item No. 34). An example item from this subscale is: "I prefer to learn new material by moving or touching rather than by reading a book or listening to a lecture."

High scores on any of the above subscales indicated a preference for that perceptual learning style. Participants were considered multimodal if they achieved equal scores on more than one perceptual style scale. Table 4.1 below shows the numbers of items assessing each of the above subscales.

Table 4.1

Items Assessing the Perceptual Learning Styles Subscales

Perceptual learning styles subscale	Item number	Total
Visual	3, 6, 13, 16, 17	5
Aural	20, 21, 26, 27, 35	5
Read/Write	1, 7, 12, 31, 32	5
Kinaesthetic	2, 4, 9, 19, 34	5

B. The Peer Collaboration Scale

As pointed out in Section 2.8.2.1 in Chapter 2, the theoretical assumptions put forth by Kinsella and Sherak (1994) guided the development of the Peer Collaboration Scale in this study and the interpretation of its findings. Nonetheless, in order to account for some of the issues raised by my students during my preliminary discussions with them (e.g. whether they preferred to work with classmates with certain characteristics, how they preferred the groups to be formed and how they preferred to be graded when working in groups) that were not addressed by Kinsella and Sherak's (1994) Classroom Work Style Survey, I borrowed only a few items from their scale and developed the rest of the items myself. More specifically, I developed six of the items in this scale (items No. 23, 28, 29, 30, 38, 39) and adopted/adapted three items from the Classroom Work Style Survey (items No. 14, 37, 40). For example, item 37 was originally "Usually, I prefer my teacher to let us form our own groups", but the adverb *usually* was deleted, as explained in Section 4.3.1 above. Additionally, item 40 "I feel uncomfortable working in groups with students who are native speakers of English or ESL who speak English more fluently than I do" was modified to "I feel uncomfortable working in groups with students who speak English more fluently than I do" in order to make the items more focused on English learning situations. I also adapted one item (item No. 11) from

Reid's (1984) PLSPQ: "I learn more when I study with a group." The only modification made to this item was changing the pronoun *with* to *in* in order to match the Arabic translation of this sentence.

Thus, my Peer Collaboration Scale consisted of 10 statements examining students' preferences for working with peers (i.e. pair and group work) or individually in class. A high score on this scale indicated a preference for peer collaboration. As pointed out in Chapter 2, both pair and group work were regarded in this study as forms of peer collaboration, as they indicated that learners were not working by themselves. Factors such as the characteristics of the group members, the teacher's involvement in the formation of the pairs/groups and the assignment of scores to shared work were also examined by the scale.

C. The Tolerance of Ambiguity Scale

As explained in Section 2.8.3.1 in the previous chapter, the theoretical underpinning of this questionnaire was influenced by the assumptions of Ely's (1995) SLTAS. Nevertheless, in order to shed some new light on the complex nature of this learning style among English learners in Saudi Arabia, I adapted only a few items from the SLTAS and developed the rest of the items using my extensive review of the literature as well as the insights I gained from my initial discussions with my EFL students in Saudi Arabia. As a result, my scale consisted of 10 statements assessing the degree to which learners were comfortable with or willing to cope with ambiguous situations when learning English. I developed seven of the items in this scale (items No. 5, 10, 15, 18, 22, 24, 33) and adapted three items from the SLTAS (items No. 8, 25, 36). The only modification done to these three items was changing the contracted forms (don't and I'm) used in them to their full forms (do not and I am) in order to maintain the same level of formality throughout the scale. An example item from this scale is: "I prefer to

understand grammatical rules completely before engaging in activities related to them." A high score on this scale indicated a high level of IA in language learning.

4.3.1.3 The AFLLQ

This survey instrument was developed to assess the affective factors influencing Saudi learners of English at the university level. More specifically, it was used to answer the second research question posed in this study:

Q2. What affective factors influence Saudi learners of English?

In addition, the results of this questionnaire together with those obtained from the LLSQ were used to address the third research question investigated in the present study:

Q3. What is the relationship between the learning style preferences of Saudi learners of English and the affective factors influencing them?

The AFLLQ consisted of 50 statements comprising the following three scales:

A. The Anxiety Scale (16 items);

B. The Motivation Scale (24 items); and

C. The Self-efficacy Scale (10 items)

As explained earlier in this chapter, I developed some of the questionnaire items and adapted others from well-established existing instruments (see Appendix C for the English and Arabic versions of this questionnaire).

A. The Anxiety Scale

As pointed out in Section 3.3.1.4 in the previous chapter, Horwitz et al.'s theoretical framework guided the development of the Anxiety Scale in this study. The scale therefore, consisted of three subscales that examined the three components of communication apprehension, test anxiety and fear of negative evaluation. There was also a fourth subscale

investigating issues related to the general feeling of anxiety experienced in the English class that had not been addressed in Horwitz et al.'s (1986) FLCAS. In order to shed new light on the complex nature of anxiety and take the population and context of the current study (i.e. English learners in Saudi Arabia) into consideration, it was not wise to borrow all items from the FLCAS. Thus, I adapted only a few items from the FLCAS and developed the majority of the items by myself. I also adapted a few items from well-established and validated questionnaires in the field, namely Gardner's (1985) AMTB and Spielberger's (1980) Test Anxiety Inventory (TAI). The AMTB was designed to measure "the major affective components shown to be involved in second language learning" (Gardner, 1985, p. 5). It consists of 63 items comprising the following eight subscales: Attitudes toward French Canadians, Interest in Foreign Languages, Attitudes toward European French People, Attitudes toward Learning French, Integrative Orientation, Instrumental Orientation, French Class Anxiety and Parental Encouragement. The TAI was developed to assess test anxiety as a type of situation-specific anxiety. It consists of two subscales: Worry and Emotionality and a total of 20 statements.

Thus, the Anxiety Scale developed and used in the present research consisted of four subscales comprising 16 items as follows:

1. General Classroom Anxiety: I developed two of the items in this subscale (items No. 6, 48) and adapted two items from the FLCAS (items No. 23, 25). The only modification made to these items was changing the phrase "language class" to "my English class". An example item from this subscale is: "I get apprehensive when I think about my English class."

2. Communication Apprehension: I developed two of the items in this subscale (items No. 8, 34) and adopted two items from the AMTB (items No. 9, 27).

An example item from this subscale is: "I get nervous when I participate in discussions in my English class."

3. Test Anxiety: I developed one of the items in this subscale (item No. 18) and adapted three items from the TAI (items No. 14, 30, 47). For the sake of making the items more focused on English testing situations, the phrases "an important examination" and "a test" in items 14 and 30 were modified to "an English test". Likewise, the word "English" was added to item 47 to make it "I freeze up on important English tests."

4. Fear of Negative Evaluation: I developed three of the items in this subscale (items No. 33, 35, 50) and adapted one item from the FLCAS (item No. 29). The only modification made to this item was changing the phrase "the foreign language" to "English". An example item from this subscale is: "I feel embarrassed when the teacher corrects my mistakes in front of my classmates."

A high score on a subscale indicated the existence of a high level of that type of anxiety, and a high total score on the Anxiety Scale indicated a high level of FLA. Table 4.2 below shows the numbers of items assessing each of the above subscales.

Table 4.2
Items Assessing the Anxiety Subscales

Anxiety subscale	Item numbers	Total
General Classroom Anxiety	6, 23, 25, 48	4
Communication Apprehension	8, 9, 27, 34	4
Test Anxiety	14, 18, 30, 47	4
Fear of Negative Evaluation	29, 33, 35, 50	4

B. The Motivation Scale

As explained in Section 3.3.2.3 in the previous chapter, the theoretical underpinning of this questionnaire was influenced by the assumptions of Deci and Ryan's (1985) SDT and Vallerand et al.'s (1989) classification system. Nonetheless, in order to allow for some exploration of the multi-faceted nature of motivation among the participants in the present study, I adapted only a few items from Noels et al.'s (2000) LLOS-IEA (described in Section 3.3.2.3) and developed the rest of the items using my extensive review of the literature and the insights I gained from my initial discussions with my students in Saudi Arabia. I also adapted a few items that met the issues raised in the discussions from Gardner's (1985) AMTB, described in the previous section. The modifications made to the items borrowed from the LLOS-IEA and AMTB are provided in Table 4.4 below and underlined for clarity. Again, these modifications were made for the same reasons discussed in Section 4.3.1 above (e.g. to make the sentences pertinent to English learning situations and their structures consistent with one another).

The Motivation Scale developed in the current study consisted of two subscales, which included six further subscales and 24 items as follows:

1. The Intrinsic Motivation Scale, which is assessed by 12 items as follows:

a. The Accomplishment Scale: I developed two of the items in this subscale (items No. 21, 41) and adapted an item from the LLOS-IEA (item No. 39) and another one from the AMTB (item No. 24). An example item from this subscale is: "Mastering a new grammatical rule motivates me to learn more rules."

b. The Knowledge Scale: I developed three of the items in this subscale (items No. 15, 40, 44) and adapted an item from the LLOS-IEA (item No. 45). An example item from this subscale is: "Reading English publications helps to expand my knowledge of the world."

c. The Stimulation Scale: I developed two of the items in this subscale (items No. 36, 38) and adapted an item from the LLOS-IEA (item No. 32) and another one from the AMTB (item No. 12). An example item from this subscale is: "Learning English is interesting."

2. The Extrinsic Motivation Scale, which is assessed by 12 items as follows:

a. The External Regulation Scale: I developed three of the items in this subscale (items No. 7, 22, 49) and adapted an item from the AMTB (item No. 13). An example item from this subscale is: "Learning English is necessary for everyday life in Saudi Arabia, such as in the field of education, the media and communication with foreigners who work here."

b. The Introjected Regulation Scale: I developed three of the items in this subscale (items No. 16, 31, 37) and adapted an item from the AMTB (item No. 28). An example item from this subscale is: "It would be a shame if I could not speak an international language like English."

c. The Identified Regulation Scale: I developed three of the items in this subscale (items No. 19, 20, 46) and adapted an item from the LLOS (item No. 1). An example item from this subscale is: "Learning English is a good investment of my time."

A high score on a subscale indicated the participant's possession of a high level of that type of motivation, and a high score on the whole Motivation Scale indicated a high level of language learning motivation. Table 4.3 below presents a summary of the items assessing each of the above subscales, and Table 4.4 shows the modifications made to the items borrowed from the LLOS-IEA and AMTB.

Table 4.3
Items Assessing the Motivation Subscales

Motivation subscale	Item number	Total
Intrinsic Motivation		12
Accomplishment	21, 24, 39, 41	4
Knowledge	15, 40, 44, 45	4
Stimulation	12, 32, 36, 38	4
Extrinsic Motivation		12
External Regulation	7, 13, 22, 49	4
Introjected Regulation	16, 28, 31, 37	4
Identified Regulation	1, 19, 20, 46	4

Table 4.4
Modifications Made to the Items Borrowed from LLOS-IEA and AMTB

Item No.	Original sentence	Modified sentence
	Accomplishment	
24	Learning English <u>often</u> gives me a feeling of success.	Learning English gives me a feeling of success.
39	<u>For the enjoyment I experience</u> when I grasp a difficult construct in <u>the second language</u>.	<u>I enjoy it</u> when I grasp a difficult construct in <u>English</u>.
	Knowledge	
45	<u>For the pleasure I experience in knowing more</u> about the <u>second language community</u> and their way of life.	<u>Learning English provides knowledge</u> about the <u>English-speaking communities</u> and their way of life.
	Stimulation	
12	<u>Studying</u> English is important because it allows me to meet and converse with <u>more and varied</u> people.	<u>Learning</u> English is important because it allows me to meet and converse with <u>a wide variety of</u> people.

Item No.	Original sentence	Modified sentence
32	For the "high" feeling that I experience while speaking in the second language.	I like learning English for the exuberant feeling that I experience while speaking it.
	External Regulation	
13	Studying English is important because it will be useful in getting a good job.	Learning English is important because it will be useful in getting a good job.
	Introjected Regulation	
28	Studying English is important because other people will respect me more if I know English	Learning English is important because other people will respect me more if I know English.
	Identified Regulation	
1	Because I choose to be the kind of person who can speak a second language.	I am learning English because I want to be the kind of person who can speak a second language.

C. The Self-efficacy Scale

As pointed out in Section 3.3.3.4 in the previous chapter, Bandura's theoretical framework guided the development of the Self-efficacy Scale in this study. However, since Bandura's questionnaires were not pertinent to language learning contexts, I developed all the items used to assess self-efficacy in the present study according to Bandura's (1986) SCT assumptions while taking into consideration the content area to be covered by the questionnaire items. Therefore, the questionnaire examined learners' sense of self-efficacy for the four language skills of listening (items No. 2, 5), speaking (items No. 11, 43), reading (items No. 10, 17) and writing (items No. 4, 26) together with self-efficacy for learning new English vocabulary (item No. 42) and grammatical structures (item No. 3). Following the guidelines provided by Bandura (2006), all statements began with the phrase "I can" to

designate individuals' beliefs in their ability to execute certain learning tasks: "self-efficacy is concerned with perceived capability. The items should be phrased in terms of can do rather than will do. Can is a judgment of capability; will is a statement of intention" (p. 308). An example item from this subscale is: "I can express myself clearly when writing in English."

4.3.2 Semi-structured interviews

Alongside questionnaires, face-to-face, semi-structured, in-depth interviews with selected participants were used in the present study to collect qualitative data about the students' learning style preferences and the affective factors influencing their learning of English. Kvale (1996) explains that, as its name implies, an interview describes "an inter change of views between two persons conversing about a theme of mutual interest" (p. 2). Kvale (1996) further points out that one of the main strengths of using interviews in research is "a move away from seeing human subjects as simply manipulable and data as somehow external to individuals, and towards regarding knowledge as generated between humans, often through conversation" (p. 11). Thus, since quantitative instruments could only provide an overall picture of the students' experiences, interviews were used to provide students with an opportunity to express their own beliefs, perceptions and views on those issues. In consequence, they assisted in the clarification and interpretation of the questionnaire data. As Holloway (2005) points out:

> Interviewing, as a qualitative data collection tool, has many strengths including: the participants' own words can be captured; the interview can focus on issues salient to the participants, rather than being driven by the researcher's agenda; clarification can be sought; they allow opportunities to probe and explore in depth; [and] non-verbal behaviours can be noted and recorded. (p. 52)

In fact, the qualitative data obtained in the current study through the use of in-depth interviews offered a rich insight into the individual differences among the students with

regard to their language learning styles and affective states. Rossman and Rallis (2012) and Patton (2015) also considered in-depth interviewing an effective means through which researchers could obtain a rich description of people's opinions, feelings, and experiences.

Moreover, the general interview guide (IG) approach manifested through the use of semi-structured interviews (also called *guided interviewing*) was used "to ensure that the same general areas of information are collected from each interviewee; this provides more focus than the conversational approach, but still allows a degree of freedom and adaptability in getting information from the interviewee" (McNamara, n.d.). Thus, although the topics to be explored in the interviews are predetermined, interviewers use follow-up questions or probes, prepared in advance, to gain deeper insight or to seek clarification on certain issues of interest (Gillham, 2007). Since the same themes are discussed with all interviewees, "researchers can readily compare different responses to the same questions, while at the same time remaining open to important but unforeseen information or points of discussion" (Lankshear & Knobel, 2004, p. 202). For these reasons, semi-structured, in-depth interviews were selected as an appropriate method to provide the qualitative data necessary to investigate the research questions outlined in Chapter 1. Hence, two main topics were examined in the interviews: language learning styles and affective factors in language learning.

The interviews started with a set of warm-up questions, which asked the students about their experiences with learning English and how they felt about them. That was followed by the learning styles section, which included three main parts: perceptual learning styles, peer collaboration and TA. Information gained from the students' responses in this section was used to expand and interpret their answers to the LLSQ in order to address the first research question investigated in this study. To ensure sufficient coverage of the topics that I was keen to investigate, the same core questions were asked to all participants, and the follow up ones

were used only if clarification or interpretation was needed (see Appendix D for a copy of the interview schedule).

The perceptual learning styles part started by explaining the four categories examined in this study (visual, aural, read/write and kinaesthetic) to the learners in order to elicit their preferred styles, why they preferred them and whether their preference had changed since they started to learn English. The participants were also asked if there were any styles that they never used and if they believed that using more learning styles to learn new material was better than depending on one style. Other themes covered in the interviews were: the classroom factors that influenced their preferences for those perceptual styles and the possible impact of using those styles on their English language performance (See Appendix E for a sample interview with one of the participants in this study).

Similar questions were asked about peer collaboration in order to cover the themes investigated above. To provide some insight into the students' responses to the questionnaire statements (items No. 38, 40), the students were asked if their preferences for group work differed according to the characteristics of the group members (e.g. being friends or more proficient in English than they were).

Regarding TA, the participants were first asked if they found learning English to be sometimes ambiguous and why they thought so. They were also asked about their feelings when experiencing ambiguity in their English class and their reactions in such situations. The remaining questions were similar to those asked about perceptual learning styles above.

Finally, an important concluding question was asked at the end of the learning styles section. The students were asked if they thought that being aware of their preferred learning styles could help their English learning and why they thought so. The learners' answers provided important practical suggestions, as will be discussed in Chapter 8.

The affective factors section also included three main parts: anxiety, motivation and self-efficacy. Information gained from the students' responses to this section was used to complement and clarify their answers to the AFLLQ in order to address the second research question in this study. As with the learning styles questions above, the same core questions were asked to all participants, and the follow up ones were used only if clarifications were needed.

The anxiety part started by asking the students about their experiences with anxiety in learning and using English in class and probed the main sources of their anxiety. The participants were also asked if their anxiety had changed since they started to learn English. Other themes covered by the interviews were: the influences of the classroom environment on their feeling of anxiety and the impact of anxiety on their English learning.

Regarding motivation, the participants were first asked about their motives for learning English. After that, questions similar to the ones asked about anxiety were used in order to cover the same themes investigated above.

The last part of the affective factors section examined the students' self-efficacy beliefs. It began by asking the participants about the extent to which they felt capable of learning difficult material and what kind of tasks/skills they found most difficult to master. Questions similar to the ones asked about anxiety and motivation were then used in order to ensure that the same themes were addressed.

The concluding question asked at the end of the affective factors section provided useful information, which was used to inform the pedagogical implication of the present research. The participants were asked about their suggestions on what could be done to reduce their anxiety or enhance their motivation or self-efficacy when learning English. Useful suggestions were provided by the students, as will be discussed in Chapter 8.

4.4 The pilot study

Prior to conducting the main study, a small-scale pilot study was undertaken during the fall term of 2013. The importance of pilot studies for checking the appropriateness of data collection procedures and instruments and enhancing the quality of research has been widely stressed in the literature (see e.g. Creswell, 2003; Dörnyei, 2003b; Gliner, Morgan & Leech, 2011; Loewen & Plonsky, 2015; McBurney & White, 2009; Riazi, 2016). Such researchers maintain that piloting can provide valuable feedback on:

- The clarity of the language used in the instrument by pointing out any ambiguity in item wording or difficulty of instructions.
- The validity and reliability of the instrument.
- The amount of time needed to complete the instrument.

Based on these considerations, researchers modify their instruments and prepare them for the main administration.

4.4.1 Data collection procedures

Following Dörnyei's (2003b) guidelines, the pilot study undertaken in this research consisted of two stages: initial piloting and final piloting.

4.4.1.1 Initial piloting

This stage started by asking three people (a colleague and two family members) from different backgrounds (applied linguistics, English and psychology) to complete the Arabic versions of the three questionnaires developed for this study (DIQ, LLSQ and AFLLQ) while thinking aloud. Each participant worked individually, and I was present to check for any confusion or difficulty they might have faced with the questionnaire items. All participants

were able to understand the statements and completed the three questionnaires without seeking my assistance. After they were finished, I asked them for feedback on the questionnaire contents, clarity and layout. Based on their comments, I amended the wording of three phrases in the Arabic version of the Learning Styles Questionnaire (the Peer Collaboration Scale) to make them consistent with one another.

A few days later, I pilot tested the interviews with the same individuals. I requested them to pay particular attention to the types of questions I used, as I aimed to avoid leading, double-barrelled and sensitive questions. I also asked them to point out any areas of concern that I had overlooked but were worth discussing in the interviews. They all thought that the questions were clear, comprehensive and bias-free. However, they made a few suggestions regarding the opening remarks in order to make the description of my study more concise.

After making the revisions suggested above to the instruments, I started planning for the final piloting stage.

4.4.1.2 Final piloting

In this phase, the Arabic versions of the three questionnaires were administered to two groups of 25 students during regular class time. According to Dörnyei (2003b), "the typical sample size at this stage is around 50 (+/- 20)" (p. 68). The participants shared similar characteristics with the target population, as they were all foundation year students learning English at a public university in the western region of Saudi Arabia. The sample consisted of both male and female students, humanities and science students and students from the three English proficiency groups (high, middle and low) examined in the main study. The students were assured that their participation in this research was completely voluntary and their

responses would be kept confidential (See Appendix F for the Participants' Information Sheet and Appendix G for the Informed Consent Form).

The students were requested to ask questions if they had difficulty understanding the instructions or questionnaire items or if they were not completely sure about the meaning of a statement. They took approximately 30 minutes to complete the questionnaires, and no major issues were reported. However, upon examining the students' responses, I found that a large number of them did not answer the open-ended questions placed at the end of the AFLLQ. These questions were:

1. What is your main source of anxiety (if any) when speaking English?

2. What is your most important reason for learning English?

3. During your study of English, what kind of things do you feel most confident in doing?

When discussing this point with the students, the majority revealed that those questions assessed the same issues assessed by the closed-ended items in the questionnaire. Accordingly, the above questions were removed from the final version of the AFLLQ but were investigated further in the interviews.

Two weeks later, the same questionnaires were administered to the same groups of students, and similar data collection procedures were followed. This second administration was needed to calculate the test-retest reliability of the questionnaires, which will be discussed in Section 4.4.2 below.

Around the same time, pilot interviews were carried out prior to undertaking the main interviews. They provided an opportunity to test the questions with participants similar to the main study sample, and thus, they helped to determine if any modifications had to be made. One male and two female students from the English proficiency levels described above participated in the interviews. For ease of understanding and to allow the students to express

their thoughts and feelings clearly, the interviews were conducted in Arabic. The students reported no difficulty in comprehending the questions and responding to them. However, I found that they sometimes provided only brief answers to important questions and thus, I had to ask more follow-up questions than I thought would be necessary. Consequently, I included a number of probes and prompts in the final version of the interview schedule in order to use them in similar cases.

4.4.2 Validity and reliability of the instruments

In this section, I discuss the validity and reliability of the methods used to collect data in the current research, based on the information obtained from the pilot study. According to Nunan (1992), "reliability refers to the consistency of the results obtained from a piece of research. Validity, on the other hand, has to do with the extent to which a piece of research actually investigates what the researcher purports to investigate" (p. 14).

4.4.2.1 Validity and reliability of the LLSQ

Two types of validity were examined in the present study: content validity and face validity. Paltridge and Phakiti (2015) define the former as "the representativeness of our measurement regarding the phenomena that we want information about", while they describe the latter as "the familiarity of our instrument, and how easy it is to convince others that there is content validity to it" (pp. 107–108). In order to check the content and face validity of an assessment tool, several researchers (e.g. Heppner, Wampold & Kivlighan, 2008; Johnson & Christensen, 2004) suggest that some experts judge whether the content of the items reflects the intended variable or not. Accordingly, two lecturers in Applied Linguistics at different public universities in Saudi Arabia were provided with a copy of the questionnaire and

144

requested to assess these constructs. The lectures examined the questionnaire items and reported that they all related to the three categories of learning styles investigated in this study and that the items sufficiently represented the corresponding constructs. As a result, the lecturers decided that the LLSQ had acceptable content and face validity.

According to Creswell (2003), reliability of a questionnaire can be assessed by checking its "internal consistency (i.e. are the items' responses consistent across constructs?) and test-retest correlations (i.e. are scores stable over time when the instrument is administered a second time?)" (p. 158). Therefore, to assess the internal consistency of the LLSQ, Cronbach's alpha coefficients were calculated for each of its scales and subscales as well as for the whole questionnaire. According to Nunnally (1978), Cronbach's alpha values above .7 are considered acceptable. This value has also been agreed upon in more recent statistics books (e.g. Brace et al., 2012; Pallant, 2013). The results are presented in Table 4.5 below.

Table 4.5
Internal Consistency Reliability of the Scales and Subscales of LLSQ

Scale/subscale of LLSQ	Cronbach's alpha	Cronbach's alpha based on standardised items	No. of items
Perceptual Learning Styles	.811	.815	20
Visual	.756	.755	5
Aural	.817	.820	5
Read/Write	.725	.723	5
Kinaesthetic	.700	.704	5
Peer Collaboration	.774	.793	10
Tolerance of Ambiguity	.818	.819	10
Total LLSQ	.842	.850	40

As we can see, Cronbach's alpha coefficients ranged from a minimum of .700 for the kinaesthetic learning style to a maximum of .842 for the whole LLSQ. Next, the test-retest reliability of the LLSQ was assessed by calculating Pearson product-moment correlation coefficients (*r*) between the students' responses on the two occasions the questionnaire was administrated. The results are presented in Table 4.6 below.

Table 4.6
Test-Retest Reliability of the Items in the LLSQ

Item No.	Pearson's *r*
1	.747 [**]
2	.848 [**]
3	.703 [**]
4	.902 [**]
5	.844 [**]
6	.829 [**]
7	.773 [**]
8	.847 [**]
9	.839 [**]
10	.838 [**]
11	.737 [**]
12	.742 [**]
13	.793 [**]
14	.742 [**]
15	.836 [**]
16	.759 [**]
17	.795 [**]
18	.747 [**]
19	.780 [**]
20	.839 [**]
21	.806 [**]

Item No.	Pearson's r
22	.824[**]
23	.865[**]
24	.813[**]
25	.776[**]
26	.830[**]
27	.815[**]
28	.820[**]
29	.776[**]
30	.762[**]
31	.770[**]
32	.806[**]
33	.864[**]
34	.845[**]
35	.873[**]
36	.832[**]
37	.872[**]
38	.812[**]
39	.740[**]
40	.745[**]

Note. [**] $p < 0.01$ (2-tailed).

The data in Table 4.6 shows that Pearson's coefficients ranged from a minimum of .703 for item 3 to a maximum of .902 for item 4. According to Cohen (1988, pp. 79–81), an r value between .50 and 1.0 indicates a large correlation between the items. Additionally, all coefficients were statistically significant. Hence, it was concluded that the LLSQ had high test-retest reliability.

4.4.2.2 Validity and reliability of the AFLLQ

Content and face validity of the AFLLQ were assessed by the same lecturers who assessed the validity of the LLSQ. They both reported that all items were relevant to the three types of affective factors examined in the present study and that they adequately covered the necessary contents. Consequently, the lecturers judged the AFLLQ as having acceptable content and face validity.

To assess the internal consistency of this questionnaire, Cronbach's alpha coefficients were calculated for all of its scales and subscales as well as for the whole questionnaire. The results are presented in Table 4.7 below.

Table 4.7
Internal Consistency Reliability of the Scales and Subscales of AFLLQ

Scale/subscale of AFLLQ	Cronbach's alpha	Cronbach's alpha based on standardised items	No. of items
Anxiety	.924	.924	16
General Classroom Anxiety	.776	.778	4
Communication Apprehension	.810	.810	4
Test Anxiety	.809	.811	4
Fear of Negative Evaluation	.785	.786	4
Motivation	.920	.927	24
Intrinsic Motivation	.900	.900	12
Accomplishment	.717	.719	4
Knowledge	.700	.701	4
Stimulation	.779	.794	4
Extrinsic Motivation	.832	.847	12
External Regulation	.711	.740	4
Introjected Regulation	.720	.721	4
Identified Regulation	.799	.797	4

Scale/subscale of AFLLQ	Cronbach's alpha	Cronbach's alpha based on standardised items	No. of items
Self-efficacy	.916	.917	10
Total AFLLQ	.893	.900	50

As we can see, Cronbach's alpha coefficients ranged from a minimum of .700 for the Knowledge subscale to a maximum of .924 for the Anxiety Scale. Next, the test-retest reliability of the AFLLQ was assessed by calculating Pearson product-moment correlation coefficients (*r*) between the students' responses on the two occasions the questionnaire was administrated. The results are presented in Table 4.8 below.

Table 4.8
Test-Retest Reliability of the Items in AFLLQ

Item No.	Pearson's *r*
1	.752[**]
2	.830[**]
3	.758[**]
4	.871[**]
5	.808[**]
6	.820[**]
7	.735[**]
8	.836[**]
9	.875[**]
10	.760[**]
11	.892[**]
12	.837[**]
13	.858[**]
14	.873[**]
15	.819[**]

Item No.	Pearson's r
16	.915[**]
17	.817[**]
18	.858[**]
19	.873[**]
20	.860[**]
21	.805[**]
22	.825[**]
23	.878[**]
24	.727[**]
25	.853[**]
26	.785[**]
27	.838[**]
28	.874[**]
29	.823[**]
30	.872[**]
31	.904[**]
32	.865[**]
33	.912[**]
34	.905[**]
35	.881[**]
36	.876[**]
37	.789[**]
38	.865[**]
39	.749[**]
40	.868[**]
41	.890[**]
42	.850[**]
43	.885[**]
44	.835[**]
45	.834[**]
46	.850[**]

Item No.	Pearson's *r*
47	.856 **
48	.853 **
49	.808 **
50	.837 **

Note. ** *p* < 0.01 (2-tailed).

The test-retest reliability coefficients ranged from a minimum of .727 for item 24 to a maximum of .915 for item 16. Besides, all coefficients were found to be statistically significant. Therefore, it was concluded that the AFLLQ had high test-retest reliability.

4.4.2.3 Validity and reliability of the interviews

Creswell (2003) argues that validity is "a strength of qualitative inquiry", while "reliability and generalisability play a minor role" and can be used "in a limited way" when several researchers are involved in a project (p. 196). The terms *credibility* and *dependability* are sometimes used in qualitative research to refer to validity and reliability, respectively. Researchers (e.g. Creswell, 2003; Johnson & Christensen, 2004; Lincoln & Guba, 1985; Patten, 2005) proposed a number of strategies to validate the accuracy of findings obtained from qualitative measures. Triangulation of data sources is one of those strategies. It was employed in the current study by combining quantitative data (from three questionnaires) and qualitative data (from semi-structured interviews) in order to present stronger evidence for the findings, as explained in Section 4.2.1 above. Another strategy suggested in the literature and employed in the current study was peer debriefing. I asked one of the lecturers who assessed the validity of the LLSQ and AFLLQ to serve as a peer debriefer. We met three times, after important stages in the process were completed: transcribing quotes from the interviews, analysing the data and interpreting the results. The debriefer checked the data to ensure that I

had not overlooked or overemphasised certain points. He believed that adequate weight was given to the six learning styles and affective factors that the study aimed to examine.

4.5 Population, sample and sampling procedures of the main study

4.5.1 The quantitative phase

The target population of the present study consisted of foundation year students at a major public university in the western region of Saudi Arabia, who had completed seven years of mandatory English education at school, as dictated by the national curriculum, prior to joining the university. The students were all Saudi nationals, with Arabic as their first language. They took an English placement test (developed by the English language institute at that university) at the beginning of the academic year and were placed into different proficiency levels: low (English 102), middle (English 103) and high (English 104). Both streams of Humanities and Science were receiving mandatory intensive English instruction for 15 hours per week and were requested to participate in this study. In addition, both male and female students were included in this research.

The total number of the target population was approximately 8,000 students. A power analysis was conducted to determine the minimum sample size required to detect an existing relationship between variables. Fink (2016) pointed out that:

> The power of a statistical test is the probability that the test will reject a false null hypothesis (that it will not make a Type II error). Another way to think about this is as the ability of a test to detect an effect given that the effect actually exists. As power increases, the chances of a Type II error decrease.

G*Power (version 3.1.7), a well-known and widely used statistical software, was used in the present study to conduct power analysis in light of the three research questions posed in Chapter 1. The inferential statistical tests used in analysing the data in the current study were independent samples t-tests, one-way between-groups analysis of variance (ANOVA) and

Pearson's correlation analysis. A small to medium effect size was hypothesised to be present, and all calculations were made assuming a power of 0.9 (i.e. a 90 per cent chance of detecting a difference) and a significance level of 0.05.

A. Independent samples t-tests: in order to detect an effect size of $d = 0.375$, a sample size of 302 participants was required.

B. One-way between-groups ANOVA: to detect an effect size of $f = 0.25$, a sample size of 255 participants was required.

C. Pearson's correlation analysis: to detect a small to moderate correlation, a minimum sample of 112 participants was required.

Since the independent samples t-tests required the largest sample size of the three tests, it was decided to consider the minimum sample size required in the present study to be 302 participants.

To reduce sampling errors, stratified random sampling was used to select the sample. Stratified random sampling is defined as "a technique in which a population is divided into mutually exclusive groups (called strata) and then a simple random sample or a systematic sample is selected from each group (each stratum)" (Johnson & Christensen, 2004, p. 207). Gender and English proficiency level were selected as stratification variables because they were the two major variables according to which the learners were placed into different classes. The participants' demographic characteristics are presented in Table 4.9 below.

Table 4.9

Frequency and Percentage Distributions of the Participants' Demographic Characteristics

Demographic characteristic	Frequency [*]	Percentage [*]
Gender		
Male	148	44.3
Female	186	55.7
Age		
18 years	27	8.1
19 years	187	56.0
20 years	79	23.7
21 years	23	6.9
22 years	9	2.7
Other	3	0.9
Track of study		
Humanities	244	73.1
Science	86	25.7
English proficiency		
Low (English 102)	83	24.9
Middle (English 103)	107	32.0
High (English 104)	144	43.1
School level at which English learning started		
Preschool	11	3.3
Elementary school	183	54.8
Intermediate school	135	40.4
Hours per week spent studying English		
Less than 5 hours	273	81.7
5–10 hours	41	12.3
11–15 hours	9	2.7
More than 15 hours	8	2.4

Demographic characteristic	Frequency [*]	Percentage [*]
Frequency of using English outside the classroom		
Always	4	1.2
Often	45	13.5
Sometimes	140	41.9
Rarely	122	36.5
Never	22	6.6
Having resided in an English-speaking country		
Yes	19	5.7
No	315	94.3
Length of time resided in an English-speaking country		
Less than 3 moths	10	52.6
3 months	3	15.8
5–7 months	3	15.8
1 year	3	15.8
Knowing a FL other than English		
Yes	18	5.4
No	316	94.6
FL known by the participants		
Bukhari	1	5.6
French	5	27.8
Hindi	2	11.1
Japanese	1	5.6
Korean	6	33.3
Spanish	1	5.6
Urdu	2	11.1
Father's educational level		
Below secondary school	97	29.0

Demographic characteristic	Frequency [*]	Percentage [*]
Secondary school certificate	112	33.5
Diploma/Bachelor's degree	100	29.9
Master's/Doctorate degree	23	6.9
Father's knowledge of English		
Good knowledge	99	29.6
Little knowledge	128	38.3
No knowledge	106	31.7
Mother's educational level		
Below secondary school	153	45.8
Secondary school certificate	93	27.8
Diploma/Bachelor's degree	78	23.4
Master's/Doctorate degree	4	1.2
Mother's knowledge of English		
Good knowledge	36	10.8
Little knowledge	125	37.4
No knowledge	169	50.6

Note. [*] For a few variables, the frequencies may not add up to the total sample size (n = 334) and the percentages may not add up to 100 due to the presence of missing values in the data.

The data in Table 4.9 shows that the number of the female students (n = 186, 55.7%) was higher than that of their male peers (n = 148, 44.3%). In addition, a large number of the students (n = 144, 43.1%) were attending the English 104 class at the time the present study was carried out. That was followed by 107 students (32.0%) in English 103 and 83 students (24.9%) in English 102 classes.

4.5.2 The qualitative phase

Semi-structured interviews were conducted with 20 students, who were purposively selected from those who had given their consent to be interviewed when asked about it after

completing the questionnaires. As with the quantitative phase, the two variables of gender and

English proficiency level served as a basis for the interviewee selection. Dörnyei (2007)

usefully summarises the primary aim of sampling in qualitative research as:

> The main goal of sampling is to find individuals who can provide rich and varied
> insights into the phenomenon under investigation so as to maximise what we can learn.
> The goal is best achieved by means of some sort of "purposeful" or "purposive"
> sampling. (p. 126)

Thus, purposeful sampling enables researchers to "learn a great deal about issues of central

importance to the purpose of the inquiry" (Patton, 2015, p. 265). Table 4.10 shows the

frequency distribution of the interviewees according to gender and English proficiency.

Table 4.10
Frequency Distribution of the Interviewees

English proficiency	Male	Female
Low (English 102)	2	4
Middle (English 103)	3	3
High (English 104)	4	4
Total	9	11

4.6 Ethical considerations

Ethics refers to "what is or is not legitimate to do, or what 'moral' research procedure

involves" (Neuman, 2006, p. 129). In the current study, a number of ethical considerations

were taken into account before and after the research process. First, permission to conduct the

study was sought from the University of Birmingham's ethics committee by completing a

University Ethics Self-Assessment Form (SAF). After receiving their approval (see Appendix

I), a written proposal was prepared and submitted to the graduate school of the Saudi

university where the study was to take place. The proposal was reviewed by several committees, and approval was granted.

Before administering the questionnaires to the selected participants, I provided them with the Participants' Information Sheet (Appendix F), which described the purpose of the research, the tasks they were required to perform and the possible benefits and risks of participating in the present study. Freedom to withdraw from the study and confidentiality of information were also guaranteed to the students (Creswell, 2003; Dörnyei, 2003b; Gillham, 2007). For ease of understanding and to avoid confusion, all information was presented in the participants' mother tongue, Arabic, and was also verbally explained to the students.

The students were offered to be sent a copy of their results once the study was completed, if they were interested. Moreover, no risks were foreseen from participation in this study; however, the students were informed that they had the freedom not to answer any question they might find embarrassing or sensitive. It was also made clear to the students that their participation in the study was entirely voluntary and that if they chose not to participate or to withdraw from the study, there would be no penalty and that their withdrawal would have no effect on their scores on the English module. This was very important, as Oliver (2003) pointed out:

> Even when participants give their informed consent, they cannot necessarily be expected to anticipate their feelings about participation. It is important that as part of the induction and informed consent process, participants are reassured that they may withdraw from the research at any time. They should not have to give any notice about withdrawal, and they should not have to provide any explanation. (p. 47)

Moreover, the students were assured that if they agreed to participate in the current study, they would not be asked to write their names on the questionnaires and that all data gathered for this study would be kept confidential and used only for research purposes. Equally important, the name of the university where the study took place was not mentioned

anywhere in this thesis. All students agreed to take part in the study and were requested to sign the Informed Consent Form (Appendix G).

Similarly, before conducting the interviews, the purpose and topics that would be probed by the interviews were explained to the participants. Again, they were requested to sign the Informed Consent Form (see Appendix H), which covered the same ethical concerns discussed above in addition to seeking permission to audio record the interviews. Moreover, participants were assured that no names would be used when presenting and interpreting the interview data.

Finally, it should be pointed out that all paper and electronic documents that contained the participants' personal data were stored safely in a locked cabinet in my home office.

4.7 Data collection procedures

The main study took place in the spring term of 2013 (i.e. the middle of the academic year in Saudi Arabia). A major public university in ▓▓▓▓▓▓▓ Saudi Arabia was chosen as the data collection site for two reasons. Firstly, it was one of the first Saudi universities to offer intensive English instruction to foundation year students. Secondly, it was well-known for implementing high standards of English language instruction and taking individual differences among learners into consideration. Both characteristics were necessary to adequately address the topics of learning styles and affective factors in English language learning.

It should be pointed out that due to gender segregation in Saudi Arabia, where male and female students attend separate campuses, I carried out the quantitative and qualitative data collection procedures with the female participants in the current study, while a male colleague, with identical qualifications to mine, undertook the quantitative and qualitative

data collection procedures with the male participants. The same steps that I had taken to collect the data (described below) were taken by my colleague.

Upon arrival in Saudi Arabia, I met with the supervisor of my fieldwork in the English language institute at the university, who explained all the necessary procedures to me. She advised me to contact the coordinators in the institute so that I could make contact with the teachers of the classes to which the questionnaires were to be distributed. Arrangements were then made directly with the teachers for convenient dates and times to distribute the questionnaires to their students.

4.7.1 Procedures for administering the questionnaires

I administered and collected all the questionnaires during regular class time. That offered two advantages. Firstly, as the teachers were not present at that time, the students had the opportunity to complete the questionnaires honestly and accurately without attempting to impress them (the so called *social desirability bias*). Additionally, a return rate of 100% was obtained. As explained in the previous section, I started by introducing myself, explaining the purpose of my research and distributing copies of the Participant Information Sheet and Informed Consent Form to the students. I made it clear that their participation in the present study was entirely voluntary, and that all data gathered for this study would be kept confidential and used for research purposes only. To ensure clarity, all verbal and written communications were made in Arabic.

Next, I read the questionnaire instructions to the students and clarified that there were no right or wrong answers, as I was only interested in their personal opinions. I also presented an example item and answered it by myself to make sure they knew how to use the Likert scale correctly. In addition, the students were requested to work individually and to provide

truthful responses to the questionnaire items. All questionnaires were completed in approximately 30 minutes. After that, I thanked the participants and promised to send them a copy of their results if they were interested.

4.7.2 Procedures for conducting the interviews

As described in Section 4.2.1 in this chapter, a concurrent triangulation strategy was used in the current study. Thus, as soon as the questionnaires were distributed to a certain class, interviews were conducted with students who indicated a desire to participate and fit the criteria of gender and proficiency level mentioned in Section 4.5.2 above. The interviews were carried out on days and times scheduled to fit the students' timetables and not to disrupt their regular classes, which resulted in conducting two or three interviews within one day.

All interviews were carried out in a one-on-one setting in a private and quiet office allocated to me by the English language institute at the university in question to conduct my project. In order to make the interviews seem less formal and more comfortable to the students, I followed King and Horrocks' (2010) advice regarding not sitting on the main office chair but on a seat close to the interviewees, with a small table between us in order not to invade their personal space. The interviews started by thanking the participants for their interest in taking part in the study. The purpose of the interviews and the manner in which they would be conducted were then explained to the interviewees. They were informed that the interviews would be audio-recorded, and the issue of confidentiality was explained to them (as described in Section 4.6 above). All participants seemed comfortable, and they signed the Informed Consent Form (Appendix H) prior to commencing the interviews. For ease of understanding and in order to give the interviewees the opportunity to express themselves freely and accurately, the interviews were conducted in Arabic.

Each interview commenced with a general discussion about the participants' English learning experiences to establish rapport. This was an essential step since, according to Seidman (2006), "the interviewing relationship must be marked by respect, interest, attention, and good manners on the part of the interviewer" (p. 97). I then started to discuss the topics of interest using the interview guide prepared for this study. The prompts and probes mentioned in the interview protocol were used whenever I needed a participant to expand on an answer and whenever I thought I could gain more insight about a certain topic. I tried to say as little as possible in order not to interrupt the interviewees and to gain as much information as possible from them. However, if the participants started to digress and bring in irrelevant issues, I had to redirect their attention by using appropriate questions. Although all interviews were audio-recorded, I took notes on important issues in case the recorder failed (Creswell, 2003). In total, 20 interviews were conducted with male and female students, and each interview lasted for about an hour.

4.8 Data analysis

Since the present study employed a concurrent triangulation design, quantitative and qualitative data analyses were carried out separately, and the results were corroborated at the interpretation phase.

4.8.1 Analysis of the questionnaire data

The total number of the questionnaires collected in the main study was 340. Of these, six were excluded for two reasons: four questionnaires were left half blank, and in the other two, the participants selected the same response category (agree) to all questionnaire items. Therefore, 334 completed questionnaires were considered for analysis.

First, the data obtained from the three questionnaires (DIQ, LLSQ and AFLLQ) was coded and entered into the Statistical Package for Social Sciences (SPSS, version 22). It was then examined for errors, more specifically, values that fell outside the range of possible scores for each variable (Pallant, 2013, p. 45). None of these was found.

After that, the data was analysed using appropriate descriptive and inferential statistics in order to answer the three research questions investigated in this study. First, the participants' scores on the items that made up each of the scales and subscales of the LLSQ and AFLLQ were added up to obtain an overall score for each participant. The scores were then transformed into categories in order to identify the high, middle and low ranges for each variable investigated in this study. After that, descriptive statistics (mean, standard deviation and minimum and maximum values) were used to identify the learning style preferences and affective factors that influenced the learners (research questions 1 and 2). Second, since the data had a normal distribution, the possible differences in the participants' learning styles and affective states according to their demographic characteristics were examined using independent samples t-tests and one-way between-groups ANOVA (research questions 1a and 2a). After that, the relationships between the participants' preferred learning styles and the affective factors influencing them on one hand and their total scores on the English module on the other hand were examined by calculating Pearson product-moment correlation coefficients (r) (research questions 1c and 2c). Pearson's correlation analysis was also conducted to explore the links between learning styles and affective factors (research question 3).

4.8.2 Analysis of the interview data

As mentioned in Section 4.5.2 above, a total of 20 interviews were conducted in the present study. All interviews were carried out in Arabic, and relevant quotes were transcribed

and translated into English. I started the data analysis process by reading through the transcripts in order to "obtain a general sense of the information and to reflect on its overall meaning" (Creswell, 2003, p. 191). The analysis then started by using NVivo 10 to organise the data into categories and themes. Advocates of qualitative data analysis software emphasise that it facilitates "an accurate and transparent data analysis process whilst also providing a quick and simple way of counting who said what and when, which in turn, provides a reliable, general picture of the data" (Welsh, 2002). In addition, since such software is often built according to the grounded theory guidelines, it allows "the data to 'speak for themselves' rather than approaching the data within, for example, existing theoretical frameworks" (Welsh, 2002).

The thematic analysis was continued by examining the emerging themes and deciding on how to organise and integrate them. That was a lengthy process that involved regrouping categories and refining themes to best represent the data (Creswell, 2003; King & Horrocks, 2010). All significant themes that were identified in the data are discussed thoroughly under the relevant questions in the results and discussion chapters in this thesis (See Appendix K for a thematic analysis example). It should also be pointed out that reflexivity was used throughout the analysis, which shed light on how my teaching experience, thoughts and beliefs influenced my interpretation of the data (Creswell, 2003; King & Horrocks, 2010)

4.9 Chapter Summary

This chapter described the methodology employed in the current study. It discussed the chief characteristics of the mixed methods research design and provided a rationale for selecting it as the most appropriate strategy to address the three research questions investigated in this study. This was followed by a description of the questionnaires and

interviews developed and used to collect the required data. The pilot study was then

thoroughly described and its results were used to provide evidence for the validity and

reliability of the data collection instruments. Next, the sampling procedures used in the main

study were discussed along with the ethical considerations followed to protect the

participants' rights. Thereafter, details of the data collection procedures were presented. That

was followed by a description of the techniques utilised to analyse the quantitative and

qualitative data. In the next three chapters, I present the results of the data analysis and

explain how they answer the three research questions posed in this study.

Chapter 5: Results and Discussion of the Learning Style Preferences

of Saudi Learners of English (Research Question 1)

5.1 Introduction

This chapter presents the results of the data analyses conducted to address the first research question posed in this study, which focuses on exploring the learning styles that Saudi learners of English prefer to use. The approaches described in the previous chapter were utilised to analyse the questionnaire data using SPSS (version 22) and to organise and examine the interview data through Nvivo (version 10). Discussion of the obtained findings and their relevance to the available literature are also provided in this chapter. As pointed out when reviewing the literature in Chapters 2 and 3, only recent studies (conducted in the last ten years) that involved EFL learners (as opposed to ESL learners and learners of other languages) are included in the discussion.

The first research question in this study sought to investigate the following:

Q1. What learning styles do Saudi learners of English prefer to use?

Q1a. Do these learning style preferences differ according to the learners' demographic characteristics? (In this study, 12 demographic characteristics are examined).

Q1b. What elements in the classroom influence the learners' preferences for these learning styles?

Q1c. What is the relationship between the learning style preferences of the learners and their English language proficiency and performance?

Each of these questions was addressed by conducting a thorough analysis of the relevant quantitative and qualitative data, drawing connections between them and explaining how they corroborated each other. The findings were also examined in relation to previous studies on

language learning styles and explained in light of the relevant theoretical models discussed in Chapter 2. Where appropriate, I drew on my English teaching experience to provide my own interpretation of the results.

5.2 Question 1. What learning styles do Saudi learners of English prefer to use?

This question was concerned with exploring the learning style preferences of Saudi learners of English. As pointed out in the previous chapter, descriptive statistics (mean, standard deviation and minimum and maximum values) of the scales and subscales of the LLSQ were calculated to address this question. The results are presented in Table 5.1 below.

Table 5.1
Descriptive Statistics of the Scores on LLSQ

Scale/subscale of LLSQ	Mean	Standard deviation	Minimum	Maximum
Perceptual Learning Styles				
Visual	3.907	.590	1.80	5.00
Aural	3.492	.626	1.40	5.00
Read/Write	3.728	.524	1.80	4.80
Kinaesthetic	3.623	.577	1.60	5.00
Peer Collaboration	3.549	.564	1.00	5.00
Tolerance of Ambiguity	3.618	.460	2.10	4.70

It should be pointed out that since the scores on the LLSQ were obtained using a 5-point Likert scale that included the following options: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) and 5 (strongly agree), it seemed reasonable to interpret the participants' mean scores as follows:

M = 1 − 2   low preference

M = 2.1 − 3.9   moderate preference

M = 4 − 5   high preference

5.2.1 Perceptual learning styles

The data in Table 5.1 shows that the mean scores on all perceptual learning styles lay in the moderate preference range and that only small differences existed between them. This might suggest that the students had no strong preference for certain styles over the others and thus, they could be considered multimodal (Fleming & Mills, 1992). Figure 5.1 below presents an overview of the participants' mean scores on each perceptual learning style subscale.
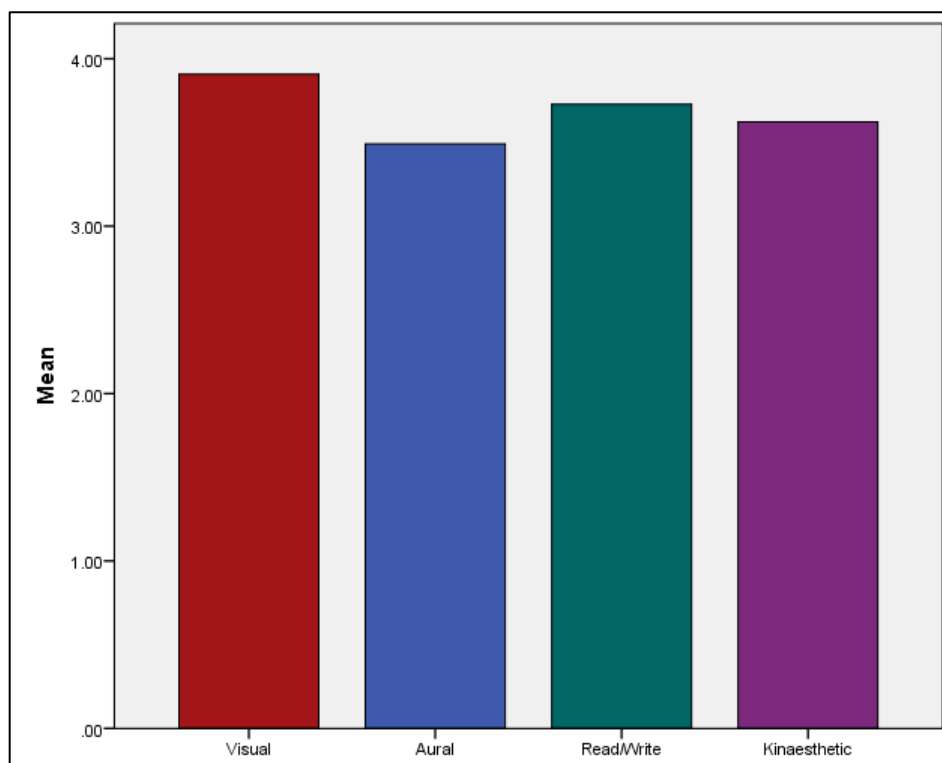
Figure 5.1. Mean scores on the subscales of the Perceptual Learning Styles Scale.

This result was supported by the qualitative data, which showed that the vast majority (85%) of the students were assertive about the advantages of using a variety of learning styles, as they "complement one another" (Interviewees 1, 2, 4 & 5). They believed that learning through different channels helped them understand the information more thoroughly and retain it longer. As Interviewee 7 eloquently pointed out, "The more senses I use, the better I learn." A useful example of this multimodal preference was provided by Interviewee 17, who explained that "English is a language which requires the use of all styles, sometimes the visual style and other times the aural. For example, when I see a picture of something, I learn its name in English through the visual style and its pronunciation through the aural style." This is consistent with Oxford's (2003) suggestion that learning styles are not "dichotomous" but "operate on a continuum or on multiple, intersecting continua" (p. 3). Thus, one learning style does not exclude the existence of another, and learners can possess a variety of learning styles. This finding also provides evidence for Sprenger's (2008) assumption that new information is processed more efficiently when more senses are triggered.

Interviewees who expressed a dislike for using a variety of learning styles believed that each individual had his/her own preferred styles, and ideally each student should be able to learn in the way that suited him/her best. In this respect, it appears that Burke and Doolan (2008) are right when suggesting that "when people use, rather than ignore their natural styles, they learn more, more quickly, and with less frustration than they do when trying to use someone else's style" (p. 206). This discrepancy in learners' experiences is not surprising and may be better understood in light of Felder's (n.d.) suggestion:

> If the balance is achieved, all students will be taught partly in a manner they prefer, which leads to an increased comfort level and willingness to learn, and partly in a less preferred manner, which provides practice and feedback in ways of thinking and solving problems which they may not initially be comfortable with but which they will have to use to be fully effective professionals.

Comparing the mean scores on the subscales of the Perceptual Learning Styles Scale, it can be seen that the mean score on the Visual Scale was the highest (M = 3.907, SD = .590), indicating that the learners showed the greatest preference for this style. More specifically, it was found that the majority (88%) of them preferred to learn new information using visual aids such as pictures, charts and maps, and a similar percentage of them enjoyed watching videos and films to learn new material. In addition, most (78.1%) of those surveyed indicated that they learned better by using colour coding and highlighting important material, and a similar percentage believed that they were able to remember information better when they pictured it in their heads. Moreover, more than half of the respondents reported that they liked to make drawings and illustrations of new material in order to understand it better.

In line with the quantitative findings, the majority (65%) of the interviewees expressed a preference for the visual learning style, and a good percentage of them reported that visual aids facilitated their understanding of new material. Significantly, there were no negative references to this style at all. The popularity of this perceptual learning style could be attributed to several factors. First, a few participants revealed that visualising helped them remember what they had learned to a better degree. It was also mentioned that the visual style was more engaging than the other perceptual styles of learning. As Interviewee 2 commented, "I participate more when the teacher uses PowerPoint shows. It is better than reading from the board or just listening to the teacher."

This finding seems to be consistent with some of the previous studies reviewed in Chapter 2 (Section 2.8.1.2), which found the visual style to be the most preferred perceptual style among EFL learners in different international contexts. These include Almutairi's (2007) study of Saudi students, Aqel and Mahmoud's (2006) research with Palestinian learners of English, Gilakjani's (2012) study of EFL learners in Iran and Zhang and Evans's (2013)

research with Chinese students. This evidence could suggest that learning style preferences are not restricted by learners' ethnicity and certain styles can be popular across different ethnic groups.

Table 5.1 above also shows that the mean score on the Read/Write Scale was the second highest score (M = 3.728, SD = .524). A significantly large percentage (89.2%) of the participants indicated that they remembered information better when they wrote it down, and a similar percentage reported that they remembered lectures and discussions better by taking notes on them. Likewise, approximately three quarters (75.2 %) of the respondents stated that they liked to summarise text material and to make lists of new vocabulary to better recall it. In the same line, more than half of the students indicated that they preferred to use written instructions rather than oral ones when carrying out new tasks.

In accordance with the questionnaire results, more than half of those interviewed indicated a preference for this perceptual learning style. A few participants explained that it helped them understand the content better, and others pointed out that reading and writing helped them memorise the material and remember it well. As Interviewee 7 commented, "When I read something, I see it in front of me, and I can focus on it. Also, when I write down information, I reinforce what I have learned. Similarly, when the teacher explains something and writes it down on the board, I learn and understand it better than if she just says it." Nevertheless, two participants indicated a dislike for this style, with one student attributing that to the fact that it only helped him "learn how to write but not how to pronounce new words" (Interviewee 17), and another one finding it "boring" (Interviewee 20). It was also observed that a few participants revealed that this was a style that they simply needed to use when learning English.

Moreover, quantitative data showed that the kinaesthetic learning style was the third preferred perceptual style (M = 3.623, SD = .577) among the study participants. It was found that the majority of them preferred to learn new material by moving or touching (reported by 79.9% of the participants) and by playing games and taking part in role-plays (reported by 71.3%). A similar percentage also revealed that physical movement helped them think better about their classroom assignments.

Interestingly, the interview data revealed that the responses of those who preferred the kinaesthetic learning style revolved around the belief that moving around and playing games were effective in helping them understand new material and retain information longer. As Interviewee 10 stated, "Doing activities and playing games help me remember information better." Other students, however, were less positive about this style, with one participant indicating that this was his least preferred learning style and two participants suggesting that this style should only be used to compliment other styles.

Finally, the aural style was found to be the least preferred one (M = 3.492, SD = .626) by the learners. Nonetheless, the fact that only small differences existed between the respondents' mean scores on the four subscales of the Perceptual Learning Styles Scale should be taken into consideration. Indeed, an examination of the quantitative data revealed that approximately three quarters (75.2%) of the students stated that they remembered information better by discussing it aloud with a classmate, and more than half (55.7%) of them reported that they preferred to learn by listening to a lecture rather than by reading.

Qualitative data also showed that the aural style was contentious, with five participants preferring this style and seven participants disliking it. Those who preferred this style focused on the fact that they needed it to learn how to pronounce words correctly. As Interviewee 11 commented, "I remember information better when I hear it. Also, I have to listen to words to

learn their correct pronunciation." Nonetheless, the reason for the relative unpopularity of the

aural style seemed to be connected to the fact that some participants had difficulty with

listening comprehension and tended to not do well on listening tests. For example,

Interviewee 4 stated, "I cannot learn by listening to information only. Also, in tests, speakers

talk very fast which frustrates me." Similarly, Interviewee 6 commented, "I have difficulty

with listening comprehension. I do not understand by listening alone; I need to read the

transcript at the end of the book to understand what the speakers say. Then, when I listen to

the same conversation again, I become able to understand it without looking at the transcript."

Other participants complained about not being able to remember information delivered

through the aural style. Interviewee 20, for example, mentioned, "I quickly forget what I

hear."

This finding does not match those observed in a few of the earlier studies reviewed in

Chapter 2 (Section 2.8.1.2), which have found the aural style to be the most favourite style

among their participants. These include Alkhatnai's (2011) study of Saudi students, Naqeeb

and Awad's (2011) research with Palestinian learners of English, Salehi and Bagheri's (2011)

study of English learners in Iran and Chu and Nakamura's (2010) research with Japanese

students. This discrepancy could be attributed in part to the use of different instruments to

assess learning styles. As mentioned in Chapter 4 (Section 4.3.1.2), I developed the

Perceptual Learning Styles Scale used in the present study based on the VARK model. In

contrast, both Alkhatnai (2011) and Salehi and Bagheri (2011) used Reid's PLSPQ, while in

the other two studies, the researchers developed their own instruments. Another possible

explanation for this incongruity is that different factors might have come into play and

influenced the learners' preferences in various ways. As Healey et al. (2005) point out,

although people are born with particular preferences towards certain learning styles, personal

development and learning experiences can have a great influence on shaping those preferences. For example, the participants in the present study reported that they found certain styles (e.g. the visual style) to be more helpful than others when carrying out certain learning activities (e.g. grammar exercises). They also indicated that their teacher played a significant role in encouraging them to use a variety of learning styles (See section 5.4.1 below for a discussion of these findings).

Interestingly, mixed responses were obtained when the interviewees were asked whether their preferred perceptual styles had changed since they started to learn English. More specifically, half of the participants indicated that their styles were fixed and had always been the same, while the other half asserted that they had changed since they joined the university. As Interviewee 16 commented, "I did not have preferred styles in school, and I have started using these styles at university." Another interviewee provided a clear explanation for why her learning styles had changed: "I used to memorise without understanding. If I understood something, it was only to pass tests. I do not remember any of the information I learned in school. But now, I want to learn the language for its own sake. I have better goals now" (Interviewee 11). This finding could suggest a possible link between the use of perceptual learning styles and motivation to learn English, as will be discussed in Chapter 7.

The change in the participants' learning styles could indicate that learning styles are not steady phenomena which function in the same manner all the time (Ehrman, 1996) but may be considered "flexibly stable" (Coffield et al., 2004, p. 2). That is, although learners often express typical preferences for specific learning modes, these are likely to develop and change throughout the learning process. Hence, it may be possible to encourage learners to adjust their habitual preferences in order to maximise their learning in less favourable environments.

This issue is discussed further in Chapter 8 when the pedagogical implications of this study are presented.

5.2.2 Peer collaboration

The Peer Collaboration Scale is concerned with investigating the learners' preferences for collaborative or individual learning. It can be seen from the data in Table 5.1 above that the mean score obtained on this scale fell in the region of moderate preference towards peer collaboration (M = 3.549, SD = .564). This indicated that the students displayed equal preferences towards working with peers or alone. The majority of the respondents reported that they learned more and remembered information better when learning with a partner or in a group (i.e. peer collaboration), and 43.4 per cent of them reported a dislike for individual work in class. It should be pointed out here that only items No. 11, 23, 28, 30 and 39 were included in calculating the mean scores on this scale, as the remaining five items assessed the manner in which the learners preferred to work in groups (e.g. if they preferred the teacher to assign a specific role to each member or to let them form their own groups).

Fortunately, the interview data offered rich explanations for the students' learning style preferences. While three quarters of the interviewees expressed a strong preference for peer collaboration, only 15 per cent of them revealed a desire for learning on their own and thought that learning in a group was not suitable for them. A large majority (65%) of the interviewees indicated that the reason why they preferred to learn in a group was the possibility of learning from their peers and correcting one another's mistakes. In fact, 25 per cent of the students indicated that they found it more beneficial to work with fellow students who were "good" at English, and 20 per cent of them stressed that the most important characteristic of group members was cooperation. Whereas 30 per cent of the participants asserted that it did not

matter to them whether or not they were working alongside their friends, 20 per cent of them indicated that they felt more comfortable working with people they knew. Interestingly, 10 per cent of the interviewees preferred to work with strangers, as they would have different ways of thinking and there would be less distraction as well.

These findings support Cohen's (1994) assumption that "group work is an effective technique for achieving certain kinds of intellectual and social learning goals. It is a superior technique for conceptual learning, for creative problem solving, and for increasing oral language proficiency" (p. 6). Frey, Fisher and Everlove (2009) also maintain that interaction with peers "forms the basis for more complex thinking and understanding".

On the other hand, those who preferred individual work pointed out that it helped them learn more and remember information better. As interviewee 10 eloquently explained, "If I work in a group, there is some dependence on the other members, for example, asking a good student to translate new words. But if I work alone, I do the translation by myself, and consequently, I memorise the meanings of those words. When I do something by myself, I remember it more." Another student was apprehensive about the possibility of learning incorrect information when working in a group and preferred to ask the teacher about what he did not understand. Still another student assertively mentioned "if I become a teacher, I will never ask my students to work in groups" (Interviewee 8).

In this regard, Elliot and Reynolds (2014) point out that an imbalanced sense of power and abilities are inevitable in any group, which deprives less skilled learners from participating actively in group work. Importantly, Gilovich et al. (2006) argue that what sometimes makes the performance of a group less fruitful than the sum of the works done by its individual members is that some people do not devote as much effort to accomplishing a task when they work with others as they would when working individually.

176

In total, there were four negative references to group work as opposed to two negative references to individual work. In spite of that, the majority (85%) of the interviewees pointed out that using a combination of learning styles was better than depending on one style, as each style had its own advantages and limitations. For example, Interviewee 12 stated, "learning in a group helps me become more fluent when speaking English. Learning alone helps me depend on myself." Interviewee 17 indicated that his preference for learning individually or with classmates depended on the task at hand "some activities are better done in groups, but there are certain exercises which I should answer by myself." These views are reasonable and support MacKeracher's (2004) suggestion that there is no one right way to learn a FL. Different learning styles should be viewed as "value-neutral" and should not be judged as better or worse (p. 80). What contributes to learning success is the appropriateness of specific styles to specific learning tasks and contexts. This issue is discussed further in Section 5.4.2 in this chapter.

An examination of previous studies on peer collaboration among EFL learners reveals inconsistent results (see Section 2.8.2.2 in Chapter 2). Similar to the findings of the present study, Li (2012) found no significant differences in Chinese students' preferences for group or individual work. On the other hand, both Alkhatnai's (2011) study of Saudi learners and Salehi and Bagheri's (2011) research with Iranian learners of English found that the participants reported group work as their major learning style while they regarded individual work as a negligible style. Chu and Nakamura (2010) also found that Taiwanese learners preferred to learn English collaboratively whereas Japanese learners favoured individual learning. The discrepancy in these findings could be attributed to the fact that certain factors (e.g. the classroom environment and prior learning experiences) can influence learners' preferences for one style over the other (Kinsella, 1995). In addition, it can sometimes be

difficult for learners to state with certainty a preference for one style over the other, since different tasks may call for different ways of learning, as pointed out by a few participants in the present study (see Section 5.4.2).

Interestingly, varied responses were obtained when interviewees were asked whether their preference for peer collaboration had changed since they started to learn English. Half of the participants indicated that their preference had always been the same. For example, Interviewee 7 commented, "I have always liked to study in a group". The other half asserted that their preferences had changed since they joined the university, as "group work was not used in school" (Interviewee 17). The following quote clearly shows the change of a learner's preference from collaborative to individual learning: "At the beginning, I wanted to work in a group because I was afraid I might not be able to answer questions by myself. I needed somebody to help me. Later, I realised that it was for my benefit to work alone in class. Working in a group was not useful for me" (Interviewee 8). This finding supports Coffield et al.'s (2004) assumption that learning styles are "flexibly stable" (p. 2), as explained in Section 5.2.1 above.

5.2.3 TA

The data in Table 5.1 above shows that the participants of this study had a moderate level of TA, as the mean score on the Tolerance of Ambiguity Scale was M = 3.618 (SD = .460). Hence, it appears that these learners were at an advantage. According to Ely (1995), moderate TA is the "ideal case" and the learner "who is aware of, but not threatened by, linguistic differentiation, and who treats it as an occasion for introspection, experimentation and, ultimately, learning, is the one for whom tolerance of ambiguity will be a help, not a hindrance" (p. 93).

In general, the respondents were found to be most intolerant of ambiguity when they did not completely understand grammatical rules (reported by 91.3% of the participants) and when they missed the beginning of an English class (reported by 69.8%). This finding supports Ely's (1995) assumption that ambiguity can be experienced in the language classroom in situations where learners are faced with grammatical structures that have diverse usages.

Moreover, interesting results were obtained regarding the extent to which the students were willing to tolerate ambiguity when listening comprehension was involved. It was found that the majority (78.3%) of the learners reported difficulty comprehending what people said if they used unfamiliar English words, and a large percentage (58.7%) of them did not enjoy listening to anything in English that they did not understand completely. This result could be linked to the fact that the aural style was found to be the least preferred learning style among the students, as mentioned in Section 5.2.1 above. Besides, Ely (1995) attributed the ambiguity which language learners commonly experience with listening comprehension to the presence of unfamiliar accent, vocabulary and grammatical structures in the verbal input.

On the other hand, the learners appeared to be more tolerant of ambiguity when reading comprehension was involved, since more than half of them liked to understand the meaning of every word that they came across in a reading passage (reported by 52.1% of the participants) or felt impatient when they did not totally understand the meaning of a reading text (reported by 53.4%). In fact, only 20.1 per cent of the respondents indicated that they did not like to guess the meaning of a new word from the context. Again, the moderate level of ambiguity tolerance observed here could be interpreted in light of the fact that the read/write style was found to be the second preferred learning style among the study participants, as explained in Section 5.2.1 above.

Consistently, a large percentage (60%) of the interviewees reported experiencing ambiguity in the English class, with only three participants indicating that they experienced no ambiguity there. As Interviewee 4 commented, "There is always ambiguity in English classes." Fortunately, the interviewees' comments offered useful insight about the reasons why they felt English was ambiguous. These include the fact that the structures of the Arabic and English languages are completely different, and that new or "difficult" words make English ambiguous. The following quote illustrates one of these many experiences of ambiguity:

> Because English is a foreign language, there should be some ambiguity in it. Even its grammatical rules are different from one another. I think the teacher should start each lesson by explaining new grammatical rules, and we can practice these rules later in class. I do not like the inductive method in learning English; it confuses me and most of the students as well. It can be used in Arabic classes because I understand what is being said there. (Interviewee 7)

As noted in Chapters 1 and 2, very little was found in the literature on the role of TA in language learning, and no studies were conducted in the context of Arab learners of English. Nonetheless, a comparison of the results of this study with those of studies conducted in other EFL contexts reveals a few similarities and differences between them. For example, the finding of this study matches that of Marzban et al.' (2012) research, which reported that Iranian learners of English had a moderate level of TA. On the other hand, Erten and Topkaya (2009) observed that Turkish university students exhibited low levels of TA when learning English.

When faced with a situation of ambiguity, a large number of the interviewees in the current study reported that they felt confused and upset, while others stated that they were not bothered by ambiguity. The participants' reactions to ambiguous situations also varied. Some of them preferred to wait until ambiguous information became clear: "I try to focus on the teacher's explanations, and ambiguous information usually becomes clear later on"

(Interviewee 4). Others simply asked their teacher for clarification either straightaway, as Interviewee 2 commented, "I cannot wait, so I ask my teacher immediately about anything I do not understand" or at a later time: "If I do not understand a grammatical rule, I ask the teacher at the end of the class" (Interviewee 14). Other students sought clarifications from their classmates, and still others depended on themselves by looking up difficult material online at home. Unfortunately, a few students preferred to simply keep quiet about not understanding the content of their English lesson, as Interviewee 6 stated, "I get upset and keep quiet. I do not ask the teacher because she does not speak Arabic, and so she will not be able to understand what the problem is." We can therefore, conclude that the role that the teacher plays in how students handle ambiguity is critical. This issue is discussed in further detail in Section 5.4.3 below.

Last but not least, the interview data revealed that the vast majority (75%) of the learners indicated that they had become more tolerant of ambiguity since they joined the university. As Interviewee 4 commented, "until I was in secondary school, I used to give up if I did not understand something." A possible reason for not tolerating ambiguity in school was provided by Interviewee 2, who pointed out, "teachers only had 45 minutes (the class duration) to explain everything. I did not even understand the reading passages. I always thought English classes were useless. I did not know the basics so it was not possible for me to learn the more complicated things." Interviewee 12 also indicated that he became more tolerant of ambiguity: "In the past, when I faced a new word, I felt I wanted to translate it immediately. But now I have become more relaxed and I try to understand from the context." Only 15 per cent of the learners stated that their TA level had remained the same, while 10 percent of them indicated that they had become less tolerant of ambiguity at university. A few students attributed this decrease to the fact that they were more concerned with learning

English properly at university. For example, Interviewee 15 explained, "I did not care about understanding everything in the past. I would just ignore ambiguous information." This finding adds further support to Coffield et al.'s (2004) view that learning styles are "flexibly stable" (p. 2), as pointed out in Sections 5.2.1 and 5.2.2 above.

5.3 Question 1a. Do these learning style preferences differ according to the learners' demographic characteristics?

To answer this question, a series of independent-samples t-tests was conducted to examine the differences in the participants' scores on the scales and subscales of the LLSQ according to their demographic characteristics. Since t-tests could only compare independent variables with two categories, the following demographic variables were included in the analysis: gender, age (redefined into two categories: *under 20* and *20 or above*), track of study, residing abroad and speaking other foreign languages. Table 5.2 below presents the mean scores of each group of participants on the scales and subscales of the LLSQ. The standard deviation values are provided in parentheses.

Table 5.2

Mean Scores on LLSQ According to Five Demographic Characteristics

Scale/subscale of LLSQ	Gender		Age		Track of study		Residing abroad		Speaking other foreign languages	
	Male	Female	Under 20	20 or above	Humanities	Science	Yes	No	Yes	No
Visual	3.845	3.957	3.944	3.863	3.894	3.940	3.775	3.917	4.112	3.894
	(.560)	(.611)	(.564)	(.632)	(.572)	(.650)	(.671)	(.585)	(.480)	(.595)
Aural	3.448	3.527	3.497	3.505	3.458	3.598	3.336	3.503	3.569	3.487
	(.596)	(.650)	(.668)	(.539)	(.630)	(.620)	(.744)	(.617)	(.498)	(.634)
Read/Write	3.759	3.703	3.706	3.768	3.695	3.817	3.739	3.727	3.876	3.718
	(.518)	(.530)	(.532)	(.519)	(.505)	(.570)	(.665)	(.515)	(.445)	(.529)
Kinaesthetic	3.622	3.623	3.601	3.653	3.591	3.707	3.598	3.624	3.576	3.626
	(.580)	(.577)	(.578)	(.586)	(.593)	(.533)	(.555)	(.580)	(.688)	(.570)
Peer Collaboration	3.471	3.611	3.565	3.518	3.595	3.413	3.489	3.553	3.462	3.555
	(.602)	(.527)	(.583)	(.537)	(.535)	(.630)	(.643)	(.560)	(.463)	(.571)
Tolerance of Ambiguity	3.625	3.613	3.622	3.603	3.639	3.564	3.523	3.625	3.506	3.626
	(.440)	(.477)	(.446)	(.478)	(.452)	(.489)	(.692)	(.440)	(.647)	(.445)

To determine the statistical significance of the differences between the above groups, let us examine the results of the t-tests in Table 5.3 below. For each group, the t-value is provided and followed by the relevant degree of freedom.

Table 5.3

Differences in Scores on LLSQ According to Five Demographic Characteristics

Scale/subscale of LLSQ	Gender		Age		Track of study		Residing abroad		Speaking other foreign languages	
	t	df	t	df	t	df	t	df	t	df
Visual	-1.722	332	1.181	326	-.622	328	-1.087	332	1.645	332
Aural	-1.137	332	-.128	275.62	-1.787	328	-1.206	332	.582	332
Read/Write	.957	332	-1.013	326	-1.877	328	.098	332	1.339	332
Kinaesthetic	-.009	332	-.760	326	-1.600	328	-.208	332	-.379	332
Peer Collaboration	-2.255[*]	332	.717	326	2.593[**]	328	-.518	332	-.729	332
Tolerance of Ambiguity	-.240	332	-.356	326	1.298	328	-.682	22.21	-.834	21.29

Note. [**] $p < 0.01$ (2-tailed)
[*] $p < 0.05$ (2-tailed).

Since the remaining seven demographic variables (the School level at which English learning started, hours spent studying English outside class, frequency of using English outside the classroom, father's educational level, father's knowledge of English, mother's educational level and mother's knowledge of English) had more than two categories, one-way between-groups ANOVA was conducted to explore the differences in the participants' learning style preferences according to these variables. The mean scores of the different groups of participants on the scales and subscales of the LLSQ are provided in Appendix J, and the results of the ANOVA analysis are presented in Table 5.4 below.

Table 5.4

Differences in Scores on LLSQ According to Seven Demographic Characteristics

Scale/ subscale of LLSQ	School level at which English learning started		Hours spent studying English		Frequency of using English outside class		Father's educational level		Father's knowledge of English		Mother's educational level		Mother's knowledge of English	
	F	df	F	df	F	df	F	df	F	df	F	df	F	df
Visual	.373	2	1.520	3	1.083	4	1.012	3	.236	2	.125	3	1.338	2
Aural	1.555	2	.512	3	4.829 **	4	.335	3	.053	2	1.032	3	.474	2
Read/Write	1.363	2	1.677	3	.677	4	1.457	3	.066	2	.073	3	.836	2
Kinaesthetic	1.408	2	.494	3	2.369	4	.359	3	.705	2	.991	3	1.124	2
Peer Collaboration	.390	2	.147	3	1.794	4	.360	3	.335	2	.421	3	.207	2
Tolerance of Ambiguity	.708	2	.784	3	4.803 **	4	2.119	3	1.949	2	2.242	3	7.586 *	2

Note. ** $p < 0.01$ (2-tailed).

In the following sections, I discuss the results of the above analyses for each learning style category.

5.3.1 Perceptual learning styles

It can be seen from the data in Table 5.4 that there was a statistically significant difference in the scores on the aural learning style according to the frequency with which English was used outside the classroom: $F (4, 328) = 4.8$, $p = .001$. Figure 5.2. below shows the mean score of each group of learners.
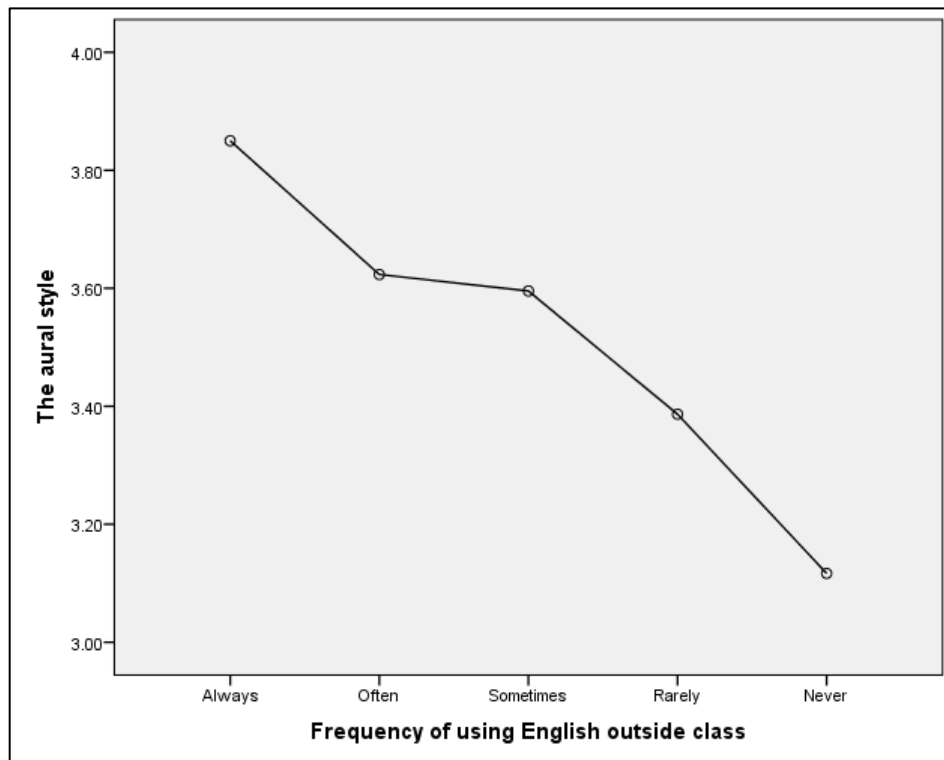
Figure 5.2. Differences in the aural learning style according to the frequency of English use outside the classroom.

We can see from this plot that the group who always used English outside the classroom reported the highest preference for the aural style, with those who never used it reporting the

lowest. The effect size, calculated using eta squared, was .06 which, according to Cohen (1988), would be considered a medium effect. The guidelines proposed by Cohen (1988, pp. 284–287) for interpreting the values of eta squared are:

.01 = small effect, .06 = medium effect, .14 = large effect.

Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the students who often used English outside the classroom setting (M = 3.62, SD = .56) was significantly different from the score of those who never used it (M = 3.11, SD = .54). In addition, the mean score of the students who sometimes used English outside the classroom (M = 3.60, SD = .61) was significantly different from the scores of those who rarely (M = 3.39, SD = .64) or never (M = 3.12, SD = .54) used it.

In line with the quantitative results, the analysis of the interview data indicated that the five students who expressed a preference for the aural learning style reported that they frequently used English outside the classroom setting. This is perhaps, not surprising given that the frequent use of and exposure to spoken English outside the classroom make the use of the aural style essential to process verbal information there. Subsequently, when learners become used to using this style outside class, they may not have as much difficulty with it in class as their peers. As pointed out in Section 5.2.1 above, learners who reported a dislike for the aural style attributed that to having difficulty with listening comprehension, especially that English is a FL in Saudi Arabia. This could possibly suggest that the popularity of the aural style could be promoted by encouraging learners to use English more frequently outside the classroom. This issue deserves further investigation and its pedagogical implication is discussed in Chapter 8.

A further examination of the data in Tables 5.3 and 5.4 as well as the interview data revealed that none of the other background variables contributed to making any variation in the participants' preferences for certain perceptual learning styles over the others.

5.3.2 Peer collaboration

The results in Table 5.3 above shows a significant difference in the scores on the Peer Collaboration Scale between males (M = 3.471, SD = .602) and females (M = 3.611, SD = .527); t (332) = -2.26, p = .03 (two-tailed). Female participants preferred to learn English collaboratively in class more than their male peers. However, the magnitude of the difference in the means (mean difference = -.14, 95% Cl: -.26 to -.018) was small (eta squared = .015). Figure 5.3. below shows the mean score of each group of participants.
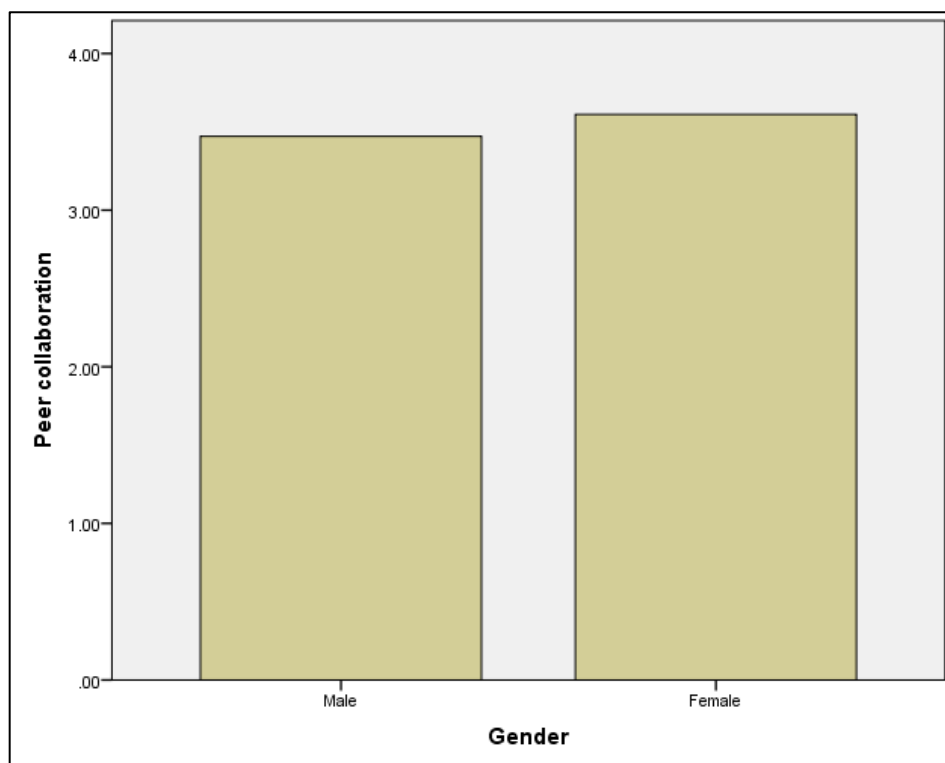
Figure 5.3. Differences in peer collaboration according to gender.

As pointed out in Chapter 2, research that attempted to examine the possible influences of learners' demographic characteristics on their preferences for peer collaboration is scarce, and to the best of my knowledge, non-existent in the Arab world. In other EFL learning contexts, only two recent studies could be located in this regard: Salehi and Bagheri's (2011) research with EFL learners in Iran and Li's (2012) study of Chinese students, which both used Reid's PLSPQ (see Section 2.8.1.2 in Chapter 2 for a review of these studies). In contrast to the finding of the present research, both studies reported no statistically significant differences between males and females in their peer collaboration preferences. As explained earlier in this section, this finding is not unexpected, given that the magnitude of the difference in the mean scores of the two groups in the present study was found to be small. In the same line, the interview data obtained in this study did not reveal any variation between the two genders in this regard. The only difference that could be observed was that two male students, as opposed to only one female student, expressed a dislike for peer collaboration.

Moreover, Table 5.3 shows a significant difference in peer collaboration scores between humanities (M = 3.595, SD = .535) and science students (M = 3.413, SD = .630); t (328) = 2.59, p = .01 (two-tailed). Humanities students preferred to learn English collaboratively in class more than their science peers. However, the magnitude of the difference in the mean scores (mean difference = .18, 95% Cl: .04 to .32) was small (eta squared = .02). Figure 5.4. below shows the mean score of each group of learners.
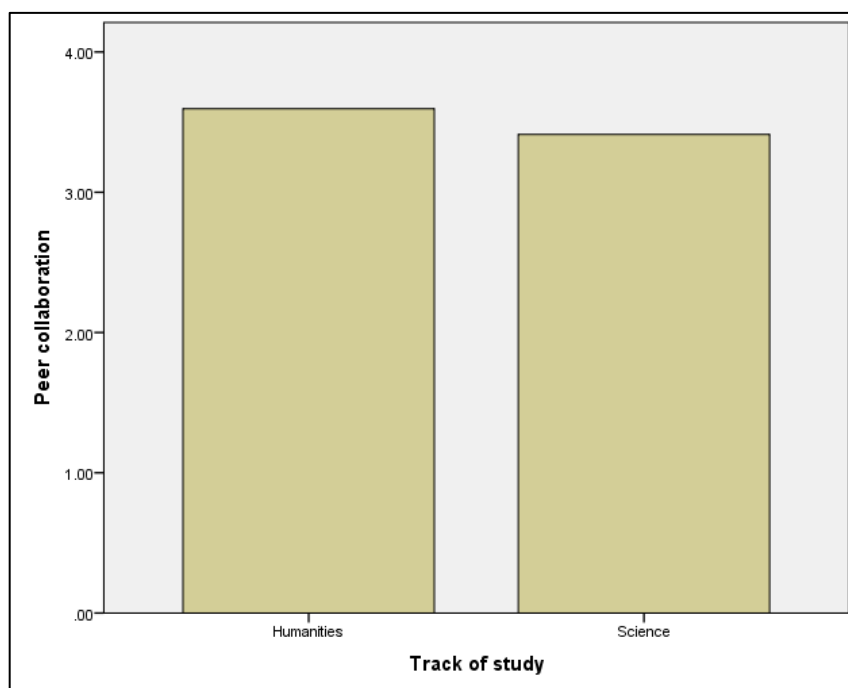
Figure 5.4. Differences in peer collaboration according to track of study.

The interview data did not reveal any variation between the participants in the two tracks of study in this regard, as the majority (75%) of them expressed a preference for peer collaboration, as discussed in Section 5.2.2 above. This result was anticipated, given the fact that the magnitude of the difference in the means was small. The only difference that could be noted was that the two participants who expressed a preference for individual learning were both science students. My experience as an English teacher for seven years enabled me to observe, although not so markedly, this difference between the students in the two tracks. It should be pointed out that science students were enrolled in other modules (e.g. biology, chemistry and physics) which required them to carry out observations and experiments individually. Since these students were accustomed to independent learning, it is possible that they had a higher sense of autonomy and thought they could do a better job when working on their own than when working with their peers.

Tables 5.3 and 5.4 as well as the qualitative data analysis indicate that none of the other background variables contributed to making any variation in the participants' preferences for peer collaboration.

5.3.3 TA

The data in Table 5.4 indicates that there was a statistically significant difference in the TA scores according to the frequency with which English was used outside the classroom: $F_{(4, 328)} = 4.8$, $p = .001$. Figure 5.5. below shows the mean score of each group of participants.
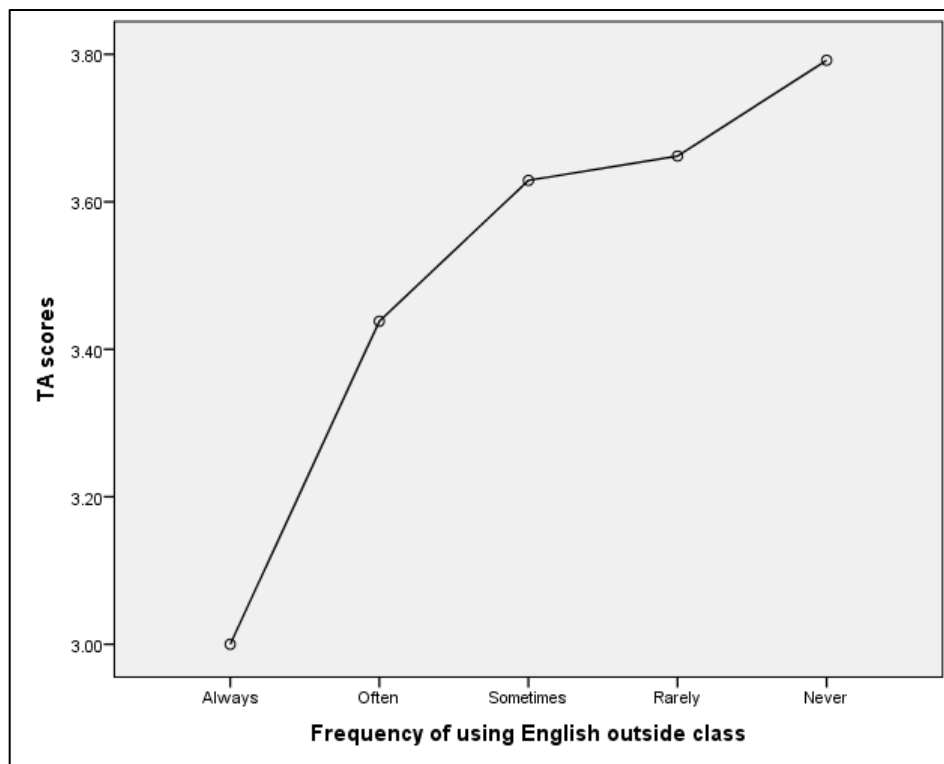
Figure 5.5. Differences in TA scores according to the frequency of English use outside the classroom.

In contrast to the findings obtained for the aural style (see Section 5.3.1 above), we can see from this plot that the group who always used English outside the classroom setting recorded the lowest score on the TA Scale (i.e. were the most tolerant of ambiguity), while those who never used English outside the classroom recorded the highest score. The effect size, calculated using eta squared, was .06 which could be considered a medium effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the students who always used English outside the classroom setting (M = 3.00, SD = .34) was significantly different from the mean scores of those who sometimes used it (M = 3.63, SD = .43), rarely used it (M = 3.66, SD = .47) and never used it (M = 3.79, SD = .51) outside the classroom. In addition, the mean score of the students who often used English outside the classroom (M = 3.44, SD = .44) was significantly different from the mean scores of those who rarely or never used it.

In accordance with the quantitative results, the analysis of the interview data indicated that the participants who frequently used English outside the classroom showed higher levels of ambiguity tolerance than their peers. This result could be explained by stating that by and large, ambiguity results from new situations with no familiar clues, complex circumstances where several clues are present or conflicting conditions in which different clues denote different structures (Budner, 1962). Therefore, when learners frequently use the target language in real communicative contexts and encounter authentic inputs, it is likely that they gradually learn how to adjust to such unfamiliar situations and consequently, become more tolerant of ambiguity.

A further examination of the data in Table 5.4 reveals a statistically significant difference in the TA scores according to the mother's knowledge of the English language: $F(2, 325) = 7.6$, $p = .001$. Figure 5.6. below shows the mean score of each group of learners.
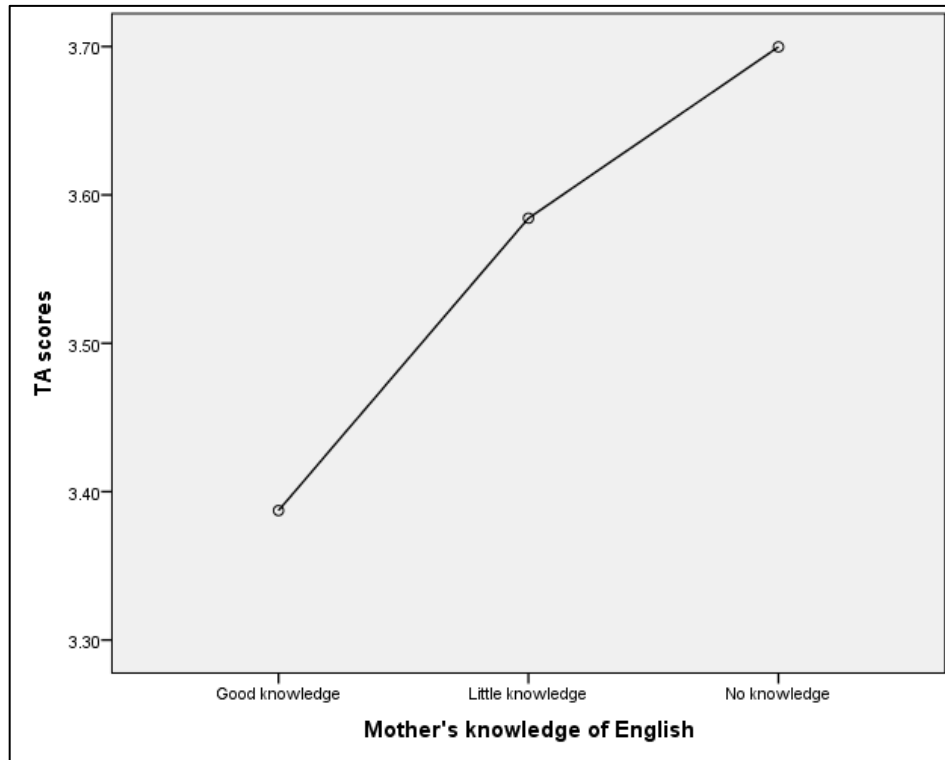
Figure 5.6. Differences in TA scores according to mother's
knowledge of English.

We can see from this plot that the group whose mothers had a good knowledge of the

English language recorded the lowest score (i.e. were the most tolerant of ambiguity), while

those whose mothers had no knowledge of English recorded the highest score. The effect size,

calculated using eta squared, was .05 which could be considered a small effect. Post-hoc

comparisons using the Tukey HSD test indicated that the mean score of the learners whose

mothers had a good knowledge of the English language (M = 3.39, SD = .49) was

significantly different from that of the learners whose mothers had no knowledge of English

(M = 3.70, SD = .41). This finding provides an indication that mothers may be able to support

language learning at home. This is especially true in Saudi Arabia, since its cultural traditions

require men to work outside the home to support their families and require women to stay at

home to look after their children. If mothers have the required level of knowledge, they often

help their children with their studies. In the case of English, this could result in building positive attitudes towards learning the language and developing the children's skills. Besides, when students are accustomed to practicing English at home, they become more familiar with its different sounds, words and structures, which could contribute to making them more tolerant of ambiguity in class.

Tables 5.3 and 5.4 and the interview data show that none of the other background variables contributed to making any variation in TA among the learners.

5.4 Question 1b. What elements in the classroom influence the learners' preferences for these learning styles?

This question was addressed through the qualitative analysis of the interview data. The results for each learning style category are presented in a separate section below.

5.4.1 Perceptual learning styles

The majority (60%) of the interviewees indicated that they used different perceptual styles when practicing different English skills. For example, they indicated a preference for the visual and read/write styles when learning grammar, the aural style when practicing listening comprehension, the aural and kinaesthetic styles when practicing speaking and the read/write style when doing reading comprehension and practicing writing.

This result is significant in two major respects. First, it provides evidence for Entwistle and Ramsden's (1983) hypothesis that it is possible for learners to adjust their learning styles to the requirements of the particular subject or task at hand. In addition, the fact that the students preferred to use different learning styles depending on the language learning situation provides further support to the finding reported in Section 5.2.1 above, in which the students

were found to be multimodal. It can therefore, be assumed that the learners were flexible about how they produced and processed information, which made it easier for them to adjust to the different modes of information presented to them.

Another important finding was that the teacher played a significant role in encouraging the learners to use a variety of learning styles and not depending only on those they were comfortable with using, as revealed by 65 per cent of the interviewees. For example, Interviewee 5 commented, "she [the teacher] tries to use all the styles. I like it because I do not get bored and I understand better." Interviewee 8 further explained that teachers should encourage students to try different styles and pointed out that "even if a student does not like to use several perceptual styles at the beginning, she will later realise that this is for her benefit." This finding is in line with Gilbert and Swanier's (2008) proposal that the learning process could be facilitated when the environment allows for the use of a wide range of learning styles. Tileston (2004) also asserts that a successful teacher does "not rely on only one modality or tactic for teaching, but provides information in a variety of contexts" (p. 15). Importantly, this support Oxford and Lavine's (1991) notion of *style-stretching*, which assumes that in order to attain certain educational objectives, individuals may need to stretch their own learning styles by implementing new, less comfortable ones. In some situations, mismatching could be acceptable in order to encourage students to try out new approaches to thinking and developing their capacities as learners as well as their learning experiences. It should, however, be pointed out that mismatching should be implemented carefully especially with low achievers, as they may become intimidated by unfamiliar learning modes.

5.4.2 Peer collaboration

The questionnaire data revealed interesting results about certain elements in the classroom which had an influence on the students' preferences for peer collaboration. First, more than half (53.9%) of the students revealed that interacting with new people in a group did not appeal to them, and more than two-thirds (69.4%) of them expressed a discomfort when working in groups with students who were more fluent in English. Consequently, the majority of the students preferred that their teachers let them form their own groups (reported by 73.3% of the participants) or assign each group member a specific role (reported by 84.1%). Regarding this last finding, Interviewee 17 expressively pointed out, "He [the teacher] asks us to work in groups, but assigns a role to each member, so it is like working independently in a group."

In this regard, Johnson and Johnson (2012) suggest that responsibilities can be distributed to group members so that each of them can contribute his/her share to group work. Thus, success will be experienced by group members on the basis of the overall achievement of the group as well as that of individual members. Researchers (e.g. Chen, 2004; Ellis, 2003) also argue that learners learn best when they work in a collaborative and interdependent manner in which each group member takes responsibility for his or her share of the work and contributes to the team effort by sharing information and resources. Therefore, teachers can use the above-mentioned criteria when implementing group work in their classes in order to provide students with a productive learning environment, in which they can cooperate with and learn from one another.

Finally, the analysis of the questionnaire data showed that a large percentage (61.7%) of the respondents preferred to be graded on their individual contribution to a group project rather than to have the whole group receive the same mark. Given that some members may

work harder and contribute more to the assignment than others, individual assessment can be a more accurate indicator of each member's achievement. As discussed in Chapter 2 (Section 2.8.2), Chen (2004, p. 6) recommends that teachers deal with this issue by either minimising the marks assigned to group work or asking students to self-assess themselves and assess their group members.

Another important classroom element that was found to have an impact on the learners' preferences for peer collaboration was the different English skills or activities they were required to carry out in class, as indicated by the majority (70%) of the interviewees. Several remarks were made about preferences for group work when practicing reading, writing and/or speaking. This finding could be taken as additional evidence to support Entwistle and Ramsden's (1983) assumption that it is possible for learners to adapt their learning styles to the requirements of a particular task or context.

Moreover, supporting Chiriac and Frykedal's (2011) view, the teacher was found to play a significant role in influencing the students' style preferences. Almost all interviewees revealed that their English teachers consistently encouraged them to use both group and individual work in class. For example, Interviewee 5 commented, "She [the teacher] gives us a chance to try different styles. The book helps because it specifies how each exercise should be done." Interviewee 2 also pointed out, "When we do reading circles, we work in groups, but we do grammar exercises alone." Only one participant expressed an unwillingness to try different learning styles: "I think it is better to let students use the styles they prefer" (Interviewee 8).

5.4.3 TA

The majority (80%) of the interviewees indicated that they experienced different levels of ambiguity when practicing different types of skills in their English class. Varied responses were obtained regarding the skills or tasks they found the most ambiguous. For instance, a few participants found ambiguity to be acceptable for tasks such as reading comprehension, where meaning could be inferred from the context, as Interviewee 9 commented, "When I read, I do not usually worry about the meanings of new words; I just try to understand the passage as a whole." On the other hand, a few students considered ambiguity intolerable as far as grammar was concerned. For example, Interviewee 2 mentioned, "only grammar is ambiguous. I do not feel that the other areas are ambiguous."

This finding lends support to Durrheim and Foster's (1997) view that TA is not fixed or constant but often fluctuates according to context. Thus, the same learner may show a high degree of TA in one context (e.g. when reading a comprehension passage which contains new vocabulary items) but may be extremely intolerant in another learning situation (e.g. when faced with a grammatical structure that has different usages). In line with this, Kamran's (2011) study (reviewed in Chapter 2) found that the learners' average scores on TA varied according to the language skill involved. More specifically, their level of TA was the highest when practicing reading comprehension. Kamran (2011) explained this finding by pointing out that "English language learners seem to have higher tolerance when confronting ambiguous meanings, unknown words, and unfamiliar topics in a text, as reading is a comprehension skill and learners deal with an existing text" (p. 28).

With regard to their English teacher, the majority of the students felt confused if their teacher did not use Arabic to explain complex English phrases (reported by 80.5% of the participants), if the teacher did not provide detailed instructions for an assignment (reported

by 79%) and if they did not understand everything the teacher said in English (reported by 78.4%). Regardless of this, an unexpected finding was that all of the interviewees were generally satisfied with their teachers' styles of teaching and asserted that they catered for their TA level. For example, the students indicated that their teachers explained new information clearly and encouraged them to ask for clarification if they did not understand a certain point. As Interviewee 15 commented, "He [the teacher] does not mind if the students ask him about something they do not understand. He explains information more than once and always checks whether or not we understand it." A more specific example was given by Interviewee 17 who explained, "If the teacher says a new word and notices that students neither know it nor ask about its meaning, he calls on a student and asks him about it. If that student does not know the answer, the teacher explains it to us." Meanwhile, half of the students indicated that their teachers sometimes encouraged them to be more tolerant of ambiguity. For example, Interviewee 8 stated, "When we do not understand new information, the teacher encourages us to wait until she gives us examples and we do exercises about it." This finding indicates that English teachers in Saudi Arabia attempt to promote their students' TA by employing the inductive approach. This learner-centred method has been proved effective in encouraging students' to utilise their critical thinking to deduce how the target language works (Killen, 2006), and it accords with Rubin's (1975) description of the good language learner as the one who "is often not inhibited … [and] … is willing to live with a certain amount of vagueness" (p. 47).

To sum up, we can conclude from the above findings that both the teacher and classroom activities had a significant influence on the learners' use of different styles when learning English in class. Interestingly, these findings are consistent with those obtained for

the three affective factors (anxiety, motivation and self-efficacy) investigated in this study, as will be discussed in the following chapter.

5.5 Question 1c. What is the relationship between the learning style preferences of the learners and their English language proficiency and performance?

To explore the differences in the participants' learning style preferences according to their English language proficiency, one-way between-groups ANOVA was conducted. The mean scores of the different groups of participants are presented in Table 5.5 below, and the results of ANOVA are presented in Table 5.6.

Table 5.5
Mean Scores on LLSQ According to English Proficiency

Scale/subscale of LLSQ	English proficiency	Mean	Standard deviation	Minimum	Maximum
Visual	Low	3.903	.556	2.60	4.80
	Middle	3.895	.570	1.80	4.80
	High	3.911	.612	2.00	5.00
Aural	Low	3.464	.613	1.60	4.80
	Middle	3.541	.632	1.60	4.80
	High	3.467	.640	1.40	5.00
Read/Write	Low	3.732	.528	2.40	4.80
	Middle	3.707	.521	1.80	4.60
	High	3.734	.521	2.00	4.80
Kinaesthetic	Low	3.712	.483	2.00	4.60
	Middle	3.563	.592	2.00	5.00
	High	3.626	.609	1.60	4.80
Peer Collaboration	Low	3.445	.559	1.60	4.60
	Middle	3.650	.507	2.00	4.80
	High	3.528	.596	1.00	5.00

Scale/subscale of LLSQ	English proficiency	Mean	Standard deviation	Minimum	Maximum
Tolerance of Ambiguity	Low	3.607	.451	2.40	4.67
	Middle	3.730	.405	2.40	4.70
	High	3.534	.490	2.10	4.50

Table 5.6

Differences in Scores on LLSQ According to English Proficiency

Scale/subscale of LLSQ		df	F	Sig.
Visual	Between Groups	2	.024	.976
	Within Groups	324		
	Total	326		
Aural	Between Groups	2	.508	.602
	Within Groups	324		
	Total	326		
Read/write	Between Groups	2	.093	.912
	Within Groups	324		
	Total	326		
Kinaesthetic	Between Groups	2	1.472	.231
	Within Groups	324		
	Total	326		
Peer Collaboration	Between Groups	2	3.131[*]	.045
	Within Groups	324		
	Total	326		
Tolerance of Ambiguity	Between Groups	2	5.714[**]	.004
	Within Groups	324		
	Total	326		

Note. [**] $p < 0.01$ (2-tailed)
[*] $p < 0.05$ (2-tailed).

Before discussing the results of the ANOVA analysis, let us examine the relationship between learning styles and English language performance in order to obtain a better insight into the interconnections between language learning styles on the one hand and language proficiency and performance on the other. As pointed out previously, the participants' English language performance was assessed using their total scores on the English module they were attending at the time of the study. Those scores represented the total of several assessments of all four language skills (listening, speaking, reading and writing) together with vocabulary and grammar. As discussed in Chapter 1 (Sections 1.3 and 1.4), this study attempts to go beyond the simple identification of the learners' preferred styles of learning to an assessment of the impact of those preferences on their performance in the English module. To achieve this aim, Pearson product-moment correlation coefficients were computed to investigate the relationships between the learners' scores on the scales and subscales of the LLSQ and their scores on the English module. The results are presented in Table 5.7 below.

Table 5.7
Pearson Correlation Coefficients between Scores on LLSQ and the English Module

Scale/subscale of LLSQ	English module score
Visual	.207[**]
Aural	.207[**]
Read/Write	.223[**]
Kinaesthetic	.265[**]
Peer Collaboration	-.063
Tolerance of Ambiguity	-.191[**]

Note. [**] $p < 0.01$ (2-tailed).

In the following sections, I discuss the results pertaining to each of the above learning style categories.

5.5.1 Perceptual learning styles

Table 5.6 reveals no statistically significant differences in perceptual learning style preferences according to English language proficiency. This result is not unexpected. As pointed out in Chapter 2 (Section 2.4), learning styles are considered "value-neutral" (MacKeracher, 2004, p. 80) and should not be judged as reflecting one's learning ability (Riding, 1997). Indeed, this finding is consistent with those of previous studies reviewed in Chapter 2 (e.g. Chu & Nakamura, 2010; Naqeeb & Awad, 2011; Zhang & Evans, 2013).

Interestingly, the interview data indicated that all participants in the high proficiency group referred to the visual style as one of their favourite learning styles. An examination of the mean scores of the three proficiency groups (presented in Table 5.5 above) revealed that the high proficiency group scored the highest on the visual style (M = 3.91, SD = .612), while the mean scores of the other two groups were approximately 3.90 (SD = .556 for the low proficiency group and .570 for the middle group). As an extremely small and insignificant difference existed between the score of the high proficiency learners and those of their peers, this result could be discarded.

On the other hand, the results of Pearson's correlation analysis (presented in Table 5.7 above), showed weak positive correlations between the use of all four perceptual learning styles and the total scores on the English module, with *r* values ranging from .207 to .265. This suggests that a greater use of these styles was associated with achieving higher English scores. The relationship between the learners' scores on each of the four perceptual styles and their English scores are shown in Figures 5.7. to 5.10. below.
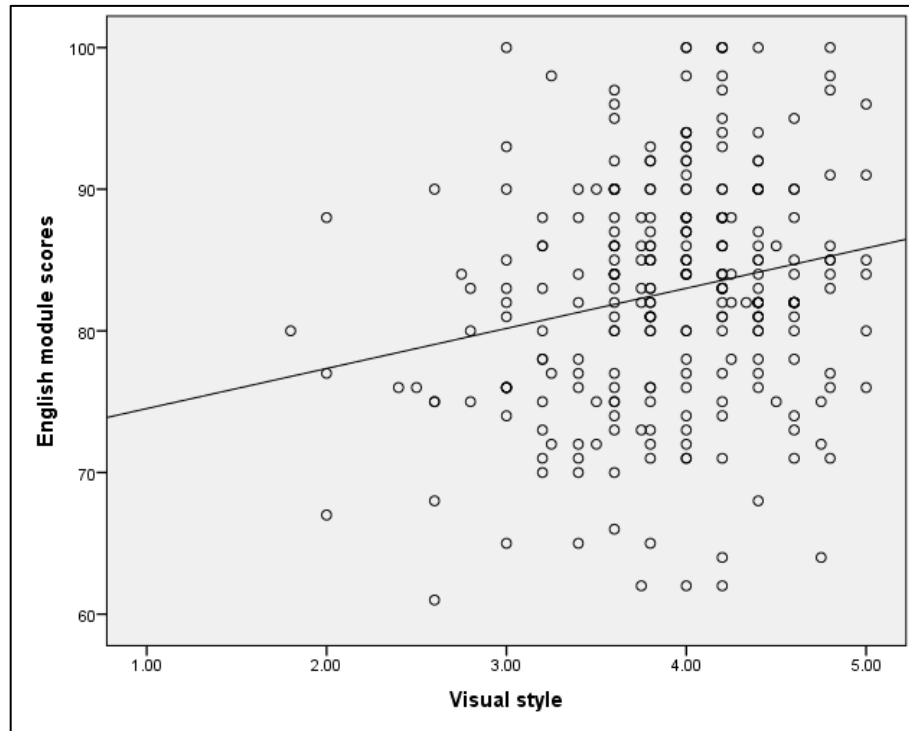
Figure 5.7. The relationship between the visual learning style
and performance in the English module.
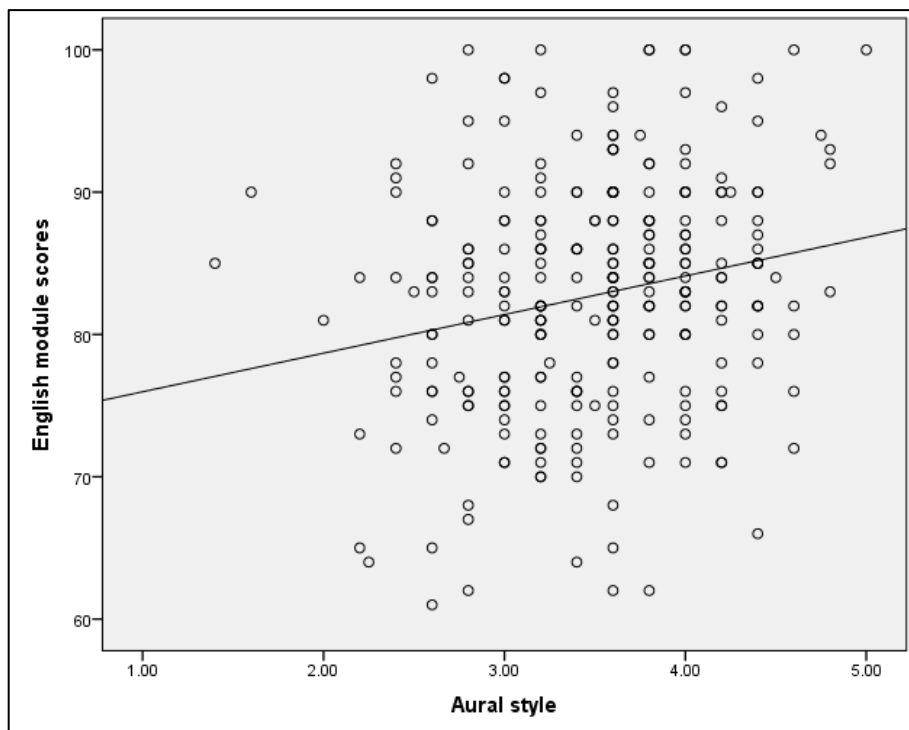
Figure 5.8. The relationship between the aural learning style
and performance in the English module.
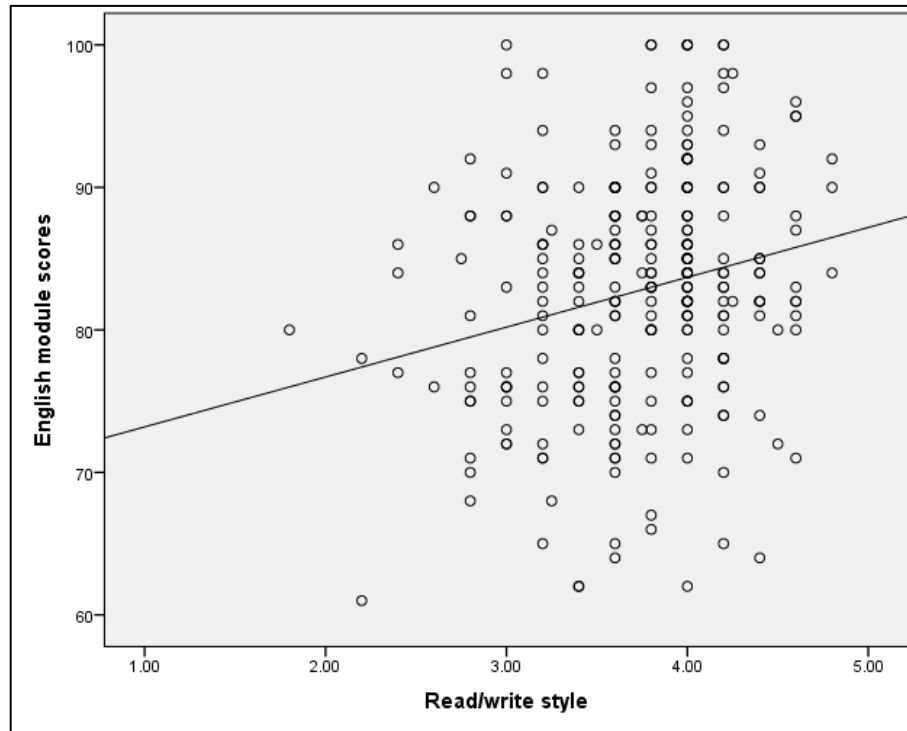
Figure 5.9. The relationship between the read/write learning style and performance in the English module.
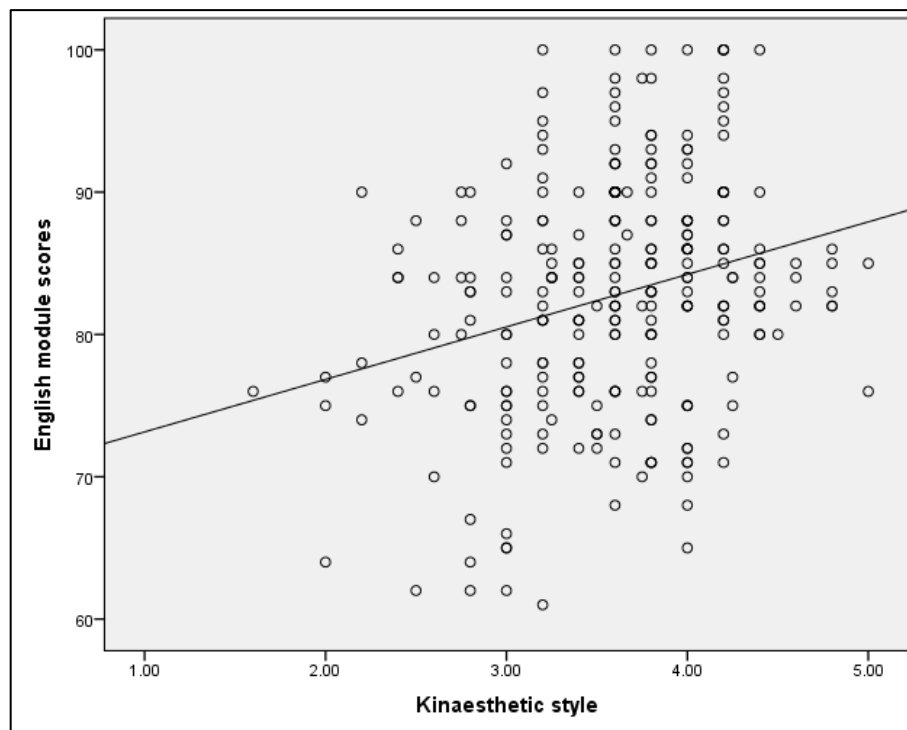
Figure 5.10. The relationship between the kinaesthetic learning style and performance in the English module.

To obtain an idea of how much variance the variables shared, the coefficients of determination were calculated and then converted to percentages of variance. The result was 4.29 for both the visual and aural styles, indicating that the participants' preference for each of these styles helps to explain only 4.29 per cent of the variance in their scores on the English module. The shared variance between the read/write style and English scores was 4.97, and it was 7.02 for the kinaesthetic learning style and English scores. This suggests that the use of the read/write and kinaesthetic styles helps to explain 4.97 and 7.02 per cent of the variance in the participants' English module scores, respectively.

An interesting finding that emerged from the interviews and was consistent with the questionnaire results was that all interviewees thought that their current learning styles had a positive effect on their English language performance. The reasons the students provided centred on the belief that using their favourite styles to learn English helped them understand the language better and learn it faster. As Interviewee 13 simply put it, "I like them, and I know how to learn English now."

This finding has a few important implications. Firstly, it supports the assumption made by Sprenger (2008) that new information is processed more efficiently and retained longer when more senses are triggered. Kormos and Smith (2012) also point out that "the active use of senses in the learning process makes the event of learning memorable and enjoyable" (p. 127). Secondly, this finding provides evidence in support of the view presented in Chapter 2, that learning styles are "value-neutral" and that "there is no one best way to learn; adults with differing styles manage to learn quite productively" (MacKeracher, 2004, p. 80). In this regard, it appears that English teachers were right when they encouraged their students to use a variety of learning styles to learn the English language, as reported by the majority of the students in Section 5.4.1 above.

It should be pointed out that the findings of two of the studies reviewed in Chapter 2 (Aqel & Mahmoud, 2006; Erton, 2010) did not match that of the present research. The former did not find a significant correlation between learning styles and tests scores, while the latter found that visual learners were the most successful of all. There are several possible explanations for this inconsistency. First, the participants in both of the above studies were not multimodal like those in the current study and might not have utilised their preferred learning styles effectively to maximise their learning. Second, Aqel and Mahmoud (2006) developed their own questionnaire, but no information was provided about its validity; hence, their finding should be interpreted with caution. By the same token, Erton (2010) used the Jeffrey Barsch Learning Styles Inventory, with a Cronbach's alpha reliability coefficient of .65, which was below the acceptable value of .7.

5.5.2 Peer collaboration

The data in Table 5.6 indicates a statistically significant difference in the learners' scores on the Peer Collaboration Scale according to their English proficiency levels: F (2, 324) = 3.1, p = .045. Figure 5.11. below shows the mean score of each group of participants.
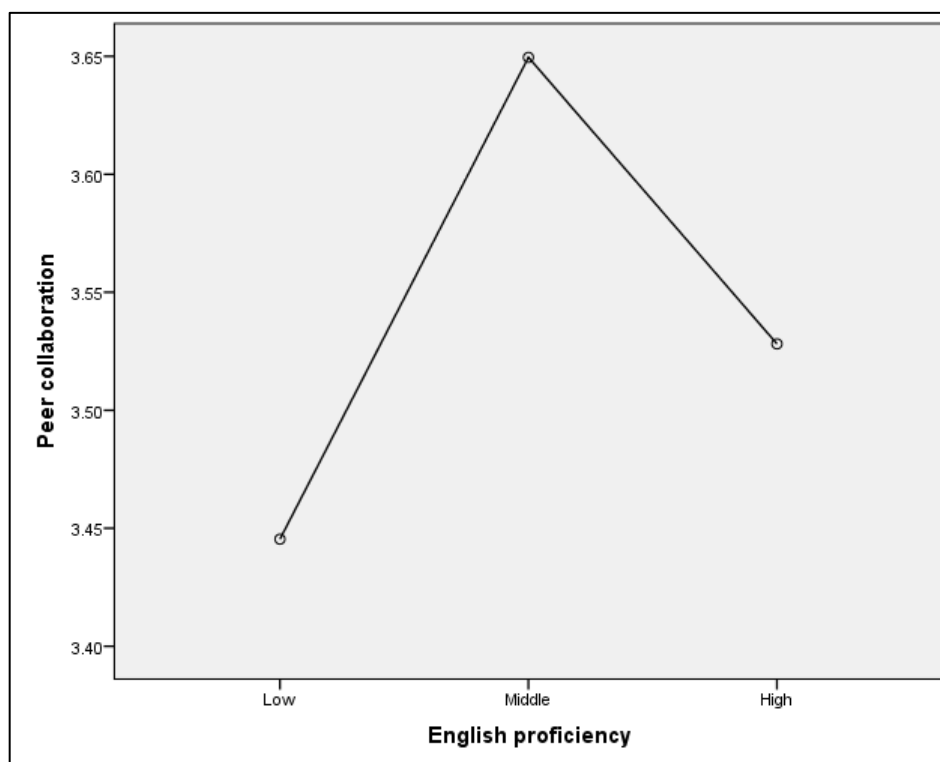
Figure 5.11. Differences in peer collaboration according to
English proficiency level.

We can see from this plot that the low proficiency group recorded the lowest score,
while the middle group recorded the highest score. The effect size, calculated using eta
squared, was .02 which could be considered a small effect. Post-hoc comparisons using the
Tukey HSD test indicated that the mean score of the middle proficiency group (M = 3.65, SD
= .51) was significantly different from that of the low proficiency group (M = 3.45, SD = .60).

A consistent and interesting finding that emerged from the interviews was that low
proficiency learners made the fewest references to group work as their favourite style of
learning English in class. More specifically, only 10 per cent of those students showed a
preference for group work, as opposed to 25 per cent and 30 per cent of high and middle
proficiency learners, respectively. A possible explanation for this finding was proposed by
Kinsella (1995) who attributed the hesitancy of low proficiency learners to take part in group

work to their "insecurity about [their] perceived English language proficiency" (p. 184). When reviewing the literature on peer collaboration, no study could be located that had attempted to examine the influence of learners' proficiency on their preferences for individual or collaborative learning.

With regard to English language performance, Table 5.7 shows no statistically significant correlation between scores on the Peer Collaboration Scale and scores on the English module. This finding is consistent with that of Dabaghmanesh and Soori's (2014) study of Iranian learners of English, which indicated no significant influence of peer cooperation on performance in a general English course. On the other hand, a few of the studies reviewed in Chapter 2 (e.g. Alghamdi, 2014; Al-Tamimi & Attamimi, 2014; Han, 2015; Moghaddam & Faruji, 2013; Zeinolabedini & Gholami, 2014) found that classroom cooperation positively influenced language performance. Nonetheless, the finding of the present study is not surprising since, as pointed out in Section 5.5.1 above, there is no one right way to learn a FL and different learning styles should be considered "value-neutral" (MacKeracher, 2004, p. 80).

Confirming the questionnaire finding, almost all interviewees thought that their preferences for learning individually and/or with peers positively influenced their learning. Those who favoured group work believed that this style helped them understand new information and recall it better. It also enabled them to help one another and share their thoughts. As Interviewee 11 explained, "when I work in a group, I learn from its members. One student may be good at grammar, another student may speak the language fluently, and so on." Only one student indicated that the influence of her preference for peer collaboration (pair work) on her performance depended on the proficiency of her partner: "It is positive if my partner is good at English, but if she is not, then she will not help me in anything"

(Interviewee 9). Last but not least, as pointed out in Section 5.2.2, those who expressed a preference for learning on their own stated that when they depended on themselves to learn new material, they were able to retain it longer.

5.5.3 TA

The data in Table 5.6 indicates a statistically significant difference in the TA scores for students in different English proficiency levels: $F (2, 324) = 5.7$, $p = .004$. Figure 5.12. below shows the mean score of each group of learners.
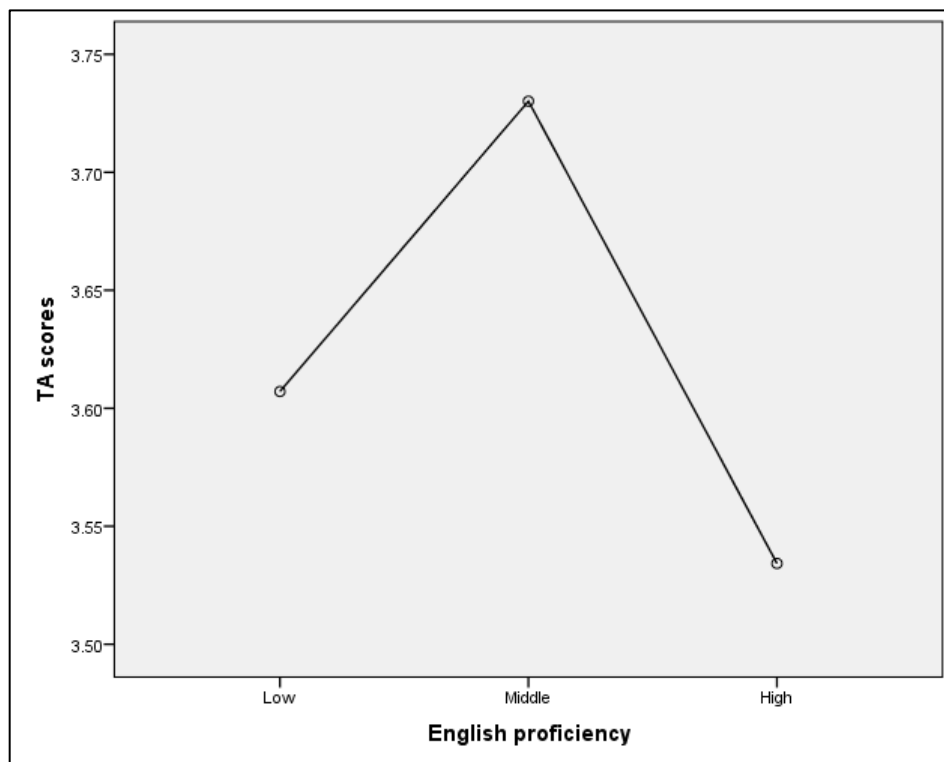
Figure 5.12. Differences in TA scores according to English proficiency level.

We can see from this plot that the high proficiency group recorded the lowest TA score (i.e. were the most tolerant of ambiguity), while the middle group recorded the highest score.

The effect size, calculated using eta squared, was .006 which could be considered a very small effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the high proficiency group (M = 3.53, SD = .49) was significantly different from that of the middle group (M = 3.73, SD = .41). This finding supports Erten and Topkaya's (2009) suggestion that "tolerance of ambiguity improves as proficiency improves. That is, as learners develop their linguistic knowledge, the need to control every detail in language learning becomes less important, thus resulting in higher tolerance of ambiguity" (p. 40).

Moreover, the results of Pearson's correlation analysis showed a weak negative correlation between TA scores and English module scores, $r = -.19$, $p = .002$. This indicates that the students who scored higher on the Tolerance of Ambiguity Scale (i.e. were more intolerant of ambiguity) achieved lower scores on the English module. The relationship between the learners' TA scores and performance in the English module are shown in Figure 5.13. below.
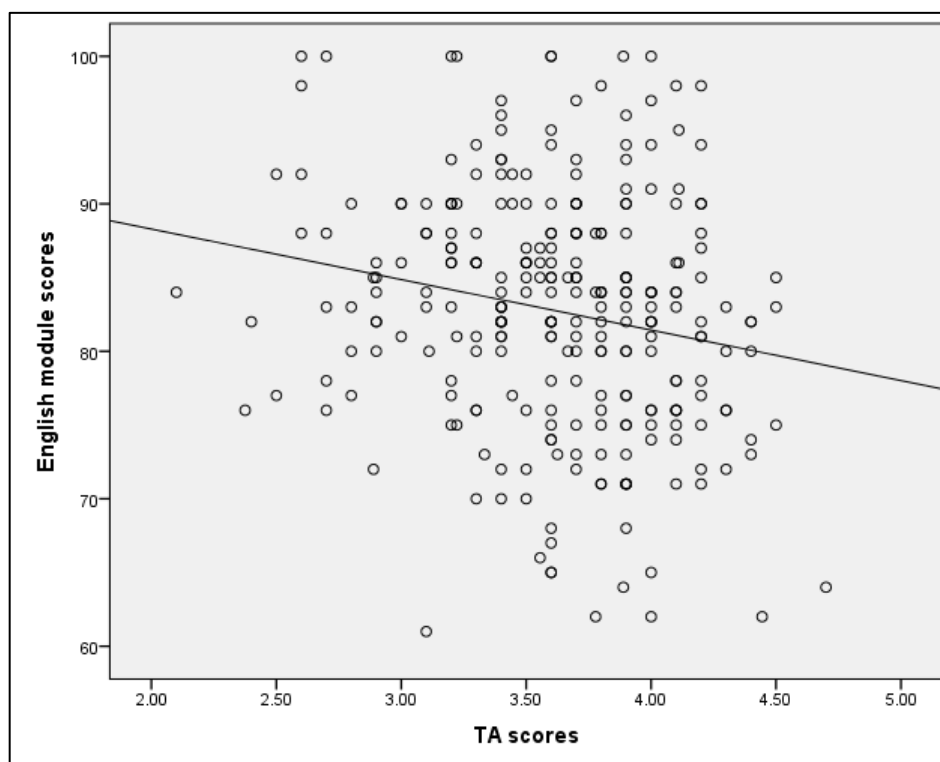
Figure 5.13. The relationship between TA scores and performance
in the English module.

The shared variance between the variables was found to be 3.65 per cent, indicating that

TA helps to explain only 3.65 per cent of the variance in the students' English scores. This

result corresponds broadly with the findings of earlier research (e.g. Kamran & Maftoon,

2012; Nezhad et al., 2013; Sa'dabadi, 2014). In these studies, students who were more

tolerant of ambiguity performed better on different measures of achievement than their peers.

Moreover, the observed correlation between TA and English language performance supports

Rubin's (1975) view of the good language learner as the one who "is willing to live with a

certain amount of vagueness" (p. 47) and Brown's (2007) argument that success in language

learning requires tolerance of ambiguous information.

Moreover, when interviewees were asked if their IA had an impact on their English

learning, their responses varied. Some believed it had a positive effect, as Interviewee 8

214

explained, "It has made me more determined to learn and to get rid of ambiguity. I have started to write down the lessons and to ask the teacher about the meanings of new words." Others believed the effect was negative, as Interviewee 3 commented, "When I experience ambiguity, I do not understand what is being said and I miss a lot of information."

Excessive TA was also reported to have a negative impact on language performance. For example, Interviewee 7 indicated, "tolerance of ambiguity is not beneficial for students. For example, if a student does not understand the meaning of a word but tolerate that ambiguity, she may answer an exercise incorrectly because the answer may depend on the meaning of that word." Similarly, another participant commented "sometimes I ignore something I did not understand, and it turns out to be essential information" (Interviewee 16).

Taken together, the above interview findings clearly support Ely's (1995) suggestion that moderate TA is the "ideal case" and that the learner "who is aware of, but not threatened by, linguistic differentiation, and who treats it as an occasion for introspection, experimentation and, ultimately, learning, is the one for whom tolerance of ambiguity will be a help, not a hindrance" (p. 93).

5.6 The learning style profile of Saudi learners of English

Figure 5.14. below presents an overview of the learning style preferences of the participants in the present study, the demographic and classroom variables that could have an impact on them and the possible relationships between the learning style preferences of the participants and their English language proficiency and performance. The arrows show the directions of the relationships between the variables.
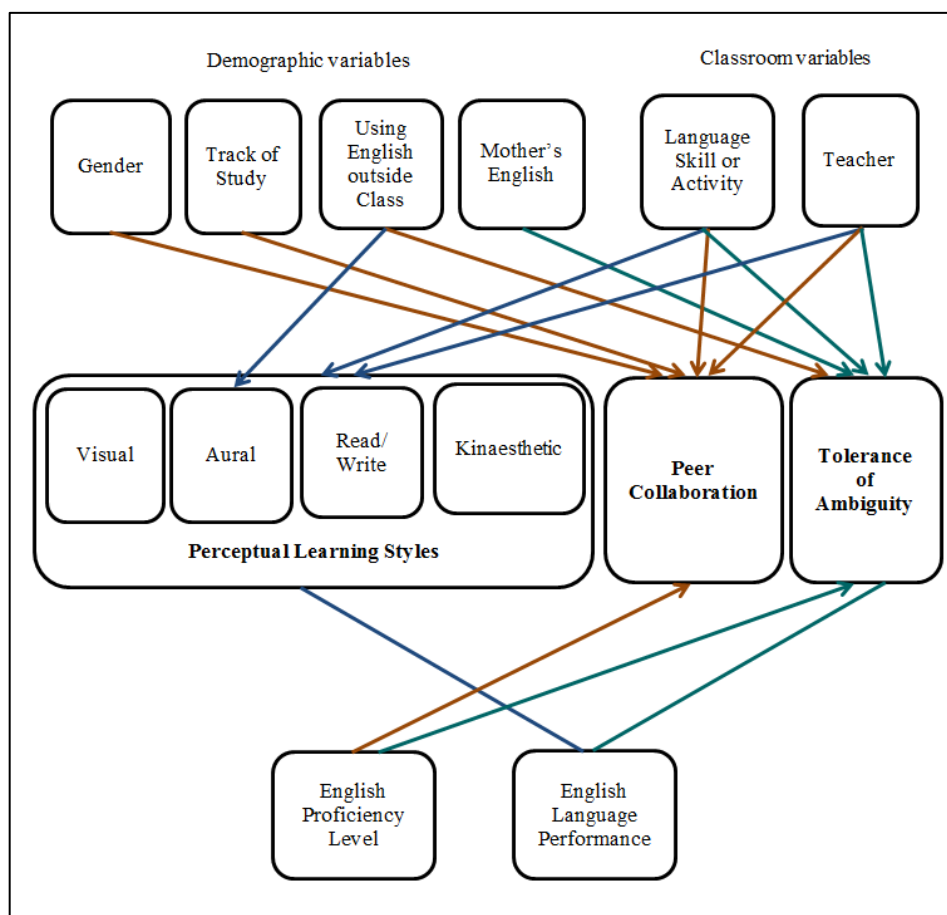
Figure 5.14. The learning style profile of Saudi learners of English.

5.7 Chapter summary

The purpose of the first research question in the present study was to investigate the experiences of Saudi learners of English as related to the following: 1) their preferred perceptual learning style(s), 2) whether they preferred to learn English collaboratively or independently and 3) their TA level when learning English in class. Quantitative and qualitative data generally yielded consistent results and complemented each other to provide an in-depth account of the learners' experiences.

It was revealed that the participants were multimodal, as they had more than one favourite perceptual learning style and preferred to use a combination of styles when learning English. A further examination of the data revealed a slight preference for the visual style,

216

followed by the read/write and kinaesthetic styles. As such, the aural style was found to be the least favourite style among the study participants. Moreover, the learners exhibited a moderate preference for peer collaboration and were moderately tolerant of ambiguity.

With regard to the learners' demographic characteristics, a statistically significant difference in the use of the aural learning style was found in relation to the frequency with which English was used outside the classroom. In addition, peer collaboration scores varied according to gender and track of study. Last but not least, the frequency with which learners used English outside the classroom and their mothers' knowledge of the English language contributed to the variations noticed in their TA scores.

Several classroom factors were also investigated and found to have a significant influence on the students' learning style preferences. These included the tasks or skills that the learners practiced in class and their English teachers' styles of teaching and encouragement for them to use a variety of learning styles.

Furthermore, the influence of English proficiency on learning style preferences was examined, and it was revealed that the learners in the middle proficiency group preferred peer collaboration significantly more than the low proficiency learners. The former group also exhibited a significantly higher level of IA than the high proficiency learners. Regarding the relationship between learning styles and English language performance, it was found that preferences for all perceptual styles correlated significantly and positively with total scores on the English module. Moreover, a significant negative relationship was obtained between IA and English module scores. It is recommended that carefully designed experimental studies be conducted to further our understanding of the exact influence of each of these learning styles on the learners' English language performance.

The learning style profile of Saudi learners of English presented in this research contributes to the existing knowledge on learning styles by incorporating the demographic and classroom factors that could have influenced the learners' preferences for certain styles and the links between these preferences and English language proficiency and performance. To my knowledge, the current study was the first, and still is, to provide a comprehensive picture of the language learning styles of English learners in Saudi Arabia and the Arab world in general. Practical applications of this research and recommendations for future research are discussed in Chapter 8.

Chapter 6: Results and Discussion of the Affective Factors Influencing Saudi Learners of English (Research Question 2)

6.1 Introduction

This chapter presents the findings of the data analysis carried out to answer the second research question posed in this study, which is primarily concerned with exploring the affective factors that influence English learners in Saudi Arabia, as follows:

Q2. What affective factors influence Saudi learners of English?

Q2a. Do these factors differ according to the learners' demographic characteristics?

Q2b. What elements in the classroom influence the learners' experiences with these affective factors?

Q2c. What is the relationship between the affective factors that influence the learners and their English language proficiency and performance?

Each of these questions was addressed by conducting a thorough analysis of the relevant quantitative and qualitative data, drawing connections between them and explaining how they corroborated each other. The findings were also examined in relation to previous studies on affective factors in language learning and interpreted in light of the relevant theoretical models discussed in Chapter 3. Where appropriate, I drew on my English teaching experience to provide my interpretation of the results.

6.2 Question 2. What affective factors influence Saudi learners of English?

As pointed out in Chapter 4, descriptive statistics (mean, standard deviation and minimum and maximum values) of the scales and subscales of the AFLLQ were used to

identify the affective factors that influenced the learners. The results are presented in Table

6.1 below.

Table 6.1
Descriptive Statistics of the Scores on AFLLQ

Scale/subscale of AFLLQ	Mean	Standard deviation	Minimum	Maximum
Anxiety	3.242	.712	1.19	4.80
General Classroom Anxiety	3.262	.849	1.00	5.00
Communication Apprehension	3.056	.833	1.00	5.00
Test Anxiety	3.483	.959	1.00	5.00
Fear of Negative Evaluation	3.169	.889	1.00	5.00
Motivation	3.907	.589	1.70	4.96
Intrinsic Motivation	3.962	.661	1.58	5.00
Accomplishment	4.043	.704	1.50	5.00
Knowledge	3.940	.746	1.25	5.00
Stimulation	3.911	.787	1.50	5.00
Extrinsic Motivation	3.852	.602	1.78	5.00
External Regulation	4.292	.679	1.50	5.00
Introjected Regulation	3.290	.821	1.00	5.00
Identified Regulation	3.953	.789	1.25	5.00
Self-efficacy	3.311	.716	1.40	5.00

As explained in the previous chapter (Section 5.2), the mean scores on the AFLLQ were

interpreted as follows:

M = 1 – 2   low level

M = 2.1 – 3.9   moderate level

$M = 4 - 5$ high level

6.2.1 Anxiety

The data in Table 6.1 shows that the mean scores on the Anxiety Scale and its four subscales lay in the moderate range and that small differences existed between them. This suggests that FLA moderately influenced Saudi learners of English (M = 3.242, SD = .712). Figure 6.1 below presents an overview of the participants' mean scores on the Anxiety Scale and four subscales.
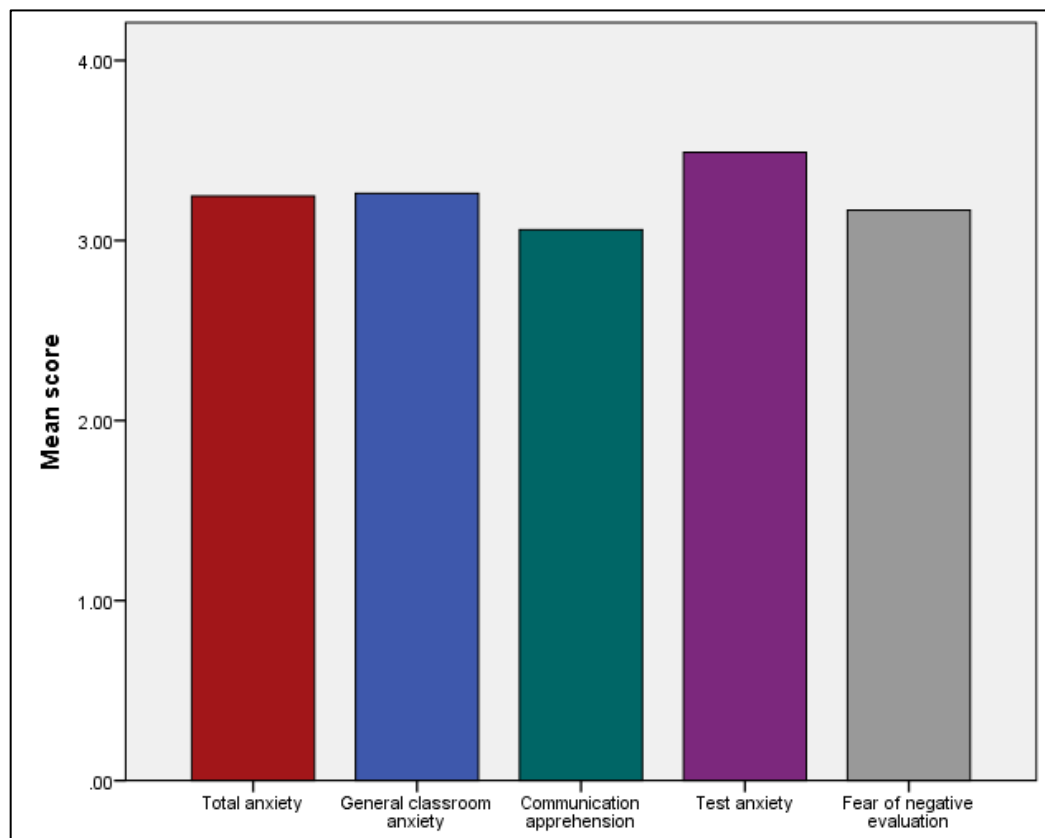
Figure 6.1. Mean scores on the Anxiety Scale and subscales.

In line with the questionnaire results, the analysis of the interview data revealed that apart from three participants, all students had experienced some sort of FLA when learning

221

English. This finding matches those observed in earlier studies reviewed in Chapter 3. For example, both Javid's (2014) study of English learners in Saudi Arabia and Huang's (2012) research with Chinese learners found that the participants were moderately anxious when learning English. It seems that the learners in the present study and similar ones were at an advantage since several researchers (e.g. Eysenck, 1997; Hewitt & Stephenson, 2012; MacIntyre, 1995) suggest that a moderate level of anxiety could cause learners to exert more effort to improve their performance. MacIntyre et al. (1997) further explains that moderately anxious learners tend to underestimate their relative competence, which could encourage them to work harder to learn the target language than those who do not feel any anxiety. The influence of FLA on the participants' English language performance is discussed in detail later in this chapter (see Section 6.5.1). In contrast to the finding of the present study, the majority of previous studies on FLA in different international contexts found that EFL learners generally exhibited high levels of anxiety (see e.g. Alrabai, 2014; Al-Shuaibi et al., 2014; Chang, 2008; Ezzi, 2012; Hashemi, 2011; Wu, 2010). The difference between the finding of the current study and those of previous research is not surprising when considering the "complex" and "multidimensional" nature of language anxiety that can influence learners in a variety of ways, depending on several factors such as "ethnic background, prior language experience, learner personality, and classroom circumstances" (Young, 1991, p. 434). Yan and Horwitz (2008) also emphasise that "language anxiety exists within a complex network of learning factors" (p. 174). A number of these factors are discussed in Sections 6.3.1 and 6.4.1 below.

Comparing the scores on the anxiety subscales, it can be seen that the mean score on the Test Anxiety Scale was the highest (M = 3.483, SD = .959), indicating that it was the most influential factor affecting the participants. Indeed, the students were found to feel anxious

both before and during English tests. The majority (69.2%) of them reported that they felt nervous about their English tests even when they were well prepared for them. It was also noted that this anxiety could hinder the students' academic performance. For example, more than half (56.6%) of the students reported that they became so nervous during English tests that they had trouble remembering information, and a similar percentage (54.5%) reported that they froze up on important English tests.

Consistently, half of the interviewees who reported experiencing anxiety in the English class considered test anxiety their main source of anxiety. A number of factors that contributed towards test anxiety could be identified in the participants' responses. First, a few participants revealed that they were worried about the difficulty of the test questions and the possible consequence of making mistakes. In addition, some learners were afraid that they might run out of time in the test and would not be able to answer all questions. It was noted that in both cases, the students were anxious about losing marks. As Interviewee 10 commented, "I feel anxious when I open the test booklet even if I am well prepared because I am afraid I may not get a good mark. I feel so worried during tests that I forget information." This quote indicates a possible negative effect of test anxiety on academic performance, as will be discussed in Section 6.5.1 below.

Although previous studies (e.g. Chang, 2008; Dahbi, 2015; Liu & Jackson, 2008; Rezazadeh & Tavakoli, 2009) used different questionnaires to assess test anxiety among their participants (e.g. self-developed questionnaires, modified versions of the FLCAS and Suinn's Test Anxiety Questionnaire), they also found that EFL learners were more anxious when taking tests than in other learning situations. This finding supports Young's (1991) view that language testing is a possible cause of anxiety among language learners and Horwitz et al.'s (1986) explanation that test anxiety is aroused by "a fear of failure" (p. l27). Dahbi (2015)

concluded persuasively that such data provided evidence for Wine's (1982) cognitive-attention theory of test anxiety, which states that "the negative influence of test anxiety is due to the fact that test-anxious persons divide their attention between personal variables and variables connected to the task. In contrast, non-test-anxious persons are able to focus their attention more on the task itself" (p. 65).

Table 6.1 above also shows that the mean score on general classroom anxiety was the second highest score (M = 3.262, SD = .849). Compared to test anxiety, it was found that only half of the learners felt apprehensive about their English class, even when they were well prepared for it. One of the possible reasons for this feeling could be that the majority (76.3%) of the participants were worried that their English proficiency might not improve as much as they were hoping. Similar to test anxiety, it was found that classroom anxiety could impede the learners' performance, as a good percentage (35.6%) of them indicated that they felt so nervous in their English class that they forgot things they knew.

Moreover, quantitative data shows that fear of negative evaluation and communication apprehension received the lowest scores (M = 3.169, SD = .889) and (M = 3.056, SD = .833), respectively. This finding accords with those of other studies (Al-Saraj, 2013; Effiong, 2013; Hashemi, 2011; Javid, 2014; Kayaoğlu & Sağlamel, 2013; Liu, 2006; Liu & Jackson, 2008), which showed that the majority of EFL learners experienced communication apprehension and fear of negative evaluation when using English in class.

The learners' responses to the items in the Fear of Negative Evaluation Scale provided useful insight into the reasons for the previously mentioned general classroom anxiety. It was found that the majority (59.9%) of the participants were afraid of being misunderstood when communicating in English, and a similar percentage (57.2%) of them were worried that their English proficiency might be interpreted as being less advanced than that of their peers.

Moreover, less than half (48.2%) of the respondents stated feeling embarrassed when the teacher corrected their mistakes in front of their classmates, and a good percentage (41.6%) of them were afraid that the other students might laugh at them if they spoke in English.

In line with the quantitative data, the qualitative data showed that around 40 per cent of the learners identified fear of negative evaluation as a main source of anxiety when learning English in class. Some learners indicated that they were worried their classmates might laugh at them if they made a grammatical mistake or mispronounced a word. Other learners felt anxious if their teacher asked them a question that they did not understand or did not know the answer to. Yet others pointed out that the mere presence of other learners who were more proficient in English than them made them feel anxious in class.

Last but not least, the participants indicated that they experienced communication apprehension when someone asked them something in English (reported by 62% of the participants) and when they participated in discussions in their English class (reported by 34.7%). More seriously, it was found that the students' feeling of communication apprehension was not unique to the English classroom, as more than half (53.6%) of them reported that speaking English anywhere made them feel worried. A possible reason for this feeling could be that the learners felt like people had a different perception of them when they spoke in English, as indicated by 40.7 per cent of them. Guiora (1979) explained this anxiety in light of the concept of *language ego boundary*. The implication is that speaking a different language can give a person a different identity and cause him/her to act differently, which is likely to disturb the individual's sense of identity and consequently, cause anxiety.

The interview data offered further explanations for why some learners felt apprehensive when communicating in English. It was found that those learners were worried that they might not be able to carry on a conversation in English or to communicate certain ideas

225

because they had limited vocabulary. Moreover, an overlap between communication apprehension and fear of negative evaluation was noticed in some of the responses. For example, Interviewee 2 identified fear of negative evaluation as her main source of anxiety when learning English in class. She then added, "When I communicate with somebody in English, I am afraid my language may not be good enough to be used in communication, and I may make grammatical mistakes. However, I do not get embarrassed if my teacher corrects my mistake, as I know that she only wants me to learn the language."

Interestingly, mixed responses were obtained when the interviewees were asked whether their feeling of anxiety had changed since they started to learn English. While half of the participants indicated that their anxiety had decreased, a quarter of them asserted that it had increased, and another quarter indicated that it had remained the same. Two main factors were reported as contributing to the increase in the learners' anxiety: finding English difficult to learn and worrying about tests. On the other hand, those who reported a decrease in their anxiety attributed this change to the improvement of their English proficiency. Specifically, their vocabulary and grammar improved as they were practicing the language on a daily basis in their English class. It was also found that FLA could fluctuate within the same learner, as Interviewee 8 commented, "My communication apprehension increased when I first joined the university. However, it has decreased a little after learning a good number of words. My test anxiety has remained the same." To sum up, we note that improvement in English proficiency helped reduce FLA, while experiencing difficulty with the English language and worrying about tests contributed to an increase in FLA. These findings provide evidence for the assumption that language anxiety is a multidimensional phenomenon that could be influenced by a variety of internal and external factors.

6.2.2 Motivation

As shown in Table 6.1, Saudi students exhibited a moderate level of motivation towards learning English (M = 3.907, SD = .589). A further examination of the data reveals that the students were more intrinsically (M = 3.962, SD = .661) than extrinsically (M = 3.852, SD = .602) motivated to learn the language. Among the subscales of IM, accomplishment (M = 4.043, SD = .704) was found to be the highest influential factor, followed by knowledge (M = 3.940, SD = .746) and stimulation (M = 3.911, SD = .787). Among the subscales of EM, external regulation (M = 4.292, SD = .679) was the highest influential factor, followed by identified regulation (M = 3.953, SD = .789) and introjected regulation (M = 3.290, SD = .821). As we can see, the learners were highly motivated by accomplishment and external regulation (their mean scores fell in the 4–5 range, as pointed out in Section 6.2 above), while they were moderately motivated by the other types (scored in the 2.1–3.9 range).

This data supports the assertion that IM and EM are best viewed as operating in conjunction with each other to promote learning (van Lier, 1996). Noels (2001) also points out that an individual can have a number of different motives for learning a language although a few of them may be of greater importance than the others. Figure 6.2 below presents an overview of the participants' mean scores on the Motivation Scale and subscales.
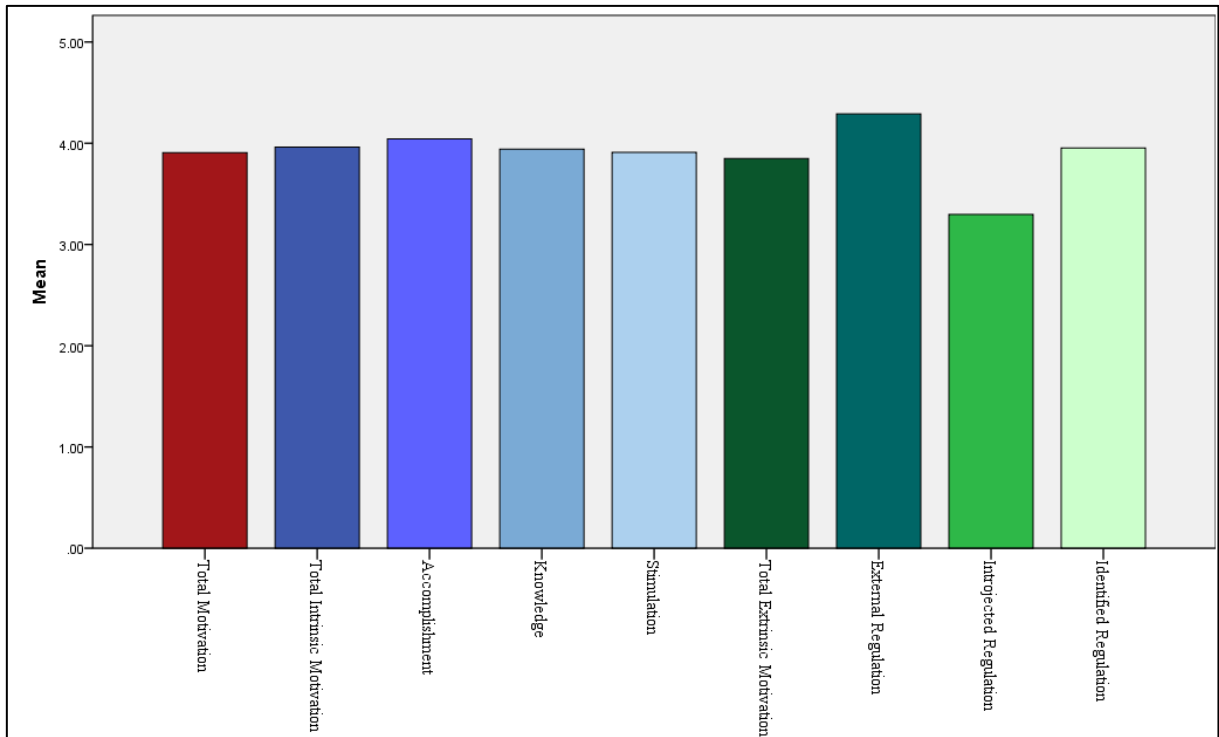
Figure 6.2. Mean scores on the Motivation Scale and subscales.

Table 6.2 below provides the percentages of the participants' agreements with the
statements in the six motivation subscales. The statements in each subscale are ranked
according to the descending order of the percentages.

Table 6.2
Percentages of Participants' Agreements with the Statements in the Motivation Subscales

Motivation subscale	Statement	Agreement (%)
Accomplishment	Learning English gives me a feeling of success.	88.3
	Mastering a new grammatical rule motivates me to learn more rules.	82.9
	I enjoy it when I grasp a difficult construct in English.	81.4
	I like to engage in thought-provoking tasks in my	75.2

Motivation subscale	Statement	Agreement (%)
Stimulation	English class.	
	Learning English is important because it allows me to meet and converse with a wide variety of people.	85.9
	I like learning English for the exuberant feeling that I experience while speaking it.	85.3
	Learning English is interesting.	72.5
	I enjoy interacting with native English speakers.	68.6
Knowledge	Learning English helps me understand English films, TV programmes, advertisements, and so on.	85.6
	Learning English provides knowledge about the English-speaking communities and their way of life.	81.4
	Reading English publications helps to expand my knowledge of the world.	74
	I like to learn how linguistic features of Arabic and English compare and contrast.	74
External Regulation	Learning English is necessary for everyday life in Saudi Arabia, such as in the field of education, the media and communication with foreigners who work here.	92.8
	Learning English is important because it will be useful in getting a good job.	85.6
	Proficiency in English is essential to work with computers and surf the Internet.	85.6
	Learning English is important because it will help me further my studies abroad.	82
Identified Regulation	Proficiency in two languages will make my life richer and more fulfilling.	82.9
	Everybody has to learn a foreign language.	77.2

Motivation subscale	Statement	Agreement (%)
	I am learning English because I want to be the kind of person who can speak a second language.	76.6
	Learning English is a good investment of my time.	72.2
Introjected Regulation	Learning English helps me develop a more positive self-image	77.5
	Learning English is important because other people will respect me more if I know English.	59
	It would be a shame if I could not speak an international language like English.	49.4
	I am learning English to impress the people around me.	38

In line with the quantitative findings, the qualitative data indicated that motivation had a substantial impact on the participants' learning. Of the 20 participants interviewed, eighteen (i.e. 90%) indicated that they were motivated to learn English. Only one participant (Interviewee 12) reported that he was neither motivated nor unmotivated to learn it, and another participant (Interviewee 15) mentioned that he was not motivated at all to learn the language. However, it was concluded that these two interviewees were simply referring to a lack of IM since they both seemed to be motivated by external regulation. For example, Interviewee 12 commented, "English has become essential in our society, so I have to learn it", while Interviewee 15 stated, "I just want to pass the module in order to move to the next level."

Significantly, the interview data provided further support to the questionnaire findings. First, three quarters of the interviewees mentioned that they were highly motivated by external regulation, as they needed to learn English in order to pursue graduate studies, travel

abroad, get a good job in the future, and so on. As Interviewee 11 simply put it, "external regulation motivates me because English has become important in all aspects of our life." This is consistent with van Lier's (1996) suggestion that IM alone is not enough to sustain the learning process: "Most teachers and parents will attest to the prevalent view that children and students will not move with sufficient enthusiasm and alacrity towards the goals of exemplary citizenship and outstanding academic achievement, if guided by nothing more than intrinsic motivation" (p. 110). Vallerand et al. (2008) also argue that IM is not always the most appropriate path to learning success. For example, when a task does not capture learners' interest, EM becomes more effective to achieve learning objectives. This also accords with earlier research which showed that a large number of EFL learners in different international contexts exhibited a high level of external regulation (see e.g. Aldosari, 2014; Chen, 2014; Javid et al., 2012; Liu, 2007; Mehrpour & Vojdani, 2012; Pan et al., 2010).

Moreover, the majority (70%) of the interviewees considered accomplishment a highly motivating factor and indicated that learning a FL made them feel good about themselves. A number of significant findings emerged from the learners' responses. First, a possible two-way relationship could be identified between accomplishment and knowledge, with one leading to the other. For example, Interviewee 4 commented, "Accomplishment is my main source of motivation. When I learn some points in English, I feel I have accomplished something, and this leads to stimulation" and Interviewee 11 stated, "If a person is not stimulated to learn, she will quit after a while. Stimulation leads to accomplishment. When I learn English, I feel I have accomplished something. I actually feel honoured to be able to speak a foreign language."

Significantly, the data above reveals that the students' needs for autonomy and competence (discussed in Chapter 3) were satisfied, as they were willing to dedicate their time

and effort to learn English, and they believed they were capable of achieving the goals of their academic course. According to Deci, Koestner and Ryan (1999, cited in Niemiec & Ryan, 2009), "Both autonomy and competence are necessary conditions for the maintenance of intrinsic motivation" (p. 135).

Moreover, a significant and almost equal number of remarks were made about knowledge (13 remarks), stimulation (12 remarks) and identified regulation (13 remarks) as sources of motivation for the learners. On the other hand, introjected regulation was considered the least motivating factor by the interviewees, as only three positive remarks were made about it. This last finding seems to have put the participants in this study at an advantage since a high level of introjected regulation could have a negative influence on language performance. For instance, in discussing the learning experiences of their Iranian learners of EFL, Shaikholeslami and Khayyer (2006) point out "people who act to avoid pressures such as anxiety or attain ego-enhancement, divide their attention between the tasks at hand and their preoccupations with how nervous they are. Instead of concentrating on a task, they keep noticing their feelings. Thus, these feelings may result in poor performance in activities" (p. 817).

An examination of previous research on motivation among EFL learners (e.g. Al-Sharief, 2013; Al-Tamimi & Shuib, 2009; Alzubaidi et al., 2016; Elsheikh et al., 2014; Chalak & Kassaian, 2010) revealed that learners in different EFL contexts exhibited various levels of the motivation categories mentioned above. This inconsistency of findings is not surprising. As pointed out in Chapter 3, numerous theoretical models and instruments were developed to assess language learning motivation, which made it very likely to obtain different results. In addition, the construct of motivation does not work in isolation but is influenced by a variety of personal, social and cultural factors (Dörnyei, 1998; Ryan & Deci, 2000). Hence, it seems

possible that such factors contributed to the variation in motivation types and levels exhibited by the participants in different research studies.

Interestingly, when interviewees were asked whether their motivation had changed since they started to learn English, the vast majority (85%) of them asserted that they had become more motivated to learn English. Three main factors were reported as contributing to the increase in the learners' motivation: 1) having a better knowledge of the English language and being able to communicate in it; 2) realising its importance for their future; and 3) their English teachers' use of interesting teaching approaches. For example, Interviewee 4 stated, "the more I understand English, the more motivated I become" and Interviewee 5 further commented "English classes are not boring like the ones in school." This change in the motivation level of the participants provides evidence for the temporal dimension of motivation and Dörnyei's (2001b) view that motivation is a dynamic process rather than a static state. As Dörnyei and Ushioda (2011) point out, motivation is "the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised and (successfully or unsuccessfully) acted out" (p. 9).

On the other hand, only 15 per cent of the learners stated that their motivation had remained the same and attributed this to the lack of encouragement from their teachers. The influence of teacher support on learners' motivation is important and discussed in further detail in Section 6.4.2 below.

6.2.3 Self-efficacy

The data in Table 6.1 above shows that the participants in this study exhibited a
moderate level of self-efficacy, as their mean score on the Self-efficacy Scale was M = 3.311
(SD = .716). This finding is consistent with that of Magogwe's (2006) study of self-efficacy
among EFL learners in Botswana (reviewed in Chapter 3). It is also supported by the
qualitative data obtained in the present study, which showed that half of the interviewees felt
self-efficacious when learning the English language. For example, Interviewee 4 commented,
"I am capable and I try hard to learn. I depend on myself to find good resources." The other
half of the participants were less confident about their ability and pointed out that their sense
of self-efficacy was influenced by such factors as studying hard from the beginning of the
English module and getting enough practice of the new material. This finding does not seem
to match those of a few previous studies (e.g. Heidari et al., 2012; Tilfarlioğlu & Cinkara,
2009), which revealed that EFL learners in Iran and Turkey exhibited high levels of self-
efficacy. This inconsistency of results is not surprising since these studies were carried out
with different populations and used different instruments to assess self-efficacy. As pointed
out in Chapter 3, Heidari et al. (2012) used a Persian questionnaire adapted from Nezami et
al.'s (1996) General Self-efficacy Scale, while Tilfarlioğlu and Cinkara (2009) used a Turkish
version of Mills' (2004) Self-efficacy Questionnaire.

The quantitative data obtained in this study showed that the learners exhibited different
levels of self-efficacy when carrying out different tasks and skills. In this respect, it appears
that Zimmerman and Cleary (2006) are right when suggesting that self-efficacy beliefs are
both task-dependent and context-dependent, as they involve specific decisions about specific
situations. To begin, the learners felt the most self-efficacious when reading and writing in
English. For example, the majority of them indicated that they were able to understand

English short stories (reported by 74.9% of the respondents) and to understand the main ideas of the reading passages in their English course books (reported by 71.6%). Similarly, a large percentage of the learners revealed that they were able to express themselves clearly when writing in English (reported by 63.5% of the participants) and to write clear and organised essays in English about general topics (reported by 74.3%). These findings are not surprising since the read/write learning style was found to be the second favourite (after the visual style) among the learners, as discussed in Section 5.2.1 in the previous chapter.

Self-efficacy in listening came next, as the majority of the learners reported that they were able to understand English TV programmes (reported by 58.1% of the respondents) and to understand their English teachers' instructions and comments (reported by 54.2%). Finally, the learners felt the least self-efficacious when speaking English. Data analysis showed that less than half (47.6 %) of the learners thought they were capable of expressing their ideas and opinions clearly when speaking in English, and only 42.2 per cent of them felt able to give an oral presentation in English to their class. Again, these results are not unexpected since the participants pointed out that the aural learning style was their least favourite one (see Section 5.2.1 in the previous chapter). Moreover, the learners' feelings of communication apprehension and fear of negative evaluation (discussed in Section 6.2.1 above) could possibly have contributed to lowering their sense of self-efficacy for speaking English.

A further examination of the questionnaire data reveals that the participants had a higher level of self-efficacy for learning new vocabulary items and using them in different contexts (reported by 61.1% of the respondents) than for learning English grammar (reported by 46.4%). A possible explanation for the participants' low self-efficacy for learning grammar could be that the majority of them considered grammar one of the most ambiguous components of the English language, as discussed in Section 5.2.3 in the previous chapter.

The above results are significant in two major respects. First, they showed that self-efficacy could fluctuate within the same individual depending on the skill or task at hand. Second, a few connections between self-efficacy and language learning styles could be inferred from the above findings. Exploring such links is one of the main objectives of the present study and is discussed in greater detail in the next chapter.

Consistently, when the interviewees were asked about the skills they felt most confident in carrying out, most (60%) of them referred to reading and writing. For example, Interviewee 2 stated, "I can read texts easily and quickly" and Interviewee 19 further commented, "I can take my time when I read. If I do not understand something, I can figure it out from the context." Positive comments were also obtained about self-efficacy for writing. For instance, Interviewee 2 asserted, "I am skilled at writing and I know how to spell difficult words," and Interviewee 10 commented, "Because I read a lot, my writing has improved." On the other hand, when the learners were asked about the skills they felt least capable of doing well, a few negative references to listening comprehension were obtained. That was especially true if the message was delivered at a fast rate or in an unfamiliar accent and if it contained a large number of new vocabulary words.

Similar to language learning motivation, when the interviewees were asked whether their self-efficacy beliefs had changed since they started to learn English, the vast majority (85%) of them asserted that they felt more self-efficacious about learning English. They attributed this increase to using English more frequently in the classroom and having a better knowledge and understanding of the language, especially grammar and vocabulary. On the other hand, only two learners (i.e. 10% of the participants) mentioned that their self-efficacy remained the same, and one learner (i.e. 5% of the participants) stated that she felt less self-efficacious and attributed this decrease to achieving lower marks on English tests than

236

expected. This result is alarming since low self-efficacy was found to negatively impact the individuals' efforts to pursue their goals. They may even decide not to take part in a task because they do not believe in their ability to carry it out successfully (Ching, 2002). The impact of self-efficacy beliefs on English language performance is discussed in further detail in Section 6.5.3 below.

6.3 Question 2a. Do these factors differ according to the learners' demographic characteristics?

To answer this question, a series of independent-samples t-tests was conducted to examine the differences in the learners' scores on the scales and subscales of the AFLLQ according to their demographic characteristics. Five demographic variables, which had two levels, were included in the analysis: gender, age, track of study, residing abroad and speaking other foreign languages. Table 6.3 below shows the mean scores of each group of learners on the scales and subscales of the AFLLQ. The standard deviation values are provided in parentheses.

Table 6.3

Mean Scores on AFLLQ According to Five Demographic Characteristics

Scale/subscale of AFLLQ	Gender		Age		Track of study		Residing abroad		Knowing other foreign languages	
	Male	Female	under 20	20 or above	Humanities	Science	Yes	No	Yes	No
Anxiety	3.175	3.296	3.257	3.220	3.334	2.976	3.331	3.236	3.042	3.256
	(.669)	(.742)	(.727)	(.681)	(.703)	(.685)	(.906)	(.698)	(.891)	(.698)
General Classroom Anxiety	3.198	3.312	3.242	3.292	3.363	2.971	3.379	3.253	3.123	3.270
	(.847)	(.849)	(.877)	(.778)	(.838)	(.835)	(1.099)	(.830)	(1.034)	(.836)
Communication Apprehension	3.000	3.100	3.090	3.005	3.109	2.890	3.311	3.037	2.956	3.062
	(.751)	(.893)	(.846)	(.824)	(.854)	(.767)	(.843)	(.831)	(1.065)	(.817)
Test Anxiety	3.380	3.565	3.485	3.490	3.637	3.058	3.337	3.493	3.302	3.495
	(.924)	(.981)	(.979)	(.929)	(.919)	(.960)	(1.151)	(.945)	(1.171)	(.944)
Fear of Negative Evaluation	3.136	3.194	3.206	3.102	3.229	2.981	3.296	3.160	2.798	3.194
	(.871)	(.904)	(.872)	(.919)	(.890)	(.858)	(1.079)	(.875)	(1.048)	(.873)
Motivation	3.939	3.881	3.880	3.977	3.843	4.088	3.770	3.916	3.933	3.905
	(.563)	(.609)	(.592)	(.582)	(.610)	(.484)	(.775)	(.574)	(.587)	(.590)
Intrinsic Motivation	4.025	3.910	3.942	4.022	3.883	4.175	3.766	3.975	4.017	3.957
	(.601)	(.703)	(.654)	(.669)	(.675)	(.577)	(.833)	(.647)	(.660)	(.662)
Accomplishment	4.110	3.989	4.044	4.081	3.970	4.246	3.860	4.056	4.008	4.045
	(.640)	(.749)	(.687)	(.718)	(.723)	(.605)	(.811)	(.696)	(.722)	(.704)
Knowledge	3.997	3.893	3.920	3.979	3.875	4.111	3.913	3.941	3.948	3.939
	(.716)	(.767)	(.735)	(.769)	(.770)	(.661)	(.813)	(.742)	(.773)	(.746)
Stimulation	3.971	3.863	3.867	4.021	3.815	4.170	3.561	3.935	4.095	3.898
	(.720)	(.835)	(.801)	(.749)	(.803)	(.684)	(1.075)	(.758)	(.762)	(.788)

Scale/subscale of AFLLQ	Gender		Age		Track of study		Residing abroad		Knowing other foreign languages	
	Male	Female	under 20	20 or above	Humanities	Science	Yes	No	Yes	No
Extrinsic Motivation	3.853	3.851	3.817	3.933	3.801	4.001	3.772	3.857	3.851	3.852
	(.611)	(.597)	(.618)	(.574)	(.623)	(.506)	(.755)	(.591)	(.583)	(.604)
External Regulation	4.243	4.331	4.257	4.372	4.238	4.446	4.072	4.307	4.270	4.293
	(.709)	(.653)	(.689)	(.654)	(.710)	(.571)	(.925)	(.657)	(.747)	(.675)
Introjected Regulation	3.355	3.238	3.274	3.330	3.261	3.377	3.439	3.279	3.099	3.302
	(.841)	(.802)	(.830)	(.819)	(.825)	(.780)	(.935)	(.813)	(.812)	(.821)
Identified Regulation	3.953	3.953	3.900	4.078	3.878	4.170	3.780	3.965	4.191	3.937
	(.784)	(.795)	(.818)	(.727)	(.813)	(.664)	(.945)	(.777)	(.564)	(.800)
Self-efficacy	3.426	3.220	3.283	3.381	3.205	3.608	3.468	3.300	3.744	3.282
	(.630)	(.768)	(.731)	(.675)	(.733)	(.578)	(.728)	(.716)	(.727)	(.708)

239

To determine the statistical significance of the differences between the above groups, let us examine the results of the t-tests presented in Table 6.4 below. For each group, the t-value is followed by the relevant degree of freedom.

Table 6.4

Differences in Scores on AFLLQ According to Five Demographic Characteristics

Scale/subscale of AFLLQ	Gender		Age		Track of study		Residing abroad		Knowing other foreign languages	
	t	df	t	df	t	df	t	df	t	df
Anxiety	-1.540	332	.443	326	4.087**	328	.601	332	-1.336	332
General classroom anxiety	-1.216	332	-.517	326	3.738**	328	.525	22.721	-.772	332
Communication apprehension	-1.105	330.949	.869	326	2.099**	328	1.489	332	-.446	21.610
Test anxiety	-1.752	332	-.041	326	4.969**	328	-.737	332	-.894	332
Fear of negative evaluation	-.587	328	.997	322	2.234**	324	.577	23.014	-1.986*	328
Motivation	.880	332	-1.420	326	-3.768**	186.722	-.868	22.651	.214	332
Intrinsic motivation	1.611	330.197	-1.042	326	-3.842**	172.663	-1.436	332	.400	332
Accomplishment	1.576	329.519	-.456	325	-3.448**	176.682	-1.260	331	-.232	331
Knowledge	1.262	331	-.677	325	-2.732**	172.251	-.171	331	.058	331
Stimulation	1.279	329.833	-1.699	326	-3.952**	173.259	-1.607	22.498	1.111	332

Scale/subscale of AFLLQ	Gender		Age		Track of study		Residing abroad		Knowing other foreign languages	
	t	df	t	df	t	df	t	df	t	df
Extrinsic motivation	.035	332	-1.658	326	-2.678**	328	-.634	332	-.001	332
External regulation	-1.178	332	-1.466	326	-2.457**	328	-1.172	22.518	-.152	332
Introjected regulation	1.298	331	-.594	325	-1.133	327	.886	331	-1.098	331
Identified regulation	-.005	331	-1.956	325	-2.992**	327	-1.062	331	1.427	331
Self-efficacy	2.697**	331.676	-1.179	326	-5.164**	187.811	1.063	332	2.890**	332

Note. ** $p < 0.01$ (2-tailed)
* $p < 0.05$ (2-tailed).

Moreover, since the rest of the demographic variables (the school level at which English learning started, hours spent studying English outside class, frequency of using English outside the classroom, father's educational level, father's knowledge of English, mother's educational level and mother's knowledge of English) had more than two levels, one-way between-groups ANOVA was conducted to examine the differences in the effects of the affective factors on the learners according to these variables. The mean scores of the different groups of participants are provided in Appendix J, and the results of the ANOVA analysis are presented in Table 6.5 below.

Table 6.5

Differences in Scores on AFLLQ According to Seven Demographic Characteristics

Scale/ subscale of AFLLQ	School level at which English learning started		Hours spent studying English		Frequency of using English outside class		Father's educational level		Father's knowledge of English		Mother's educational level		Mother's knowledge of English	
	F	df	F	df	F	df	F	df	F	df	F	df	F	df
Anxiety	.254	2	.934	3	6.129**	4	.756	3	.714	2	2.699*	3	1.299	2
General Classroom Anxiety	.296	2	2.027	3	4.911**	4	1.685	3	.382	2	3.661*	3	.556	2
Communication Apprehension	.232	2	.189	3	4.664**	4	.375	3	1.121	2	.559	3	.522	2
Test Anxiety	.539	2	.575	3	3.649**	4	1.083	3	.362	2	2.788*	3	1.417	2
Fear of Negative Evaluation	2.747	2	1.177	3	3.625**	4	.334	3	1.319	2	1.237	3	1.781	2
Motivation	.739	2	1.710	3	7.113**	4	.774	3	.632	2	.159	3	.936	2
Intrinsic Motivation	.491	2	1.882	3	8.480**	4	.676	3	.320	2	.169	3	1.344	2
Accomplishment	1.593	2	.900	3	5.936**	4	.738	3	.599	2	.251	3	.719	2
Knowledge	.756	2	1.605	3	4.719**	4	.807	3	.395	2	.268	3	.780	2
Stimulation	1.225	2	2.171	3	9.192**	4	1.174	3	.375	2	.556	3	1.530	2

244

Scale/ subscale of AFLLQ	School level at which English learning started		Hours spent studying English		Frequency of using English outside class		Father's educational level		Father's knowledge of English		Mother's educational level		Mother's knowledge of English	
	F	df	F	df	F	df	F	df	F	df	F	df	F	df
Extrinsic Motivation	.901	2	1.151	3	4.365**	4	.975	3	.844	2	.120	3	.376	2
External Regulation	.602	2	2.338	3	2.893**	4	.309	3	.486	2	.049	3	.063	2
Introjected Regulation	.541	2	.241	3	1.675	4	1.468	3	.982	2	.078	3	.380	2
Identified Regulation	.836	2	1.241	3	5.130**	4	1.239	3	1.685	2	.176	3	.538	2
Self-efficacy	.503	2	.888	3	16.980**	4	.335	3	1.048	2	6.070**	3	5.010**	2

Note. ** $p < 0.01$ (2-tailed)
* $p < 0.05$ (2-tailed).

In the following sections, I discuss the results of the above analyses for each affective factor.

6.3.1 Anxiety

The data in Table 6.4 shows a significant difference between the scores of the humanities and science students on the Anxiety Scale; t (328) = 4.09, *p* = .000 (two-tailed). Humanities students (M = 3.334, SD = .703) were found to be more anxious when learning English than their science peers (M = 2.976, SD = .685). However, the magnitude of the difference in the means (mean difference = .36, 95% *Cl*: .18 to .53) was small (eta squared = .05) according to Cohen's (1988) guidelines. Figure 6.3. below shows the mean score of each group of learners.
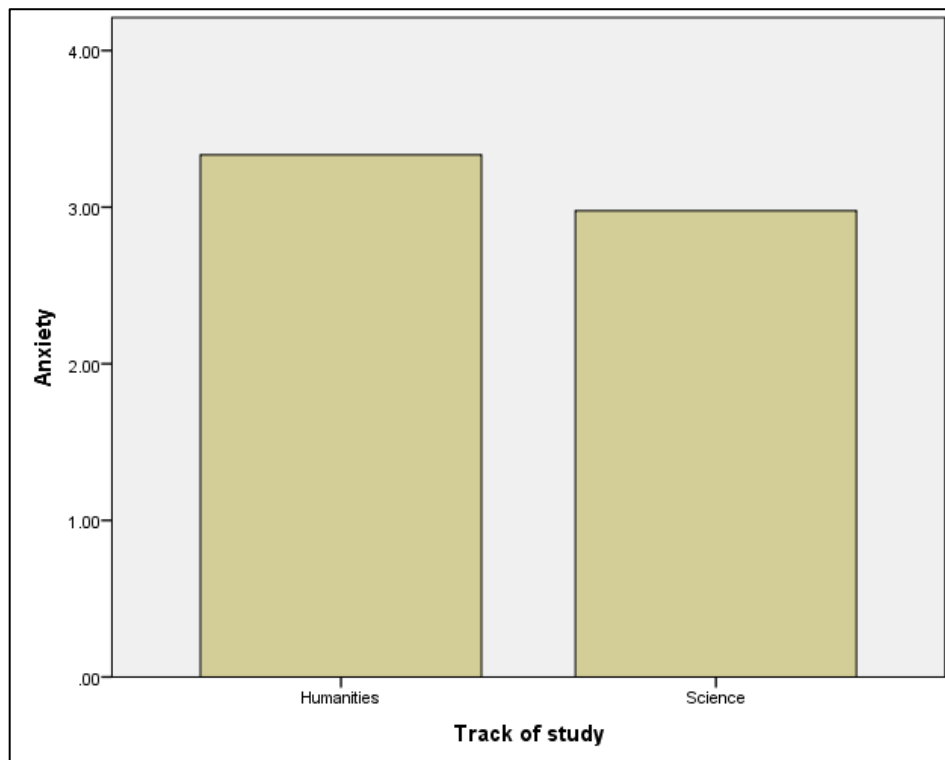

Figure 6.3. Differences in anxiety according to track of study.

Similarly, Table 6.4 shows significant differences between the scores of the humanities and science students on the four anxiety subscales, with the former group exhibiting more anxiety than the latter. This result could be attributed to the fact that in Saudi universities, all science classes are taught in English, which helped science students become accustomed to using English throughout their studies. On the contrary, humanities students encountered the target language in their English class only, which could have made them less familiar with it than their science peers and consequently, more anxious when using it. This situation is especially true in Saudi Arabia, where English is a FL, and thus, learners' exposure to it outside the classroom setting is generally limited, with only a few opportunities to communicate with its native speakers. Taken together, it is not surprising that humanities students had a higher level of language anxiety than their science peers.

Moreover, the t-test result shows a significant difference in the scores on the Fear of Negative Evaluation Scale between learners who knew other foreign languages (M = 2.798, SD = 1.048) and those who did not (M = 3.194, SD = .873); t (328) = -1.986, *p* = .05 (two-tailed). The latter group showed a higher level of fear of negative evaluation than the former. However, the magnitude of the difference in the means (mean difference = -.396, 95% *Cl*: -.789 to -.004) was small (eta squared = .012). Figure 6.4. below shows the mean score of each group of participants.
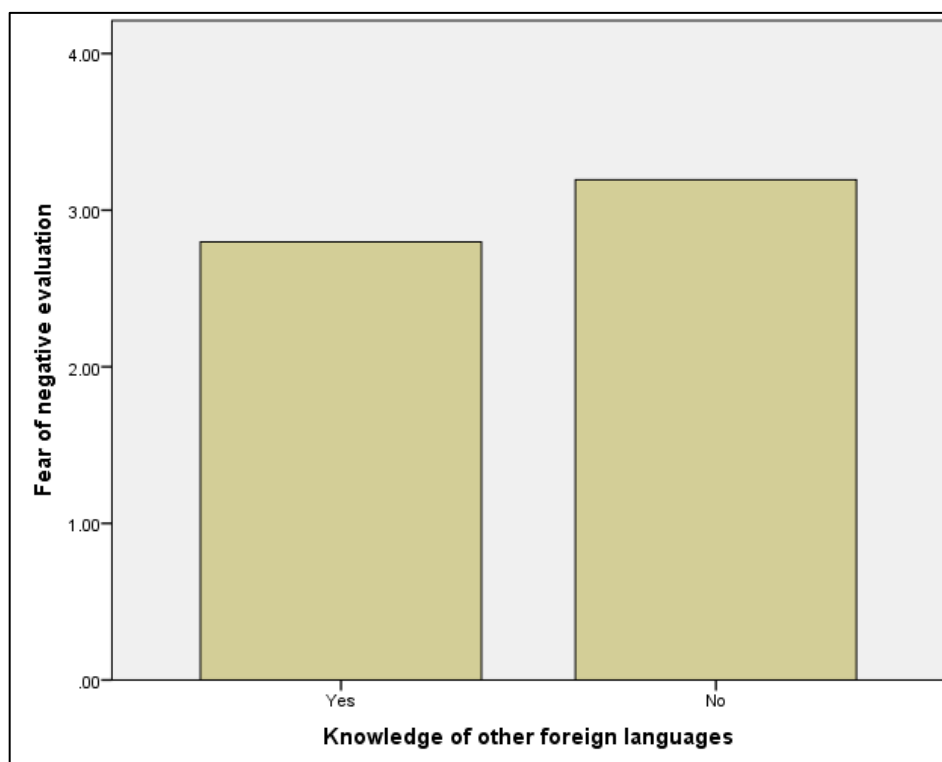
Figure 6.4. Differences in fear of negative evaluation according to knowledge of other foreign languages.

A possible explanation for this finding might be that the learners who spoke other foreign languages such as Korean, French, Hindi and Urdu (see Section 4.5.1 in Chapter 4 for more information on the foreign languages that the participants spoke) felt more competent and confident in their ability to learn English and hence, were less apprehensive about making mistakes or being judged by others when speaking English. In other words, it is likely that these students had learned from their experience that making mistakes and learning from those mistakes was a natural part of the language learning process.

Moreover, the data in Table 6.5 shows a statistically significant difference in the scores on the Anxiety Scale according to the frequency with which English was used outside the classroom: $F (4, 328) = 6.1$, $p = .000$. Figure 6.5. below shows the mean score of each group of learners.
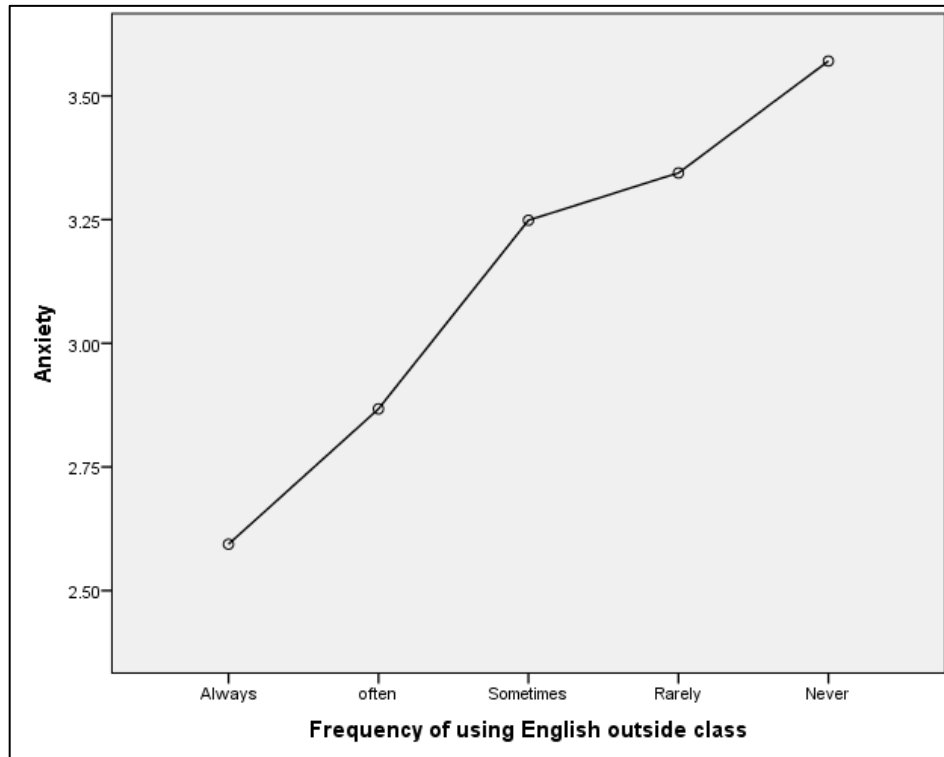
Figure 6.5. Differences in anxiety according to the frequency of
English use outside the classroom.

We can see from this plot that the group who never used English outside the classroom
setting exhibited the highest anxiety level, with those who always used it exhibiting the
lowest. The effect size, calculated using eta squared, was .07 which could be considered a
medium effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean
score of the students who often used English outside the classroom ($M = 2.87$, $SD = .71$) was
significantly different from the scores of those who sometimes used it ($M = 3.25$, $SD = .75$),
rarely used it ($M = 3.34$, $SD = .64$) and never used it ($M = 3.57$, $SD = .56$) outside the
classroom. Similarly, Table 6.5 shows significant differences in the scores on the four anxiety
subscales according to the frequency with which English was used outside the classroom. A
common finding was that learners who used the language more frequently out of class
exhibited lower levels of all types of anxiety. This finding supports that of Wu (2010) who

found that Taiwanese learners who used English outside the classroom for more than 15 hours a week showed lower levels of anxiety than their peers. The finding also supports the conclusion drawn by Liu (2006) about her Chinese learners of English "with increasing exposure to oral English, the students felt less and less anxious about using the target language in speech communication" (p. 301). As pointed out in Sections 5.3.1 and 5.3.3 in the previous chapter, the frequent use of English outside the classroom could have helped reduce the participants' feeling of anxiety. Since they were accustomed to using the language to communicate in real life situations, they felt less apprehensive when using it in class than their peers.

Last but not least, the data in Table 6.5 indicates a statistically significant difference in the scores on the Anxiety Scale in relation to the mother's education level: $F (3, 324) = 2.7$, $p = .046$. Figure 6.6. below shows the mean score of each group of participants.
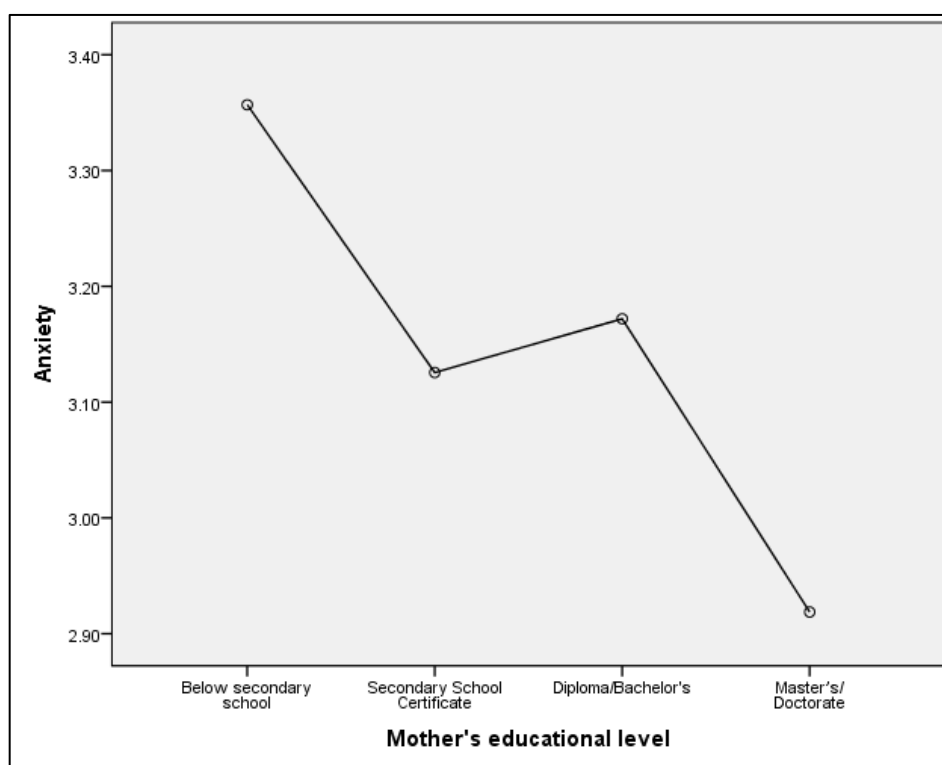

Figure 6.6. Differences in anxiety according to mother's educational level.

This plot shows that the group whose mothers' education level was below secondary school exhibited the highest degree of language anxiety, with those whose mothers held a master's or a doctorate degree showing the lowest anxiety level. The effect size, calculated using eta squared, was .02 which could be considered a small effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the students whose mothers' educational level was below secondary school (M = 3.36, SD = .63) was significantly different from the score of those whose mothers held a secondary school certificate (M = 3.13, SD = .75). Significant differences were also found between the scores of these two groups on the General Classroom Anxiety Scale and Test Anxiety Scale. This finding is significant because it could suggest that when mothers are more educated, their children's anxiety level becomes lower. It could also suggest that mothers are well placed to support language learning at home. As mentioned in the previous chapter, the cultural traditions in Saudi Arabia require women to stay at home to look after their children, and they often help the children with their studies if they have the required level of knowledge. Thus, when students learn English at home in a supportive environment, it is likely that they will feel less anxious in their English class than their peers who do not receive similar support. Further research is needed to investigate more thoroughly the impact of parents' educational level and involvement on the anxiety of their children.

6.3.2 Motivation

It can be seen from the data in Table 6.4 that there was a significant difference in the scores on the Motivation Scale between humanities (M = 3.843, SD = .610) and science students (M = 4.088, SD = .484); t (186.722) = -3.77, p = .000 (two-tailed). Humanities students were found to be less motivated to learn English than their science peers. However,

the magnitude of the difference in the means (mean difference = -.25, 95% *Cl*: .37 to .12) was

small (eta squared = .04). Figure 6.7. below shows the mean score of each group of learners.
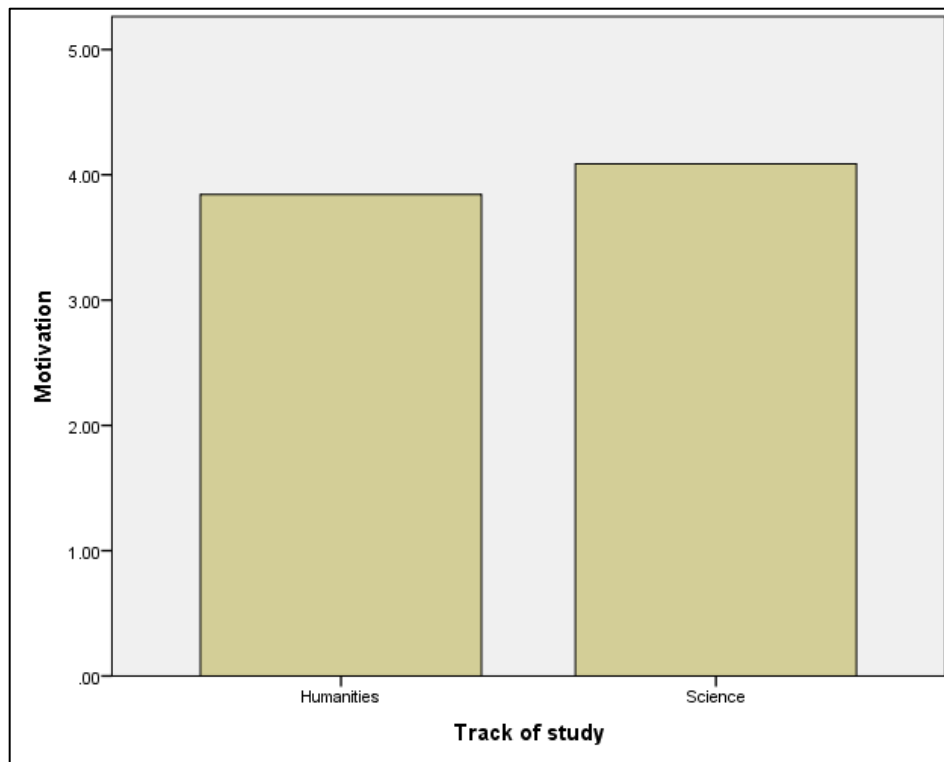
Figure 6.7. Differences in motivation according to track of study.

Similarly, Table 6.4 shows significant differences in the scores on all motivation

subscales (except introjected regulation) between humanities and science students, with the

former group exhibiting less motivation than the latter.

An examination of the interview data reveals no significant differences in motivation

between these two groups. This is not unexpected since the magnitude of the difference in the

means is small. The only difference that could be noted in the interview data was that a few

science students made frequent references to external regulation as their main source of

motivation to learn English. More specifically, Interviewees 13 and 17 expressed a desire to

achieve a good score on the English module, as it was a requirement to major in engineering.

This is perhaps, not surprising given the fact that the majority of advanced scientific resources in Saudi Arabia are written in English. Therefore, science students need to have a good command of the English language in order to be able to read and understand English textbooks. This finding is also consistent with those of Dwaik and Shehadeh (2010) and Chen (2014), reviewed in Chapter 3.

Moreover, it can be seen from the data in Table 6.5 that there was a significant difference in the scores on the Motivation Scale according to the frequency with which English was used outside the classroom: F (4, 328) = 7.1, p = .000. Figure 6.8. below shows the mean score of each group of participants.
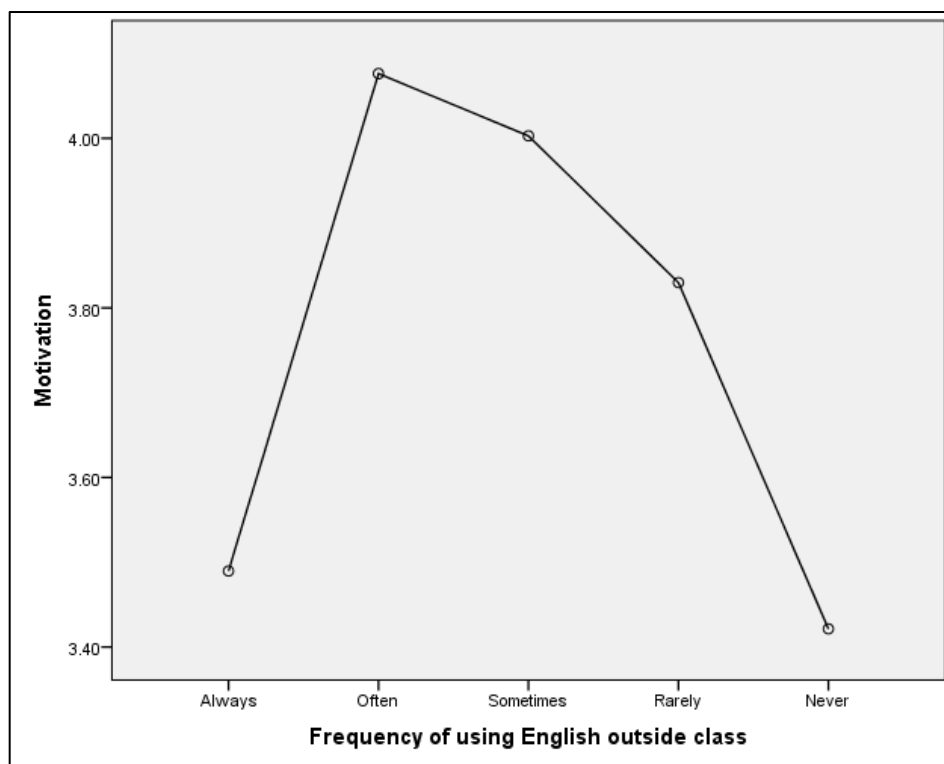

Figure 6.8. Differences in motivation according to the frequency of English use outside the classroom.

We can see from this plot that the group who never used English outside the classroom exhibited the lowest level of language learning motivation, with those who often used it,

exhibiting the highest. The effect size, calculated using eta squared, was .08, which would be considered a medium effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the students who never used English outside the classroom (M = 3.42, SD = .59) was significantly different from the mean scores of those who often used it (M = 4.08, SD = .55), sometimes used it (M = 4.00, SD = .53) and rarely used it (M = 3.83, SD = .59) outside the classroom. Similarly, Table 6.4 shows significant differences in the scores on all motivation subscales (except introjected regulation) according to the frequency of using English outside the classroom setting. These findings are expected and support Y. Wang's (2010) assumption that "a real chance of using the language instead of practicing it in a simulated situation gives the learners a sense of usefulness of the language and stimulates their desire to learn that language" (p. 610).

A surprising finding that emerged from this analysis was that the students who always used English outside the classroom setting obtained the second lowest motivation score (M = 3.49, SD = 1 .35); however, that did not differ significantly from the scores of the other groups. It is not possible to say with any certainty why those learners felt that way, but it could be that they simply did not have a strong desire to learn the English language and they simply used it for basic communication with non-native speakers of Arabic outside the classroom. It should also be pointed out that only four participants in this study (out of the whole sample of 344 participants) fell in this category, which makes it unwise to generalise this finding as applicable to the whole population.

6.3.3 Self-efficacy

The results in Table 6.4 above shows a significant difference in self-efficacy scores between males (M = 3.426, SD = .630) and females (M = 3.220, SD = .768); t (332) = 2.70, *p*

= .007 (two-tailed). Male students showed a higher degree of self-efficacy in language learning than their female peers. However, the magnitude of the difference in the means (mean difference = .21, 95% *Cl*: .06 to .36) was small (eta squared = .022). Figure 6.9. below shows the mean score of each group of learners.
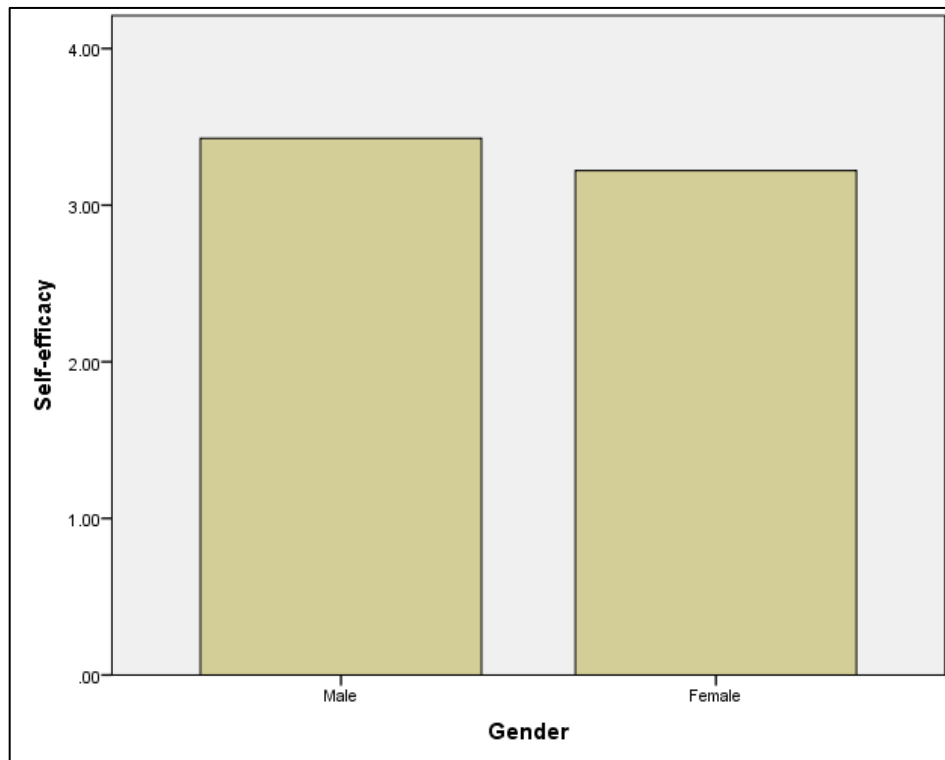
Figure 6.9. Differences in self-efficacy according to gender.

An interesting finding was observed in the interview data in this regard. It was noted that male students were more emphatic when describing their self-efficacy. For example, Interviewee 14 mentioned, "I am confident in my ability." Besides, the word *definitely* occurred three times in the male students' comments about their self-efficacy for learning English (i.e. it was used in 33.3% of their responses). On the other hand, four female students were found to be less assertive about their ability to learn English successfully, and they pointed out that they needed to receive some support from a classmate or a family member.

This difference between the two genders could be explained in light of the relationship between self-efficacy beliefs and causal attributions proposed by Bandura (1997). The researcher explains that highly efficacious individuals often attribute negative outcomes to insufficient effort, while those with low self-efficacy tend to attribute them to lack of ability. Hence, the fact that a few female participants in the present study occasionally felt incapable of carrying out English activities appropriately could possibly have contributed to lowering their sense of self-efficacy.

Additionally, Table 6.4 shows a significant difference in self-efficacy scores between humanities students (M = 3.205, SD = .733) and science students (M = 3.608, SD = .578); t (187.811) = -5.17, p = .000 (two-tailed). Science students showed a higher level of self-efficacy than their humanities peers. The magnitude of the difference in the means (mean difference = -.40, 95% Cl: -.56 to -.25) was found to be moderate (eta squared = .08). Figure 6.10. below shows the mean score of each group of participants.
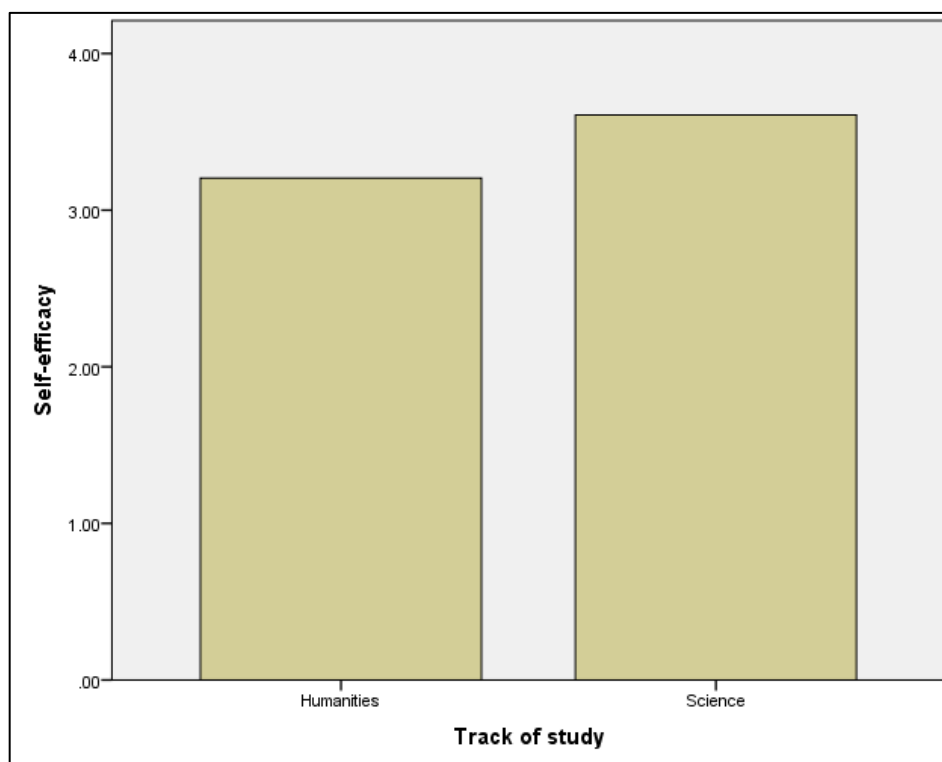
Figure 6.10. Differences in self-efficacy according to track of study.

As discussed in Section 6.3.1 above, science classes in Saudi universities are taught in English, which could have helped science students become accustomed to using English throughout their studies and hence, contributed to increasing their confidence in their ability to use the language appropriately. In contrast, humanities students encountered the language in their English class only, which could have made them less familiar with the language than their science peers and consequently, less confident in their ability to use it competently. This situation is especially true in Saudi Arabia, where English is a FL, and thus, learners' exposure to the language outside the classroom setting is limited.

Moreover, the t-test result shows a significant difference in self-efficacy scores between learners who knew other foreign languages (M = 3.744, SD = .727) and those who did not (M = 3.282, SD = .708); t (332) = 2.89, p = .004 (two-tailed). The former group showed a higher level of self-efficacy than the latter. However, the magnitude of the difference in the means

(mean difference = .462, 95% *Cl*: .148 to .776) was small (eta squared = .025). A possible

explanation for this finding might be that the learners who knew other foreign languages felt

more competent and confident in their ability to learn English than those who did not know

any FL. Figure 6.11. below shows the mean score of each group of learners.
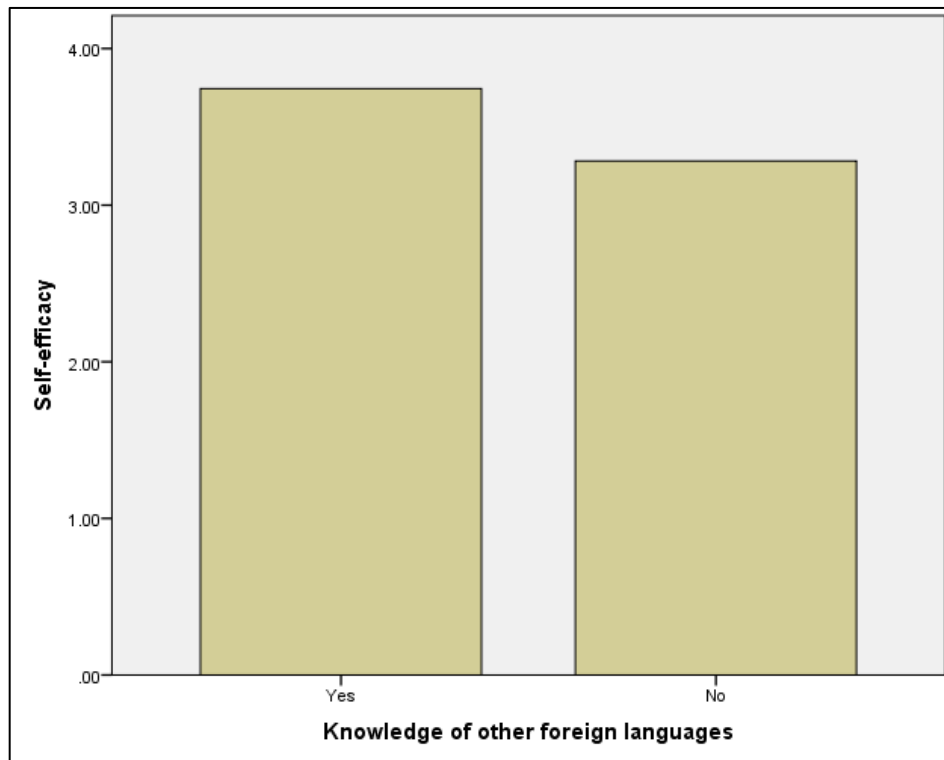
Figure 6.11. Differences in self-efficacy according to knowledge
of other foreign languages.

Furthermore, an examination of the ANOVA data in Table 6.5 reveals a statistically

significant difference in the self-efficacy scores in accordance with the frequency with which

English was used outside the classroom: $F (4, 328) = 16.98$, $p = .000$. Figure 6.12. below

shows the mean score of each group of participants.
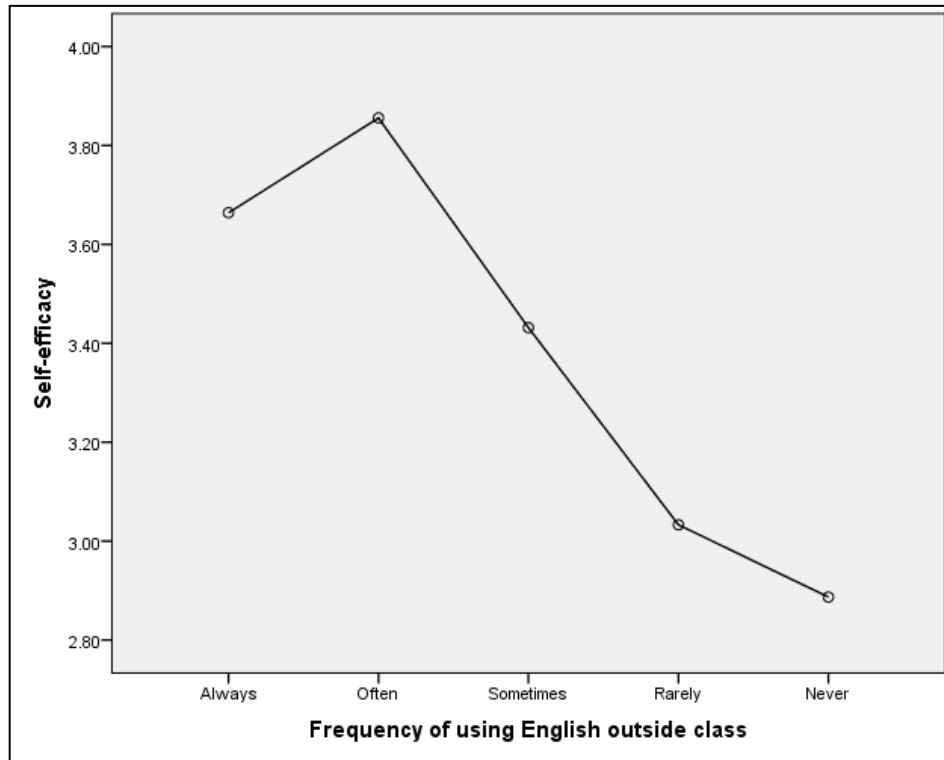
Figure 6.12. Differences in self-efficacy according to the frequency
of English use outside the classroom.

This plot shows that the group who often used English outside the classroom exhibited

the highest level of self-efficacy in language learning, with those who never used it exhibiting

the lowest. The effect size, calculated using eta squared, was .17, which would be considered

a large effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean scores

of the students who often used English outside the classroom setting (M = 3.86, SD = .59) and

those who sometimes used it (M = 3.43, SD = .60) were significantly different from each

other and from the scores of those who rarely used the language (M = 3.03, SD = .74) or

never used it (M = 2.89, SD = .52) outside the classroom. These results were anticipated as

they followed the same pattern observed with language anxiety and motivation above (see

Sections 6.3.1 and 6.3.2); hence, they might be explained by the fact that the learners who

frequently used English outside the classroom in real life situations felt more confident in

their ability to communicate in it and consequently, had a higher sense of self-efficacy when using the language in class than those who used it less frequently.

Additionally, the data in Table 6.5 shows a statistically significant difference in the self-efficacy scores in accordance with the mother's educational level: F (3, 324) = 6.1, p = .000. Figure 6.13. below shows the mean score of each group of learners.
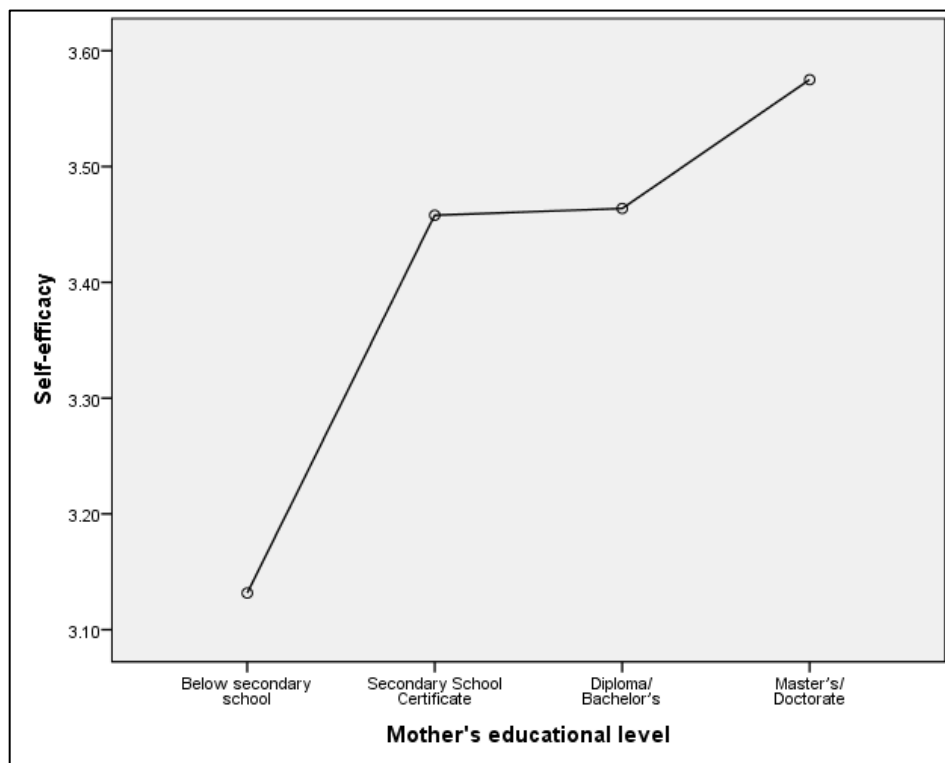
Figure 6.13. Differences in self-efficacy according to mother's educational level.

We can see from this plot that the group whose mothers' educational level was below secondary school exhibited the lowest degree of self-efficacy, while those whose mothers held a master's or a doctorate degree showed the highest self-efficacy level. The effect size, calculated using eta squared, was .05, which would be considered a small effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the students whose

mothers' educational level was below secondary school (M = 3.132, SD = .751) was

significantly different from the scores of those whose mothers held a secondary school

certificate (M = 3.458, SD = .592) and those whose mothers held a diploma or a Bachelor's

degree (M = 3.464, SD = .728).

Similarly, the data in Table 6.5 shows a statistically significant difference in the self-

efficacy scores in relation to the mother's knowledge of the English language: $F (2, 325) =$

5.01, p = .007. Figure 6.14. below shows the mean score of each group of participants.
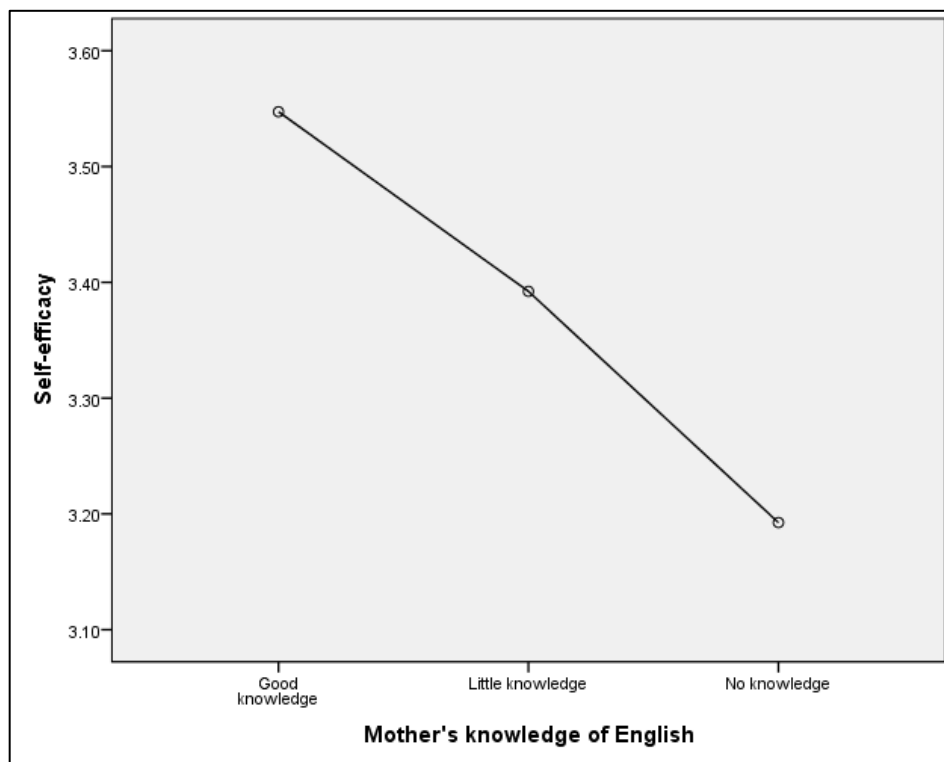
Figure 6.14. Differences in self-efficacy according to mother's
knowledge of English.

Similar to the findings obtained for language anxiety above (see Section 6.3.1), Figure

6.14. shows that the group whose mothers had a good knowledge of the English language

obtained the highest score on the Self-efficacy Scale, while those whose mothers had no

knowledge of the language obtained the lowest score. The effect size, calculated using eta squared, was .03 which could be considered a small effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the participants whose mothers had no knowledge of the English language (M = 3.19, SD = .71) was significantly different from that of the students whose mothers had a good knowledge of English (M = 3.55, SD = .67) or a little knowledge of it (M = 3.39, SD = .72).

It appears that the two findings above are related and that they provide evidence that mothers might be able to support language learning at home, as mentioned in Section 6.3.1 above. Thus, it could be that the mothers who held a secondary school certificate, a diploma or a Bachelor's degree and those who had a good knowledge of English acted as role models to their children. That could have encouraged the children to learn the language and develop their skills further. In addition, if those learners received additional support with English at home, they could have become more knowledgeable about it than their peers. Consequently, that could contribute to increasing their self-efficacy when encountering the language in class.

6.4 Question 2b. What elements in the classroom influence the learners' experiences with these affective factors?

This question was addressed through the qualitative analysis of the interview data. The results for each affective factor are presented in a separate section below.

6.4.1 Anxiety

The first major finding was that the interviewees reported experiencing different levels of anxiety in their English class. An analysis of their responses revealed two main factors that influenced their anxiety the most: topic familiarity and the teacher. The learners reported

feeling no anxiety when the topic discussed in class was an easy one which they had enough knowledge of the vocabulary required to talk about. On the other hand, the learners felt anxious when participating in class discussion if they did not know what vocabulary words to use or how to pronounce them correctly. For example, Interviewee 9 indicated, "I do not know enough vocabulary, and I worry I may not be able to express what I want clearly." This finding supports and adds to previous studies that found that unfamiliar topics together with limited knowledge of vocabulary constituted main sources of anxiety to EFL learners (see e.g. Kayaoğlu & Sağlamel, 2013; Liu & Ni, 2015).

Another important finding was that the teacher played a significant role in influencing the students' anxiety in class. Half of the participants reported feeling at ease when their teacher encouraged them to speak English. If they made a mistake, they found their teacher to be understanding and to correct the mistake in a constructive way. On the contrary, some students felt anxious when they did not understand what their teacher was saying or when they made a mistake and the teacher became upset or laughed at it. As Interviewee 3 commented, "The teacher encourages me to speak English. Even if I make a mistake, she corrects it in a positive way and encourages me to continue speaking. This makes me excited to participate in class even if I am not sure of my answer." Interviewee 17 further pointed out, "I feel anxious if I make a mistake and the teacher gets upset. However, there are teachers who eliminate students' anxiety. For example, when a student makes a mistake, they just correct it and do not allow anybody to laugh at it." These results are in accord with previous research that stresses the role of teacher support and teacher-student interaction in reducing language learners' anxiety (e.g. Al-Saraj, 2013; Dewaele & MacIntyre, 2014; Effiong, 2016; Huang et al., 2010; Yan & Horwitz, 2008; Young, 1991).

It should also be mentioned here that learners' anxiety could be triggered if their classmates were more proficient in English, as revealed by one interviewee (i.e. 5% of the participants). This supports Zhao's (2007) assumption that some learners "pay more attention to others' strong points and their own weak points, which results in the arousal of anxiety" (p. 27). Yan and Horwitz's (2008) grounded theory study also revealed that comparison with peers was a major source of anxiety for Chinese learners of EFL.

6.4.2 Motivation

The interviewees indicated that they experienced different levels of motivation in their language class. An analysis of their responses revealed two main factors that influenced their motivation the most: the curriculum and the activities used in class and the teacher. Firstly, the learners reported that they became more motivated to learn English because they found their course book and the activities carried out in class both interesting and useful. They also revealed that because they had to think and work hard in class, they eventually became more motivated to learn English. For example, Interviewee 6 commented, "the curriculum is good and full of useful things. I like it and plan to study it by myself in the summer holiday" and Interviewee 8 stated, "When the teacher assigns an activity or homework which requires us to talk about a certain topic or to describe something, it becomes a big motivator for me to learn how to do this type of assignments." Taken in their totality, the learners' experiences are consistent with Ryan and Deci's (2000) description of IM as "the doing of an activity for its inherent satisfactions rather than for some separable reason. When intrinsically motivated, a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards" (p. 56). We can also conclude that the learners' psychological needs for autonomy and competence (discussed in Chapter 3, Section 3.3.2.3) were fulfilled, as they

were willing to dedicate their time and effort to learn English and they believed they were capable of achieving the objectives of the English module.

Moreover, the teacher was found to play a significant role in influencing the students' motivation in class. Half of the participants reported feeling motivated to learn English when their teacher's teaching style appealed to them. For example, Interviewee 2 explained:

> The teacher plays an effective role in influencing motivation. At the beginning of the module, I had an excellent teacher. Her teaching style was astonishing, which made me like the module. Then, I had another teacher whose method was good, but I did not like her teaching style. I have noticed the difference in my classmates' motivation levels when we had the two teachers. They did not participate with the latter teacher.

On the contrary, it was noted that the students could feel less motivated if their teacher did not give them equal attention. As Interviewee 15 commented, "He [the teacher] has a negative influence because he focuses on good students only and ignores the rest of the class."

We have noticed earlier in this section and in Section 6.2.2 above that the learners' needs for autonomy and competence seemed to have been satisfied when they were intrinsically motivated to learn English. The finding in this section could indicate that their third psychological need for relatedness (discussed in Chapter 3, Section 3.3.2.3) was also fulfilled when they received support and approval from their teacher. Niemiec and Ryan (2009) pointed out that "relatedness is deeply associated with a student feeling that the teacher genuinely likes, respects, and values him or her" (p. 139). These three needs are considered key elements in the language learning process since, according to Niemiec and Ryan (2009), "when supported are associated with academic engagement and better learning outcomes, but when frustrated are associated with academic disengagement and poorer learning outcomes" (p. 139). In fact, numerous studies on L2 motivation have reported that a teacher's praise serves as a source of external regulation for students and that the teacher generally plays an

important role in promoting or reducing motivation in the language classroom (see e.g. Al-Sharief, 2013; Alzubaidi et al., 2016; Dörnyei, 1998; Noels et al., 1999).

It should also be mentioned here that a few other classroom factors were identified by a small number of the learners as influencing their motivation. For example, it was revealed that learners' motivation (more specifically, stimulation) could be enhanced by having proficient classmates, as mentioned by Interviewee 10: "Some of my classmates are good at English, so I have become excited to learn it." Other factors like tests and the learner's scores on them were found to negatively influence motivation. For example, Interviewee 8 indicated, "tests and scores are frightening factors that have a negative effect on my motivation. They make me study for tests only and forget everything later." On the other hand, some learners asserted that their motivation was not influenced by any of the above-mentioned factors. For example, Interviewee 10 pointed out, "I am intrinsically motivated to learn English, so they do not affect me" and Interviewee 5 explained, "They can affect my proficiency level but not my motivation."

6.4.3 Self-efficacy

As discussed in Section 6.2.3 above, the participants in this study were found to have different levels of self-efficacy when practicing different language skills and tasks in their English class. A few learners further indicated that being able to understand their lessons and getting enough practice with new material were effective in enhancing their sense of self-efficacy.

Importantly, similar to the responses obtained for anxiety and motivation (see Sections 6.4.1 and 6.4.2 above), a major factor that the learners identified as playing a role in influencing their self-efficacy beliefs when learning English in class was their teacher, as

mentioned by 65 per cent of the learners. It was noted that self-efficacy was enhanced when the teacher encouraged the learners to practice the language, had confidence in their ability and praised their efforts. That could also have a positive effect on their achievement, as Interviewee 2 commented, "When my teacher tells me that I can do something, I feel inspired and believe that I can really do it. I went through some circumstances which affected my proficiency level, but my teacher kept telling me that I could make it up. As a result, I managed to get a good score on the last English test." In addition, the learners felt more self-efficacious when their teacher treated them equally and did not criticise them if they made mistakes. For example, Interviewee 11 explained, "She [the teacher] has a positive effect if she encourages students to practice the language even if they make mistakes. However, if the teacher does not accept students' mistakes, they will just want to finish the module and get rid of it."

What is interesting in the participants' responses to Q2b is that the majority of them consistently referred to classroom activities and their teacher as playing a key role in increasing or decreasing their anxiety, motivation and self-efficacy. Similarly, the results obtained for Q1b in the previous chapter revealed that both classroom activities and the teacher had a significant influence on encouraging learners to use a variety of styles when learning English. These findings had important pedagogical implications and are discussed further in Chapter 8.

6.5 Question 2c. What is the relationship between the affective factors that influence the learners and their English language proficiency and performance?

To explore the differences in the learners' scores on the scales and subscales of the AFLLQ according to their English language proficiency, one-way between-groups ANOVA

was conducted. The mean scores of the different groups of participants are presented in Table

6.6 below, followed by the results of ANOVA in Table 6.7.

Table 6.6
Mean Scores on AFLLQ According to English Proficiency

Scale/subscale of AFLLQ	English proficiency	Mean	Standard deviation	Minimum	Maximum
Anxiety	Low	3.162	.747	1.50	4.80
	Middle	3.489	.597	2.00	4.75
	High	3.093	.732	1.19	4.75
General	Low	3.181	.845	1.00	5.00
Classroom	Middle	3.537	.755	1.75	5.00
Anxiety	High	3.086	.873	1.00	5.00
Communication	Low	3.043	.883	1.00	5.00
Apprehension	Middle	3.230	.774	1.33	4.75
	High	2.932	.845	1.00	5.00
Test Anxiety	Low	3.321	1.015	1.00	5.00
	Middle	3.808	.752	2.25	5.00
	High	3.328	1.011	1.00	5.00
Fear of Negative	Low	3.105	.957	1.25	5.00
Evaluation	Middle	3.377	.814	1.25	5.00
	High	3.025	.884	1.00	4.75
Motivation	Low	3.865	.637	1.70	4.71
	Middle	3.846	.610	2.05	4.96
	High	3.972	.543	2.14	4.92
Intrinsic	Low	3.919	.685	1.58	5.00
Motivation	Middle	3.875	.692	1.82	5.00
	High	4.044	.616	2.42	5.00
Accomplishment	Low	4.025	.714	1.75	5.00
	Middle	3.946	.757	1.50	5.00
	High	4.128	.651	2.25	5.00

Scale/subscale of AFLLQ	English proficiency	Mean	Standard deviation	Minimum	Maximum
Knowledge	Low	3.872	.768	1.50	5.00
	Middle	3.856	.784	1.25	5.00
	High	4.019	.693	1.50	5.00
Stimulation	Low	3.878	.828	1.50	5.00
	Middle	3.832	.780	1.75	5.00
	High	3.991	.763	1.75	5.00
Extrinsic	Low	3.814	.655	1.82	4.75
Motivation	Middle	3.813	.606	1.92	4.92
	High	3.899	.570	1.78	5.00
External	Low	4.117	.740	2.00	5.00
Regulation	Middle	4.277	.614	2.00	5.00
	High	4.397	.664	1.50	5.00
Introjected	Low	3.337	.838	1.00	4.50
Regulation	Middle	3.327	.837	1.00	5.00
	High	3.219	.809	1.25	4.75
Identified	Low	3.962	.843	1.50	5.00
Regulation	Middle	3.822	.846	1.25	5.00
	High	4.058	.696	1.50	5.00
Self-efficacy	Low	3.350	.776	1.80	5.00
	Middle	3.174	.681	1.60	4.70
	High	3.412	.697	1.40	4.90

Table 6.7
Differences in Scores on AFLLQ According to English Proficiency

Scale/subscale of AFLLQ		df	F	Sig.
Anxiety	Between Groups	2	10.578 [**]	.000
	Within Groups	324		
	Total	326		
General Classroom Anxiety	Between Groups	2	9.454 [**]	.000
	Within Groups	324		
	Total	326		
Communication Apprehension	Between Groups	2	3.955 [*]	.020
	Within Groups	324		
	Total	326		
Test Anxiety	Between Groups	2	9.578 [**]	.000
	Within Groups	324		
	Total	326		
Fear of Negative Evaluation	Between Groups	2	5.088 [**]	.007
	Within Groups	320		
	Total	322		
Motivation	Between Groups	2	1.644	.195
	Within Groups	324		
	Total	326		
Intrinsic Motivation	Between Groups	2	2.217	.111
	Within Groups	324		
	Total	326		
Accomplishment	Between Groups	2	2.110	.123
	Within Groups	323		
	Total	325		
Knowledge	Between Groups	2	1.800	.167
	Within Groups	323		
	Total	325		
Stimulation	Between Groups	2	1.357	.259

Scale/subscale of AFLLQ		df	F	Sig.
	Within Groups	324		
	Total	326		
Extrinsic Motivation	Between Groups	2	.804	.449
	Within Groups	324		
	Total	326		
External Regulation	Between Groups	2	4.423[*]	.013
	Within Groups	324		
	Total	326		
Introjected Regulation	Between Groups	2	.750	.473
	Within Groups	323		
	Total	325		
Identified Regulation	Between Groups	2	2.768	.064
	Within Groups	323		
	Total	325		
Self-efficacy	Between Groups	2	3.528[*]	.031
	Within Groups	324		
	Total	326		

Note. [**] $p < 0.01$ (2-tailed)
[*] $p < 0.05$ (2-tailed).

Before discussing the results of the ANOVA analysis, let us examine the relationship between the affective factors influencing the learners and their English language performance, as assessed by the students' total scores on the English module. Pearson product-moment correlation coefficients were computed to investigate the relationships between the learners' scores on the scales and subscales of the AFLLQ and their scores on the English module. The results are provided in Table 6.8 below.

Table 6.8

*Pearson Correlation Coefficients between Scores on AFLLQ and the English Module*

Scale/subscale of AFLLQ	English module score
Anxiety	-.251 **
General Classroom Anxiety	-.209 **
Communication Apprehension	-.101
Test Anxiety	-.339 **
Fear of Negative Evaluation	-.144 *
Motivation	.410 **
Intrinsic motivation	.423 **
Accomplishment	.351 **
Knowledge	.326 **
Stimulation	.429 **
Extrinsic motivation	.335 **
External Regulation	.261 **
Introjected Regulation	.207 **
Identified Regulation	.322 **
Self-efficacy	.834 **

Note. ** $p < 0.01$ (2-tailed)
* $p < 0.05$ (2-tailed).

In the following sections, I discuss the results for each of the above affective factors.

6.5.1 Anxiety

The data in Table 6.7 shows a statistically significant difference in the scores on the Anxiety Scale according to the learners' English proficiency level: $F (2, 324) = 10.6, p = .000$. Figure 6.15. below shows the mean score of each group of learners.
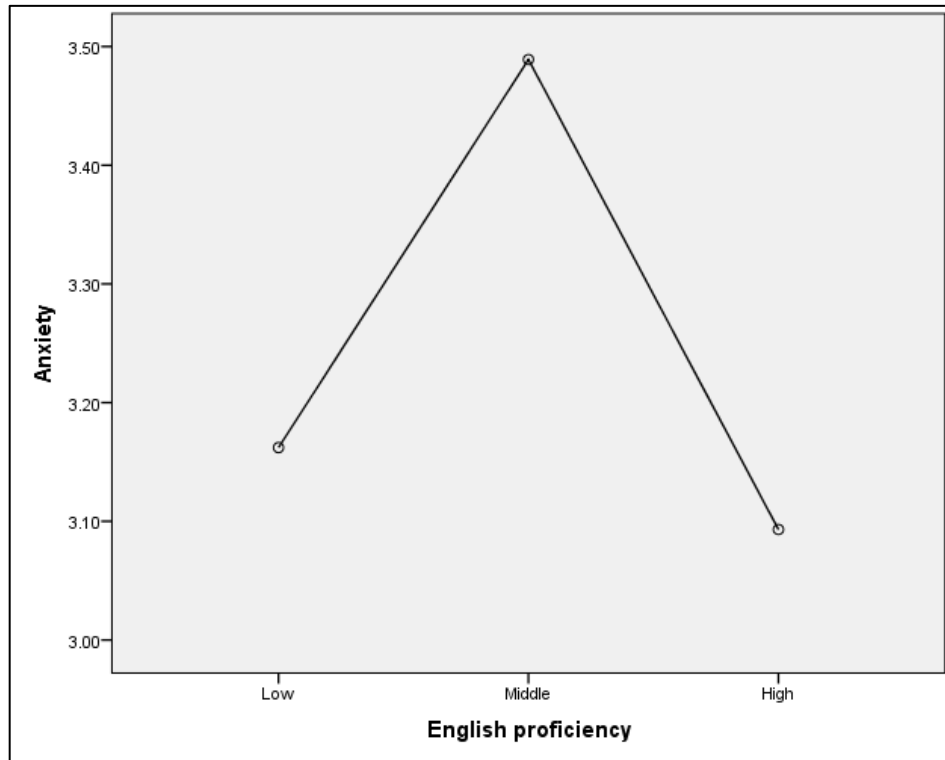
Figure 6.15. Differences in anxiety according to English
proficiency level.

What is interesting in this data is that the middle proficiency group recorded the highest

anxiety score, while the high proficiency group recorded the lowest score. The effect size,

calculated using eta squared, was .06 which could be considered a moderate effect. Post-hoc

comparisons using the Tukey HSD test indicated that the mean score of the middle

proficiency group (M = 3.49, SD = .60) was significantly different from that of the high

proficiency group (M = 3.09, SD = .73) and low proficiency group (M = 3.16, SD = .75).

Similarly, Table 6.7 shows significant differences in the scores on all anxiety subscales

between the middle proficiency group on the one hand and the high and low proficiency

groups on the other, with the former exhibiting higher anxiety than the other two groups.

The reason for this finding is not clear, but it might be related to the fact that at the low

proficiency level, the language tasks that learners are required to perform are often basic ones,

and learners receive substantial support from their teachers. That is because teachers are aware of the limited proficiency of those learners, and thus, they often provide them with ample clarifications and accept the mistakes they make, which could help reduce their anxiety. Those with high English proficiency may not receive the same support as low proficiency learners, but their competence and knowledge of the language can facilitate their learning. Hence, it is unlikely that they feel excessively anxious about it. On the other hand, learners with middle proficiency could be at a disadvantage, as they are not sufficiently competent in English, but they are required to communicate in it and not to commit certain mistakes (since they are not low proficiency learners), which may contribute to increasing their anxiety when learning the language. A consistent and interesting finding that emerged from the interviews was that when then participants were asked if they had ever felt totally comfortable when speaking English in class, the smallest percentage of positive answers was obtained from the learners in the middle proficiency group. More specifically, 33.3 per cent of those participants responded affirmatively, as opposed to 62.5 per cent of high proficiency learners. Furthermore, the fact that the high proficiency learners were found to be less anxious than their low-proficiency peers, was consistent with that reported by previous research (e.g. Liu, 2006; Liu & Jackson, 2008; Liu & Ni, 2015).

With regard to performance in the English module, the results of Pearson's correlation analysis showed a weak negative correlation between the scores on the Anxiety Scale and the English module. This indicates that the students who scored higher on the Anxiety Scale achieved lower scores on the English module, $r = -.25$, $p < .000$. The relationship between the learners' scores on the Anxiety Scale and their scores on the English module are shown in Figure 6.16. below.
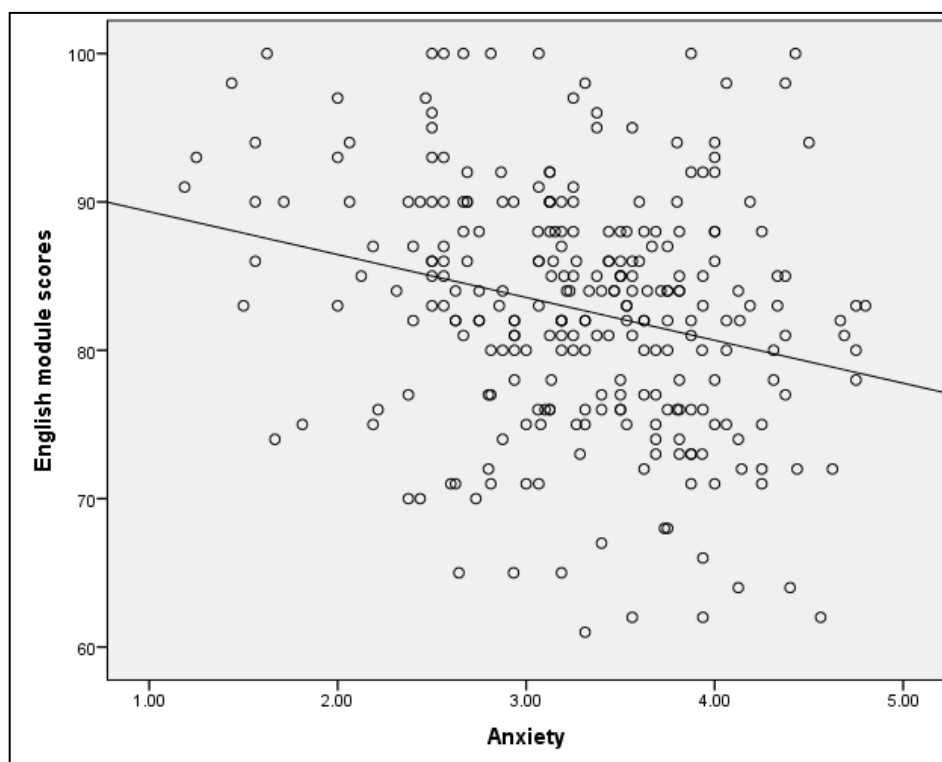
Figure 6.16. The relationship between anxiety and performance
in the English module.

To obtain an idea of how much variance the variables shared, the coefficients of

determination were calculated and then converted to percentages of variance. The shared

variance between the two variables was found to be 6.25 per cent, indicating that anxiety

helps to explain only 6.25 per cent of the variance in the students' scores on the English

module. Similarly, Table 6.8 shows significant negative correlations between the learners'

scores on the General Classroom Anxiety Scale, the Communication Apprehension Scale and

the Test Anxiety Scale and their scores on the English module. These results are not

surprising, as the questionnaire data revealed that classroom anxiety could impede the

learners' English language performance, as a good percentage (35.6%) of them indicated that

they felt so nervous in their English class that they forgot the things that they knew. Similarly,

test anxiety could hinder the learners' academic performance. As mentioned in Section 6.2.1

above, more than half (56.6%) of the learners reported that they got so nervous during English tests that they had trouble remembering information, and a similar percentage (54.5%) reported that they froze up on important English tests.

Confirming the questionnaire findings, the majority (70%) of the interviewees thought that feeling anxious negatively influenced their English language learning and performance. As Interviewee 18 pointed out, "An anxious person will never learn". More seriously, Interviewee 1 indicated that anxiety caused her to fail the previous module. A few learners also pointed out that communication apprehension and fear of negative evaluation prevented them from participating in class discussion, which hindered their learning. As Interviewee 11 commented, "Anxiety makes a person unable to speak. She will get confused and make mistakes" and Interviewee 20 also mentioned, "I am anxious about making mistakes so I avoid speaking English."

Other participants complained about the confusion they experienced as a result of their test anxiety. For example, Interviewee 3 explained, "during tests, I find it difficult to focus and understand questions. When I am nervous, I cannot see what is written in front of me." Similarly, Interviewee 6 stated, "Sometimes I feel so anxious during tests that I cannot recognise the correct answer. Feeling anxious is not a good thing; it makes me confused."

The above findings are consistent with those of other studies (e.g. Chen & Chang, 2009; Ebrahimi, 2013; Hashemi, 2011; Huang, 2012; Naghadeh et al., 2014; Rezazadeh & Tavakoli, 2009; Serraj & Noordin, 2013; S. Wang, 2010; Wu, 2011) which found that the FLA contributed to poor academic performance and class participation.

On the other hand, a few learners (10%) believed that their feeling of anxiety positively influenced their performance, as it encouraged them to pay attention to their learning and put in more effort. As Interviewee 14 mentioned, "It makes me focus more in class and at home,

study hard and feel more responsible." Still other students (20%) believed that feeling anxious had no impact on their English learning and pointed out that, despite their anxiety, they were doing well and getting good scores on their English tests. These findings are not surprising, as they support Scovel's (1978) assumption of the existence of *facilitating anxiety*, which drives individuals to exert greater effort to accomplish tasks successfully. They also provide evidence for the conclusions drawn by other commentators (e.g. Eysenck, 1997; Hewitt & Stephenson, 2012; MacIntyre, 1995) that a moderate level of anxiety can cause learners to put in more effort to improve their performance.

6.5.2 Motivation

The data in Table 6.7 indicates a statistically significant difference in external regulation scores for students in different English proficiency levels: F (2, 324) = 4.4, p = .013. Figure 6.17. below shows the mean score of each group of participants.
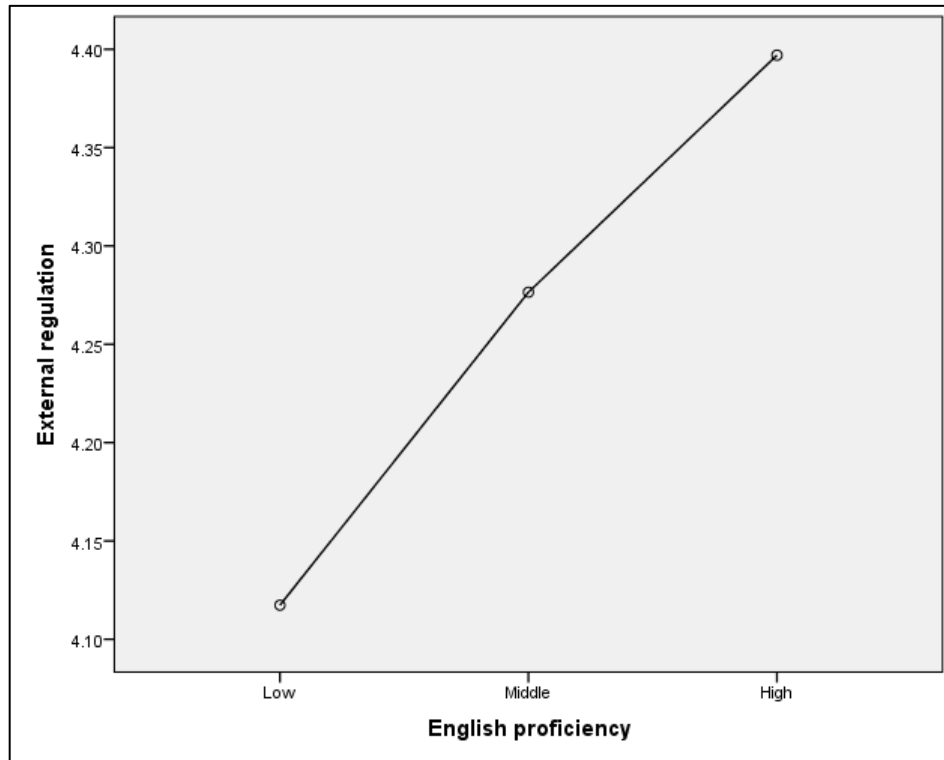
Figure 6.17. Differences in motivation by external regulation
according to English proficiency level.

We can see from this plot that the low proficiency group recorded the lowest motivation score, while the high proficiency group recorded the highest score. The effect size, calculated using eta squared, was .03 which could be considered a small effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the high proficiency group (M = 4.40, SD = .66) was significantly different from that of the low proficiency group (M = 4.12, SD = .74).

This finding is difficult to explain but it could possibly suggest that the high proficiency level of the former group and their advanced knowledge of the English language made them realise that goals such as using English when travelling or pursuing higher studies abroad are not difficult to achieve. This could have made them more determined to learn the language for such reasons than their low-proficiency peers.

Moreover, the results of Pearson's correlation analysis showed a moderate positive correlation between the scores on the Motivation Scale and the English module. This indicates that the students who scored higher on the Motivation Scale achieved higher scores on the English module, $r = .41$, $p < .000$. Figure 6.18. below shows the relationship between the two variables.
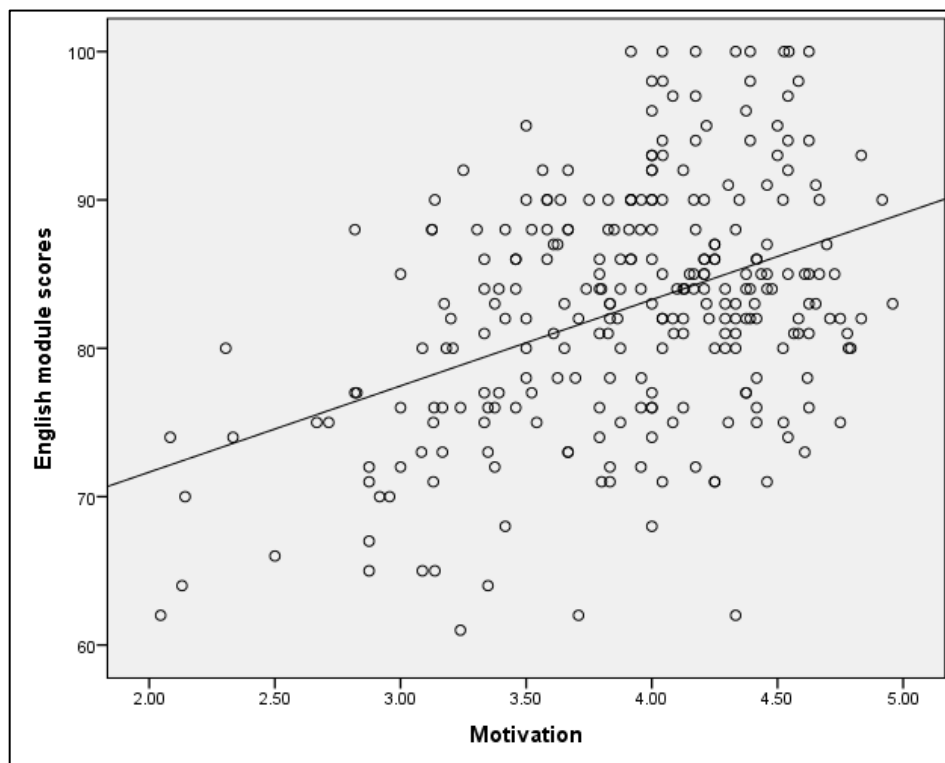
Figure 6.18. The relationship between motivation and performance
in the English module.

The shared variance between these two variables was found to be 16.81 per cent, indicating that motivation helps to explain 16.81 per cent of the variance in the students' English scores. Similarly, Table 6.8 shows significant positive correlations between the learners' scores on all motivation subscales and their scores on the English module.

Confirming the questionnaire findings, the majority (80%) of the interviewees thought that motivation positively influenced their English language learning and performance. As Interviewee 9 pointed out, "If I am not motivated to learn English, I will never learn it. On the other hand, if I am motivated, I will not only depend on the curriculum but will also use other resources to learn English like books, newspapers and TV shows."

These results are in line with those of other studies (e.g. Makrami, 2010; Srichanyachon, 2012; Zheng, 2010) which have found motivation to positively influence English learners' achievement and performance. They also support the conclusions drawn by other commentators regarding the positive impact of motivation on language learning. Rubin (1975), for example, considers motivation an essential characteristic of the good language learner, and Gardner (1985) describes it as one of the most effective factors influencing the L2 learning process. More recently, Dörnyei and Csizér (1998) maintain that "L2 motivation is one of the most important factors that determine the rate and success of L2 attainment: it provides the primary impetus to initiate learning the L2 and later the driving force to sustain the long and often tedious learning process" (p. 203).

6.5.3 Self-efficacy

The data in Table 6.7 indicates a statistically significant difference in the self-efficacy scores of the participants in different English proficiency levels: $F(2, 324) = 3.53$, $p = .031$. Figure 6.19. below shows the mean score of each group of learners.
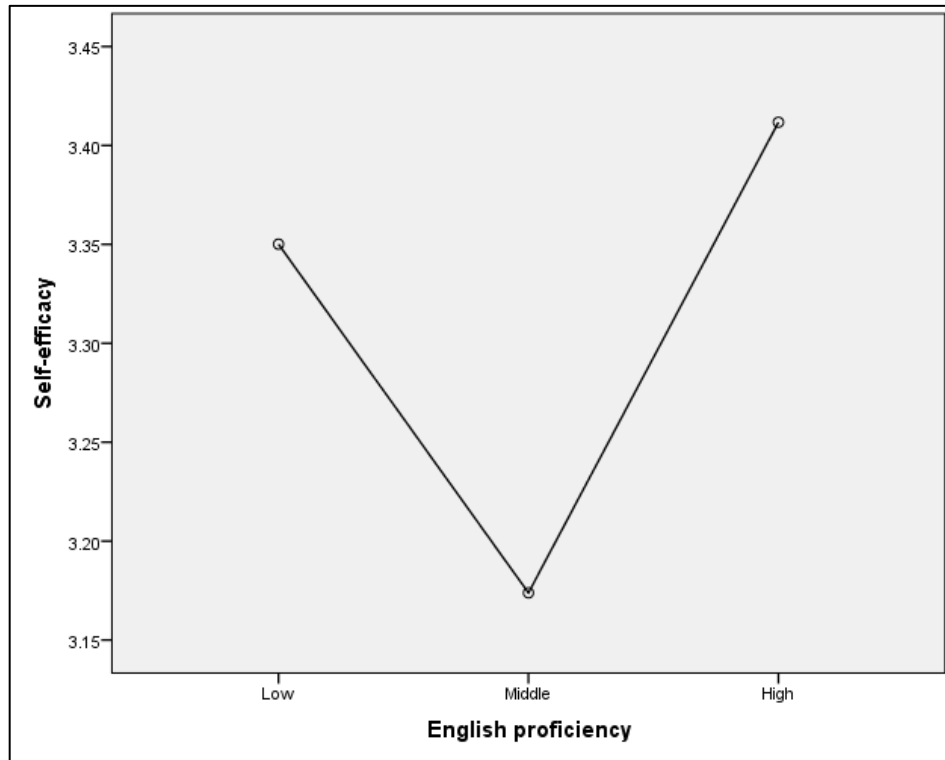
Figure 6.19. Differences in self-efficacy according to English
proficiency level.

In contrast to the previous finding where the score of the middle proficiency group on

the Motivation Scale fell between those of the low and high proficiency groups, Figure 6.19

shows that the middle proficiency group recorded the lowest score on the Self-efficacy Scale.

The effect size, calculated using eta squared, was .02 which could be considered a small

effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the

high proficiency group (M = 3.41, SD = .70), which was the highest on the Self-Efficacy

Scale, was significantly different from that of the middle proficiency group (M = 3.17, SD =

.68).

Confirming the questionnaire finding, it was noted that the interviewees in the high

proficiency group were more assertive when describing their self-efficacy than those in the

middle proficiency group. For example, a high proficiency learner mentioned "I am confident

in my abilities" (Interviewee 14), while a middle proficiency learner commented "I have a

normal ability" (Interviewee 16). As explained in Chapter 3 (Section 3.3.3.3), the type of self-efficacy assessed in this study is self-efficacy for performance which describes an individual's belief in his/her ability to perform a certain behaviour using the skills he/she possesses (Schunk, 1996). When learners are required to perform a previously learned task, they often develop self-efficacy for performing that task by referring to their attained skills and previous accomplishments. Therefore, since the high proficiency learners were more competent in the English language than their peers in the middle proficiency group, it is not surprising that the former group felt more efficacious about learning English than the latter group.

Although the finding that the middle proficiency group felt less self-efficacious about learning English than the low proficiency group was not significant, it was nevertheless surprising. It could possibly be attributed to the fact that the former group was also more intolerant of ambiguity when learning English than the latter group (see Sections 5.5.3). As we will see in Chapter 7, a significant negative correlation was found between IA and self-efficacy, which could suggest that the more intolerant of ambiguity these learners were, the less self-efficacious they felt about using English appropriately.

Moreover, the results of Pearson's correlation analysis showed a strong positive correlation between self-efficacy scores and English module scores. This indicates that the students who scored higher on the Self-efficacy Scale achieved higher scores on the English module, $r = .83$, $p < .000$. The relationship between the learners' scores on the Self-efficacy Scale and the English module are shown in Figure 6.20. below.
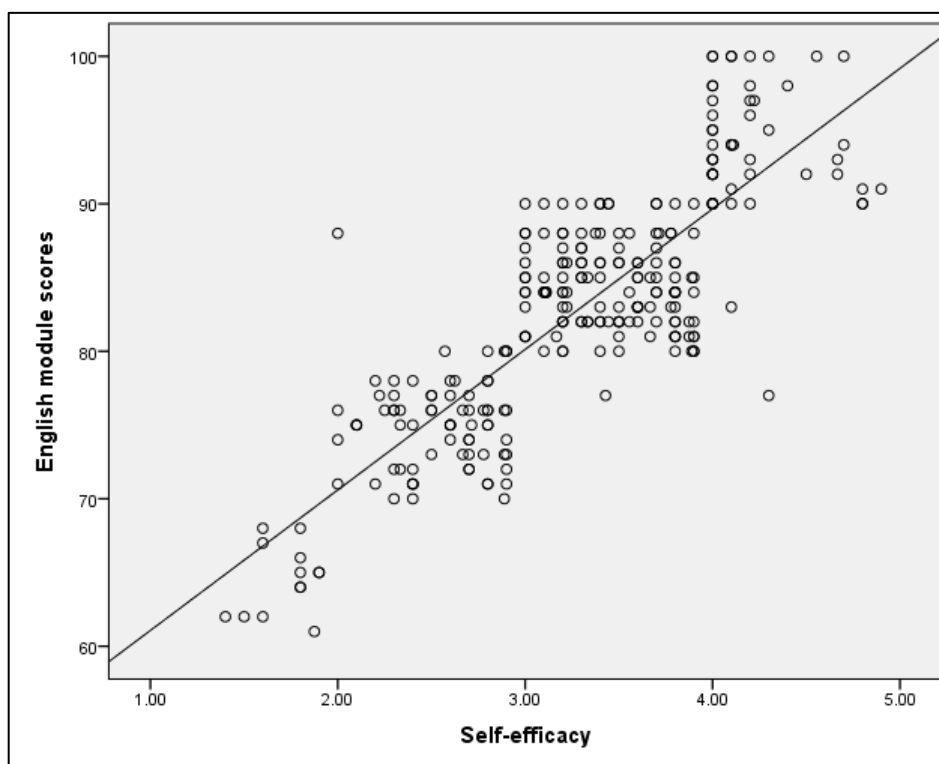
Figure 6.20. The relationship between self-efficacy and performance
in the English module.

The shared variance between these two variables was found to be 69.6 per cent, indicating that self-efficacy helps to explain as much as 69.6 per cent of the variance in the students' English scores.

An interesting finding that emerged from the interviews, and was consistent with the questionnaire result, was that all interviewees thought that their self-efficacy beliefs had positive effects on their English language performance. The reasons the students provided revolved around the notion that feeling self-efficacious about learning English helped them practice the language more frequently and learn it more effectively. As Interviewee 2 explained, "The more self-efficacious I feel, the better I perform. But, of course, I have to study hard to succeed; otherwise, I would not do well." Other interviewees also indicated that underestimating one's ability could impede learning. For example, Interviewee 5 commented,

"If I keep telling myself that I do not understand something, I would subconsciously believe that and stop learning." These findings support the conclusions drawn by some scholars (e.g. Bandura, 2006; Bong, 2006; Ehrman, 1996; McCollum, 2003; Pajares, 1996; Schunk & Miller, 2002) that self-efficacy is a strong predictor of behaviour. Researchers (e.g. Bandura, 1997; Bong, 2006; Pajares et al., 1999; Zimmerman & Cleary, 2006) also argue that individuals' assessment of their ability can determine their performance to a greater extent than their actual ability. They argue that learners with low ability and high self-efficacy achieve better than those with high ability and low self-efficacy. This is because the latter group are likely to avoid tasks that they do not believe they are capable of carrying out satisfactorily. Nonetheless, as Interviewee 2 above pointed out, while self-efficacy beliefs can significantly impact individuals' behaviour, "this does not mean that they can accomplish tasks beyond their capabilities simply by believing that they can. Competent functioning requires harmony between self-beliefs on the one hand and possessed skills and knowledge on the other" (Pajares, 2006, p. 342).

6.6 The affective factors profile of Saudi learners of English

Figure 6.21. below presents an overview of the affective factors that influenced the participants in the present study, the demographic and classroom variables that could have an impact on them and the relationships between these affective factors and English language proficiency and performance. The arrows show the directions of the relationships between the variables.
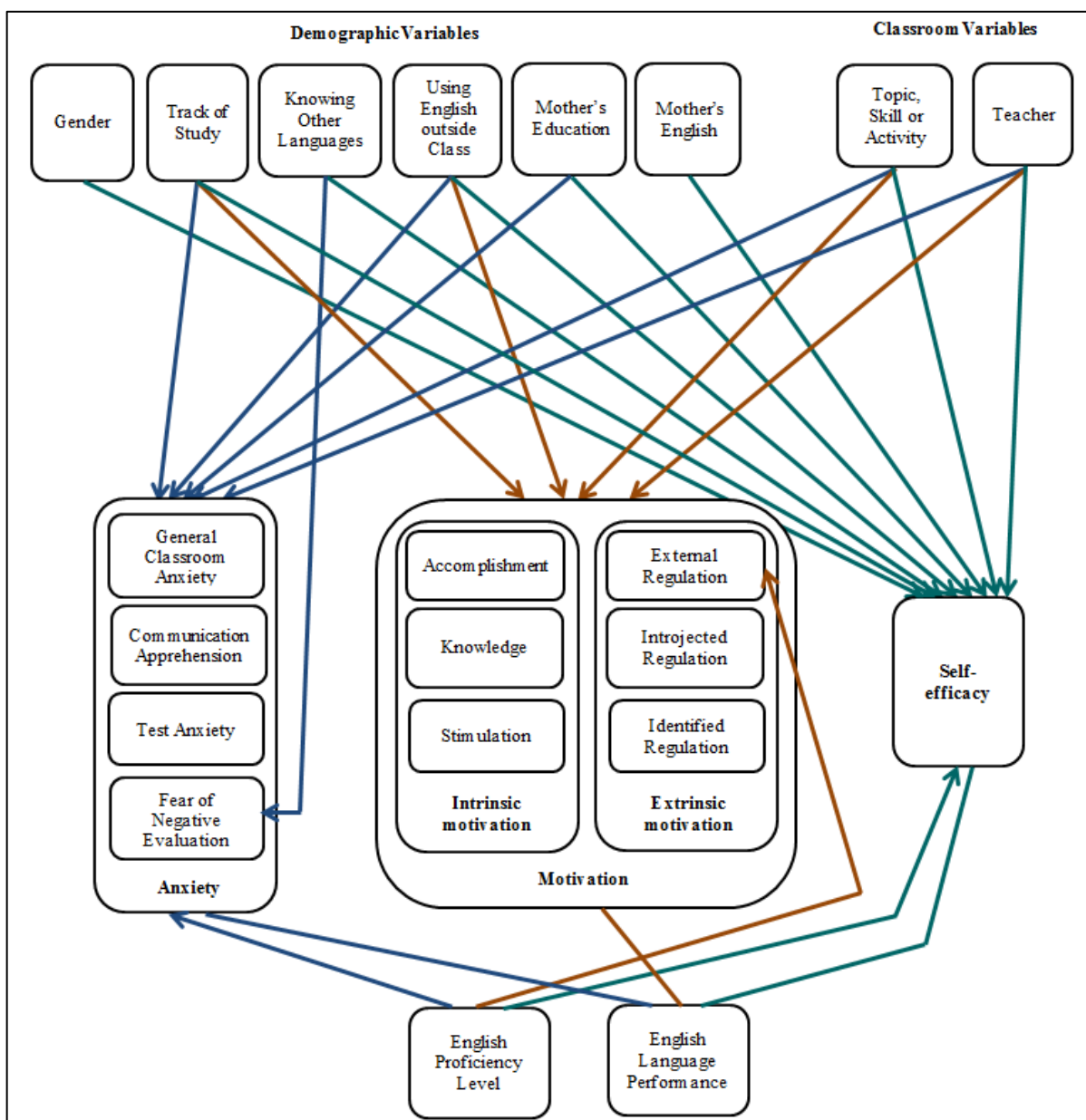
Figure 6.21. The affective factors profile of Saudi learners of English.

6.7 Chapter summary

The purpose of the second research question in the present study was to investigate the affective factors that influenced Saudi learners of English. Data analysis revealed that the participants had moderate levels of anxiety, motivation and self-efficacy.

With regard to the learners' demographic characteristics, statistically significant differences were found in the learners' anxiety scores according to their track of study, frequency of using English outside the classroom and mothers' educational level. In addition, fear of negative evaluation scores varied according to whether or not the learners knew an additional foreign language. Moreover, statistically significant differences were found in the learners' motivation scores according to their track of study and frequency of using English outside the classroom. Last but not least, gender, track of study, the frequency of using English outside the classroom and the mother's educational level and knowledge of English contributed to the variations noticed in their self-efficacy scores.

Several classroom factors were also investigated and found to have a significant influence on the affective factors influencing the participants. These included the tasks or skills the students practiced in class and the teacher's praise and general attitude towards the students.

Last but not least, the relationship between the affective factors influencing the learners and their English language proficiency was examined, and the findings showed that the learners in the middle proficiency group exhibited a significantly higher level of anxiety than those in the high proficiency group. Additionally, high proficiency learners were found to be more motivated by external regulation and to have a higher sense of self-efficacy than their peers. With regard to the relationship between the affective factors influencing the learners and their English language performance, it was found that the learners' total scores on the English module correlated significantly and negatively with their scores on the Anxiety Scale and its subscales (except communication apprehension). Additionally, significant positive correlations were obtained between the learners' scores on the English module and their scores on the Motivation Scale, its subscales and the Self-efficacy Scale. Carefully designed

experimental studies are needed to further our understanding of the exact influence of each of these affective factors on the learners' performance.

The affective factors profile of Saudi learners of English presented in this research contributes to the existing knowledge on affective factors in language learning by incorporating the demographic and classroom variables that could have an impact on these factors and the links between them and English language proficiency and performance. To my knowledge, the current study was, and still is, the first to provide a rich picture of the affective factors influencing EFL learners in Saudi Arabia and the Arab world in general. Pedagogical implications in connection with the findings of this study and recommendations for future research are discussed in Chapter 8.

Chapter 7: Results and Discussion of the Relationships between the Learning Style Preferences of Saudi Learners of English and the Affective Factors Influencing Them (Research Question 3)

7.1 Introduction

This chapter presents the findings of the data analysis carried out to answer the third research question posed in the present study. The focus here is on exploring the links between the learning style preferences of Saudi learners of English and the affective factors influencing them. The chapter forms connections between the quantitative data obtained from the LLSQ and AFLLQ and the qualitative data obtained from the in-depth semi-structured interviews and then proceeds to explain how they corroborate each other. The findings are also examined against the backdrop of relevant previous research, when and where appropriate, and then explained in light of the theoretical models discussed in Chapters 2 and 3 and of my own experience as an English teacher.

7.2 Question 3. What is the relationship between the learning style preferences of Saudi learners of English and the affective factors influencing them?

To answer this question, Pearson product-moment correlation coefficients were computed to investigate the relationships between the three learning styles and three affective factors assessed in the present study. The results are provided in Table 7.1 below.

Table 7.1
Pearson Correlation Coefficients between Scores on LLSQ and AFLLQ

Scale/ subscale	Visual	Aural	Read/ Write	Kinaesthetic	Peer Collaboration	Tolerance of Ambiguity
Anxiety	.147**	.041	.112*	-.004	.211**	.433**
General Classroom Anxiety	.062	-.017	.054	-.064	.174**	.317**
Communication Apprehension	.071	.022	.072	.005	.075	.293**
Test Anxiety	.184**	.051	.089	.005	.225**	.424**
Fear of Negative Evaluation	.153**	.079	.144**	.046	.198**	.357**
Motivation	.384**	.241**	.280**	.302**	.127*	.062
Intrinsic Motivation	.426**	.233**	.306**	.316**	.086	.055
Accomplishment	.323**	.164**	.232**	.258**	.021	-.025
Knowledge	.431**	.243**	.298**	.257**	.111*	.102
Stimulation	.361**	.204**	.275**	.317**	.086	.065
Extrinsic Motivation	.284**	.218**	.213**	.246**	.155**	.059
External Regulation	.287**	.139*	.161**	.204**	.169**	.077
Introjected Regulation	.131*	.162**	.115*	.167**	.117*	.043
Identified Regulation	.279**	.212**	.235**	.220**	.092	.032
Self-Efficacy	.261**	.212**	.266**	.321**	-.074	-.221**

Note. ** $p < 0.01$ (2-tailed)
* $p < 0.05$ (2-tailed).

As particularised in the previous chapters, studies that have examined the relationships between learning styles and affective factors in language learning are scarce, especially in the contexts of EFL learning in Saudi Arabia and the Arab world in general. While this contributes to the uniqueness of the present research and its attempts to fill this gap in the literature, it also means that only a few comparisons can be made between the findings of this research and previous studies in the EFL learning field. In the following sections, I discuss the relationships between the learning styles and affective factors presented in Table 7.1.

7.2.1 The relationship between perceptual learning styles and anxiety

The data in Table 7.1 shows weak positive correlations between the visual learning style and anxiety ($r = .147$, $p < .007$) and between the read/write learning style and anxiety ($r = .112$, $p < .042$). This suggests that high preferences for these perceptual styles are associated with high levels of anxiety. The shared variances between these variables were found to be 2.16 per cent and 1.25, respectively. Figures 7.1. and 7.2. below show the relationship between each of these learning styles and anxiety.
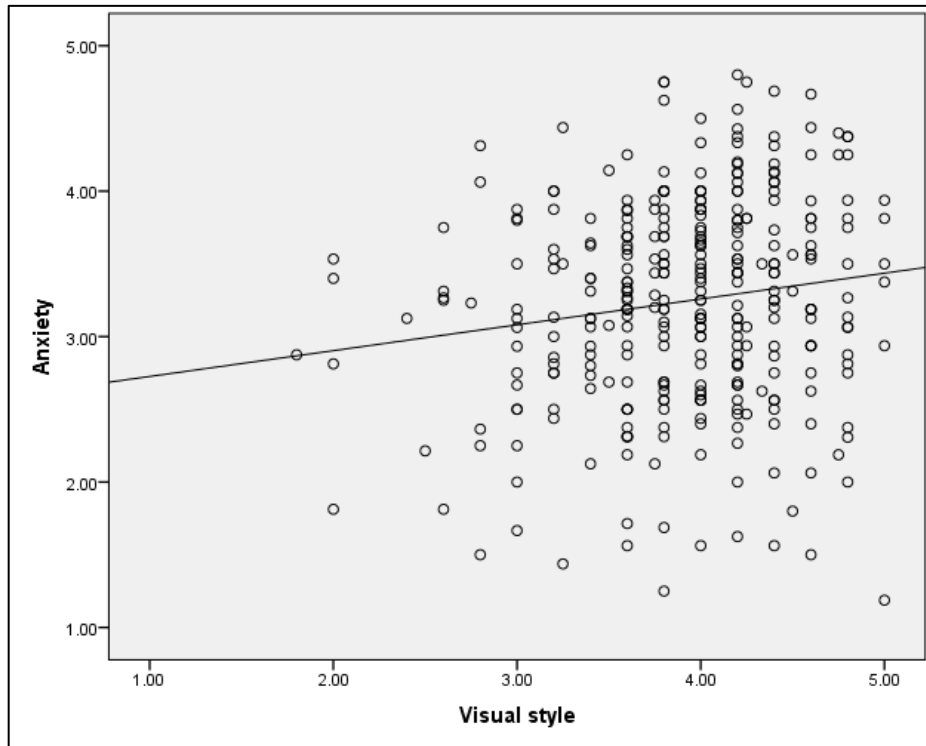
Figure 7.1. The relationship between the visual learning style
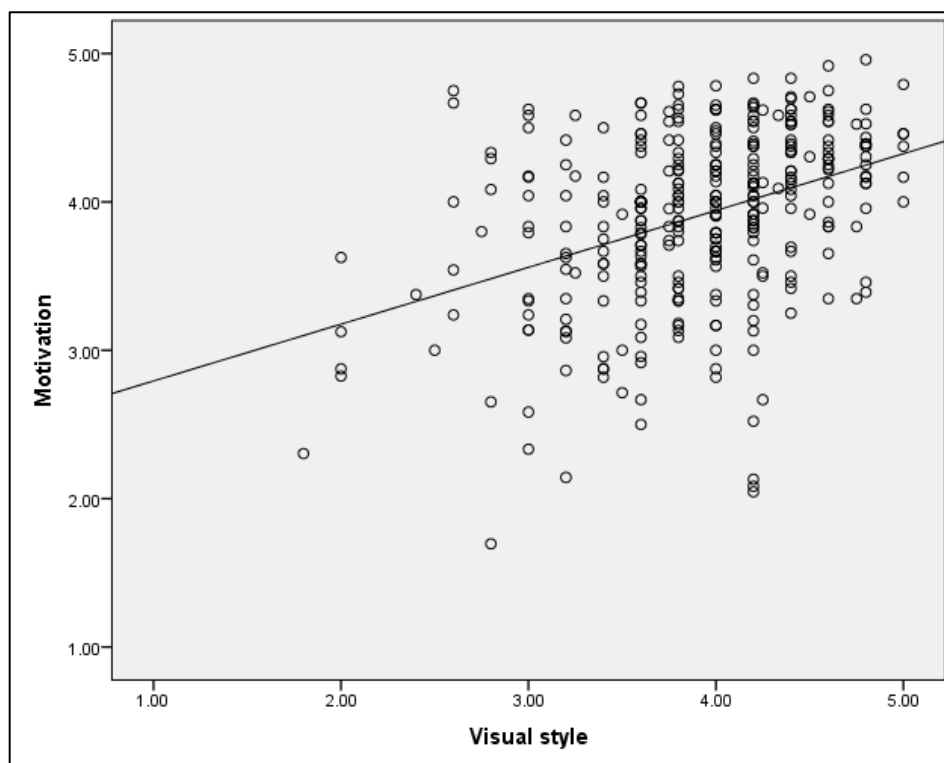and anxiety.
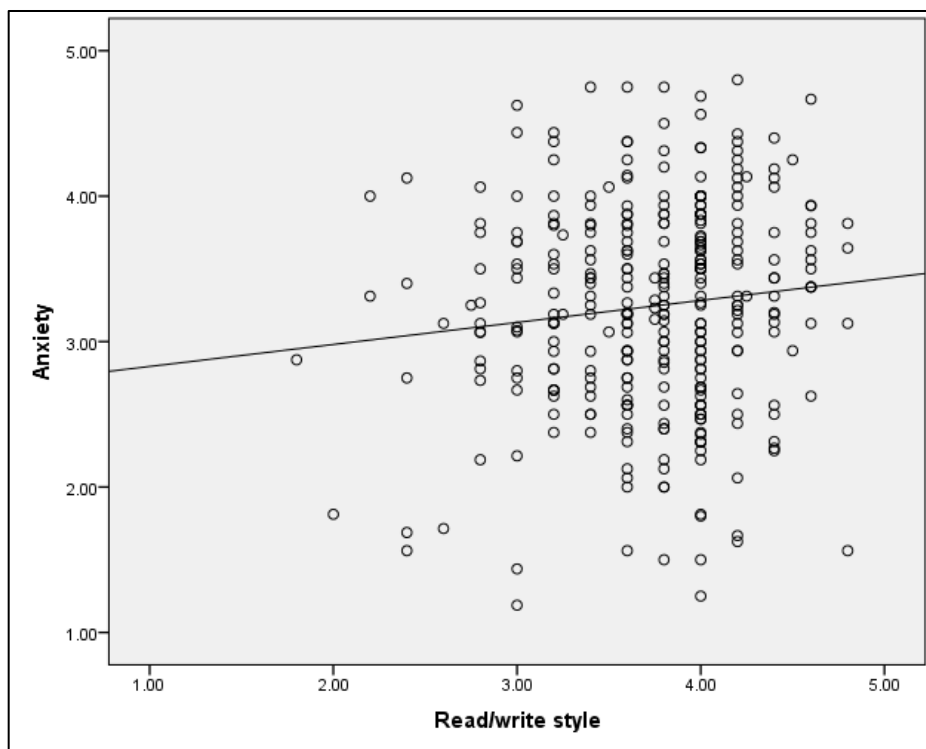
Figure 7.2. The relationship between the read/write learning style
and anxiety.

Moreover, the results of Pearson's correlation analysis show weak positive correlations between the visual learning style and two components of anxiety: test anxiety and fear of negative evaluation and between the read/write learning style and fear of negative evaluation. In examining the literature for a possible explanation for the popularity of the visual and read/write learning styles among anxious language learners, I was not able to locate a single study which had investigated this issue. However, when analysing the participants' responses to the LLSQ and interview questions (see Section 5.2.1 in Chapter 5), it found that the learners who expressed a preference for the above learning styles explained that they understood new information better when they saw it in front of them (e.g. in pictures, charts and books) and that writing it down helped them retain it longer. Thus, it makes sense that the visual and read/write styles were preferred by anxious students to learn new material, as they could have helped them focus on the message. This is very likely since their anxiety might have hindered the processing of information delivered verbally (i.e. through the aural learning style). As Horwitz et al. (1986) point out, when EFL learners feel anxious, they often have difficulty producing and interpreting the target language sounds and structures. Tobias (1986) also explains that experiencing anxiety in the learning environment can result in cognitive deficits during the input, processing and output stages. Likewise, it is unlikely that the kinaesthetic style was a preferred learning style for anxious students. According to Gregersen and Horwitz (2002), when learners experience anxiety, they "tend to sit passively in the classroom, withdraw from activities that could increase their language skills, and may even avoid class entirely" (pp. 562–563).
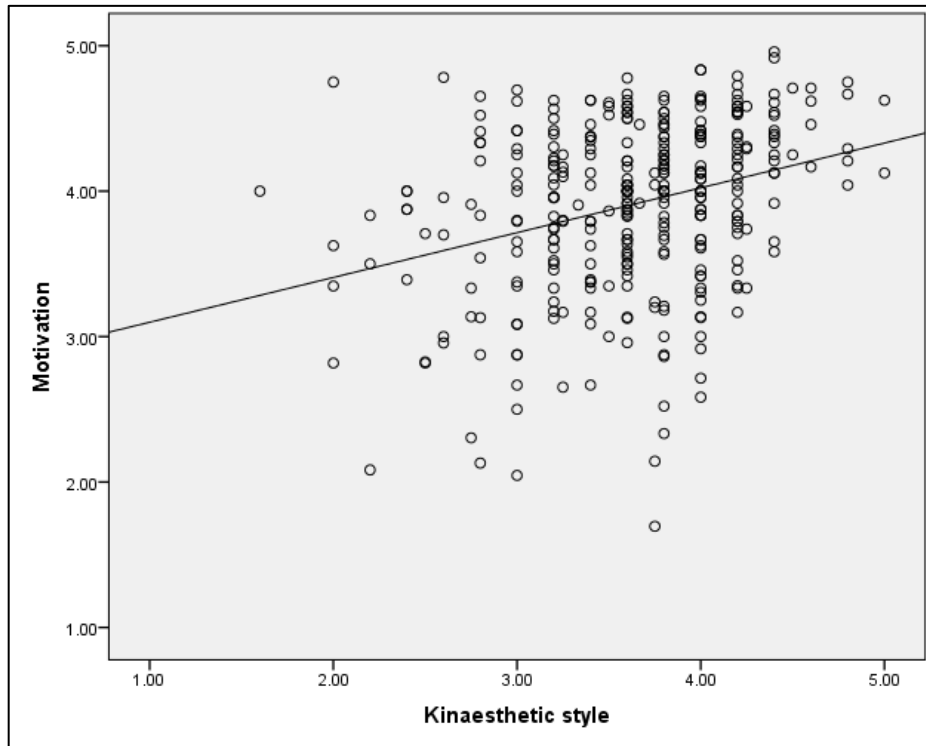
7.2.2 The relationship between perceptual learning styles and motivation

The data in Table 7.1 shows moderate positive correlations between the visual learning style and motivation ($r = .384$, $p < .000$) and between the kinaesthetic learning style and motivation ($r = .302$, $p < .000$). The shared variances between these variables were found to be 14.75 per cent and 9.12 per cent, respectively. Additionally, weak positive correlations were obtained between the aural learning style and motivation ($r = .241$, $p < .000$) and between the read/write learning style and motivation ($r = .280$, $p < .000$). The shared variances were 5.81 per cent and 7.84 per cent, respectively. These positive correlations indicate that high preferences for these learning styles were associated with high levels of motivation. Figures 7.3. to 7.6. below show the relationship between each perceptual learning style and motivation.
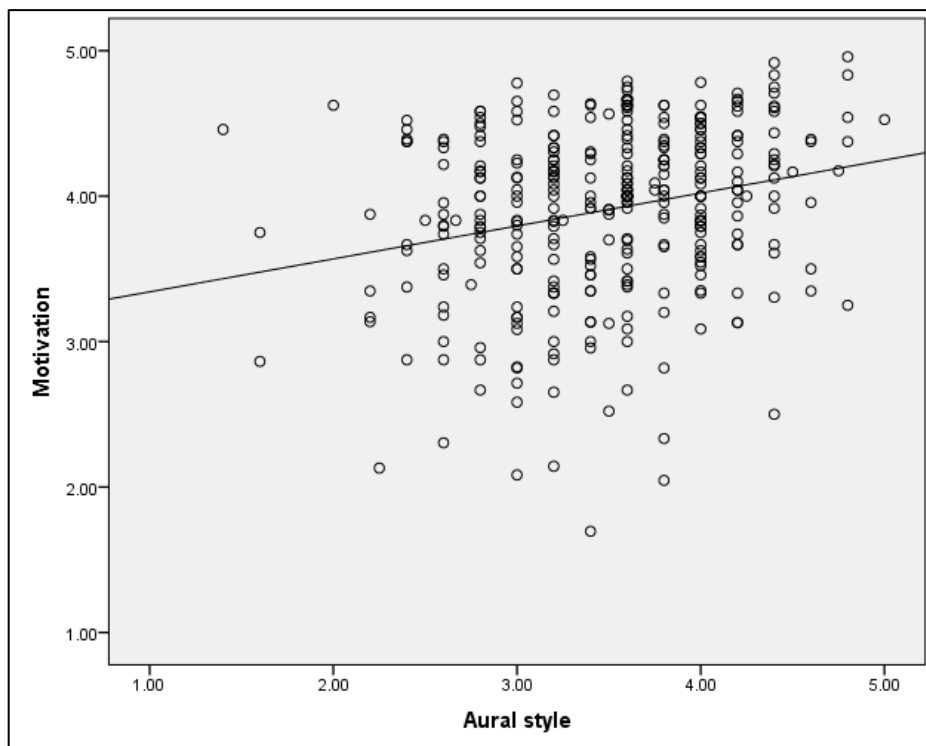

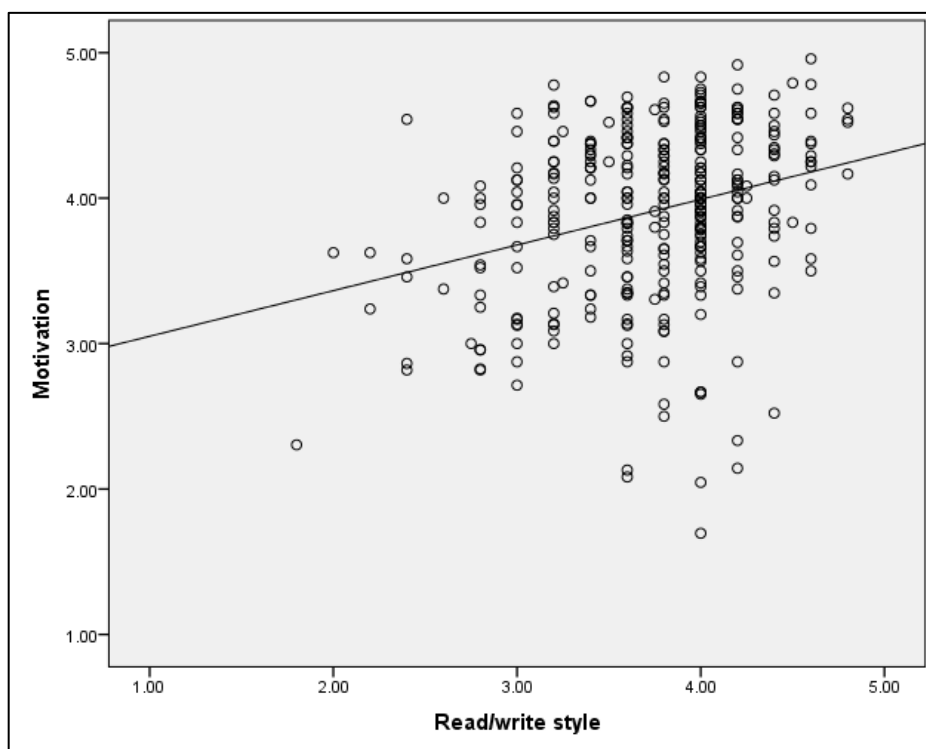*Figure 7.3.* The relationship between the visual learning style and motivation.

Figure 7.4. The relationship between the kinaesthetic learning style
and motivation.

Figure 7.5. The relationship between the aural learning style
and motivation.

Figure 7.6. The relationship between the read/write learning style
and motivation.

Moreover, the results of Pearson's correlation analysis show that all four perceptual learning styles correlated significantly and positively with all motivation subscales. These results are not surprising since the participants in the present study were found to be multimodal (see Section 5.2.1 in Chapter 5), which meant that they preferred to use a variety of perceptual styles to learn English. It is thus, possible that the frequent use of these styles made the learners more motivated to learn the language since according to the VARK website, "if learners are using modes that are a strong part of their preferences they are more likely to be motivated than if they have to use modes where their preference is weak." In line with this, Alkhatnai's (2011) study of the learning styles of EFL learners in Saudi Arabia (reviewed in Chapter 2) reported that motivation to learn English increased when the learners used their preferred learning styles. Moreover, Kim and Kim's (2011) research with Korean learners of EFL found that the visual learning style was the participants' favourite style and

further reported that "the students' visual style preference contributed strongly to the forming of a vivid ideal L2 self, which in turn resulted in a higher level of motivated L2 behaviour" (Kim & Kim, 2011).

Of noteworthy significance here is that the relationship between the use of perceptual styles and motivation could also be interpreted in the other direction. That is, as the majority of the participants in the present study were found to be motivated to learn English, this desire could have made them more willing to frequently employ a variety of perceptual styles in order to achieve their goal of learning the language. This is supported by the finding discussed in Chapter 5 which showed that the participants believed that using several perceptual styles helped them understand new information better and remember it longer.

The fact that medium correlations were found between motivation and the visual and kinaesthetic learning styles was supported by the qualitative data, which revealed that all interviewees (except one) who expressed a preference for the visual and/or kinaesthetic learning styles were motivated to learn the English language. For example, when Interviewee 4, a visual and kinaesthetic learner, was asked whether or not she was motivated to learn English, she affirmatively answered, "Definitely. I'm very motivated to learn it." Indeed, the link between the kinaesthetic learning style and motivation was explicitly pointed out by Interviewee 1 who commented, "To increase students' motivation, the teacher can use activities which involve movement."

7.2.3 The relationship between perceptual learning styles and self-efficacy

The data in Table 7.1 shows a moderate positive correlation between the kinaesthetic learning style and self-efficacy ($r = .321$, $p < .000$). The shared variance was found to be 10.30 per cent. Additionally, weak positive correlations were found between the visual

learning style and self-efficacy ($r = .261$, $p < .000$), the aural learning style and self-efficacy ($r = .212$, $p < .000$) and the read/write learning style and self-efficacy ($r = .266$, $p < .000$). The shared variances between these variables were 6.81, 4.49 and 7.08 per cent, respectively. Clearly, the positive correlations indicate that high preferences for these learning styles were associated with high levels of self-efficacy. Figures 7.7 to 7.10 below show the relationships between each perceptual learning style and self-efficacy.
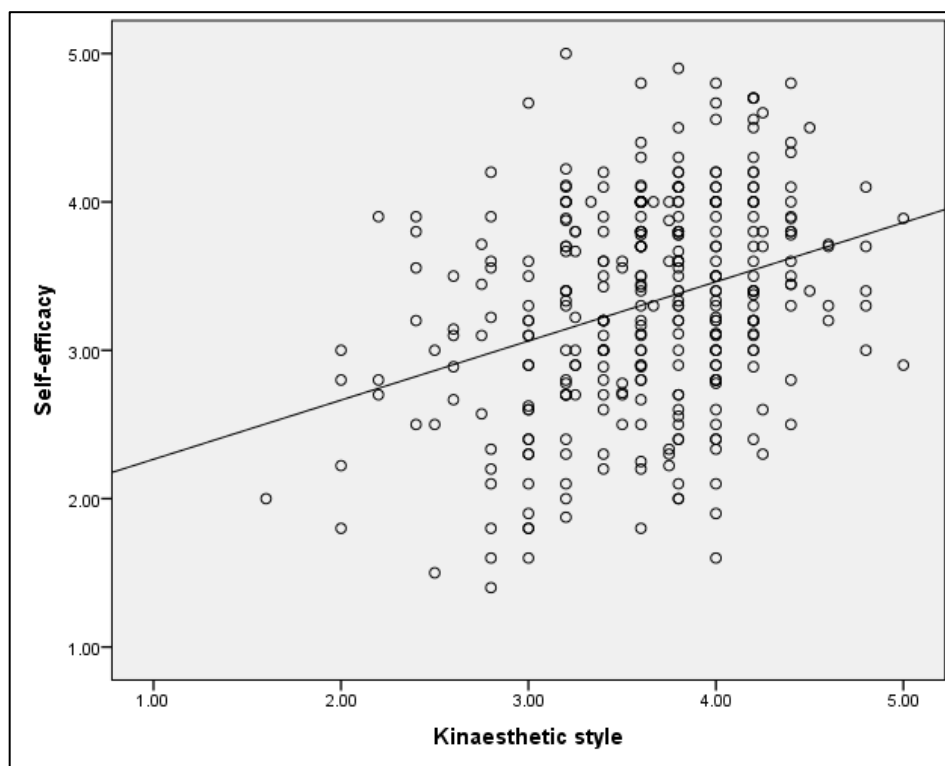
Figure 7.7. The relationship between the kinaesthetic learning style and self-efficacy.
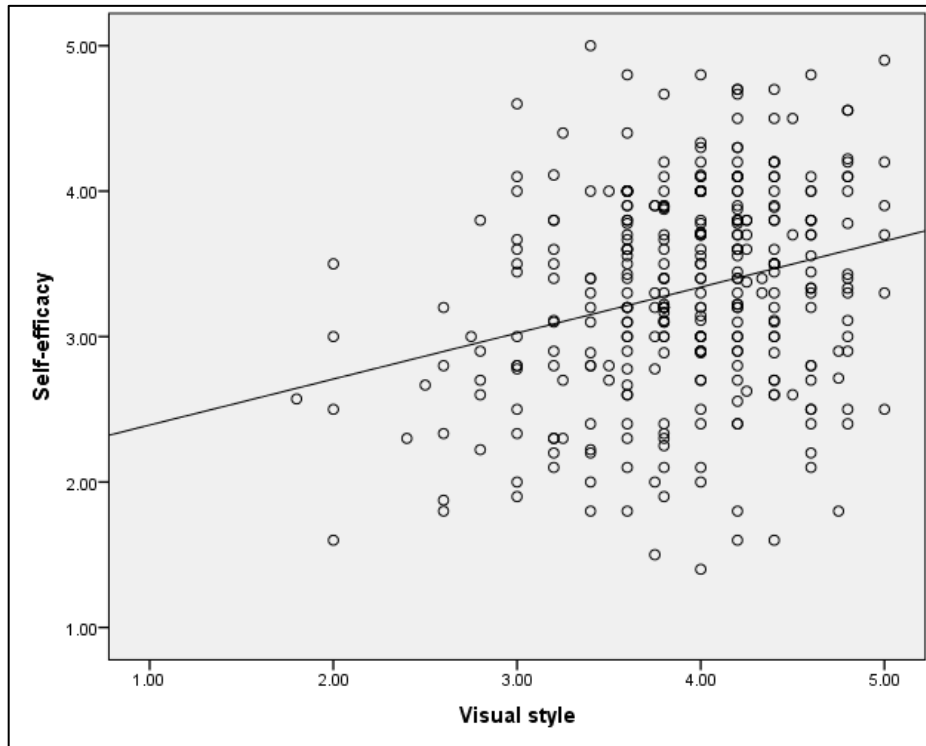
Figure 7.8. The relationship between the visual learning style
and self-efficacy.
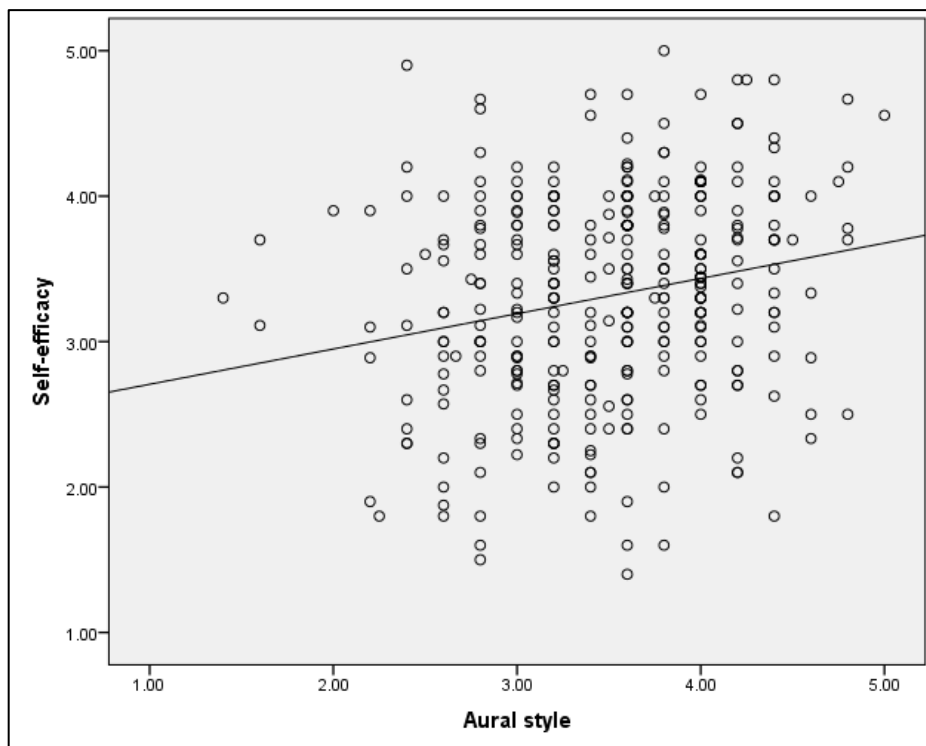
Figure 7.9. The relationship between the aural learning style
and self-efficacy.
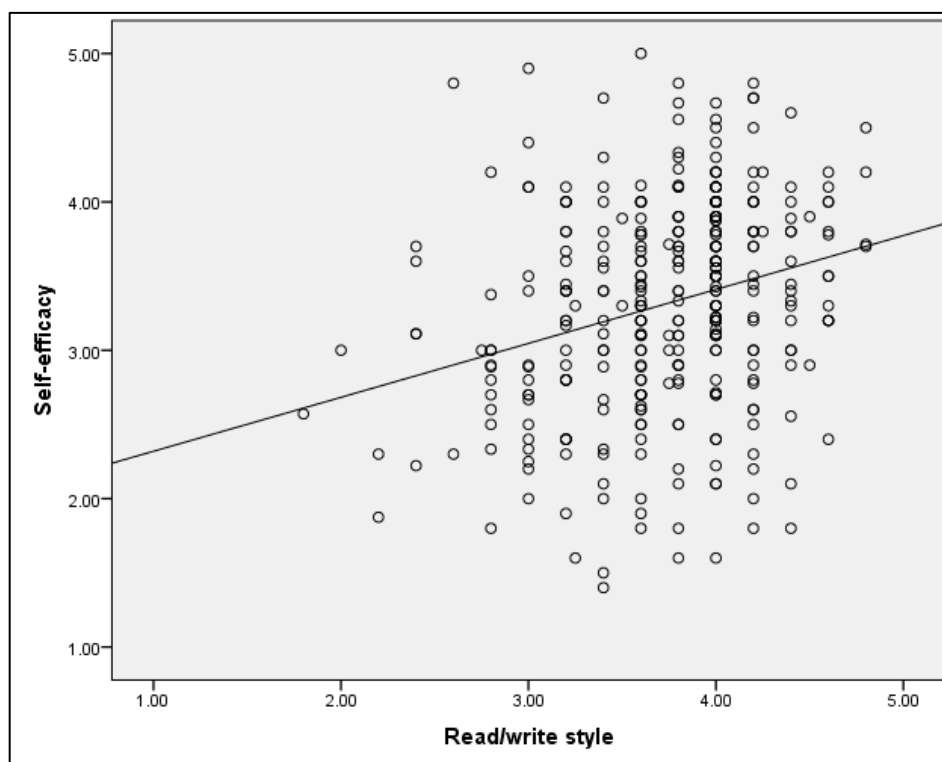
Figure 7.10. The relationship between the read/write learning style
and self-efficacy.

The association between self-efficacy and the frequent use of all four perceptual styles

is not surprising. As pointed out in the previous chapter (Section 6.2.3), learners who had

nurtured a high sense of self-efficacy in language learning were generally confident about

their ability to carry out: vocabulary and grammar activities (which required a frequent use of

the visual style), reading comprehension and writing tasks (which required the use of the

read/write style) and listening comprehension and speaking tasks (which necessitated the use

of the aural style). In other words, self-efficacious learners were capable of using a variety of

styles adequately to receive new information and perform different learning tasks

appropriately.

The fact that a moderate positive correlation was found between the kinaesthetic

learning style and self-efficacy is problematic to explain, given that in reviewing the

literature, no data was found in relation to the association between these two variables in the context of L2/FL learning. Nonetheless, it could possibly be related to the fact that although the kinaesthetic learning style is interesting to use in language learning situations, it is not a straightforward way to learn new information. This could make students with low self-efficacy to be less inclined to use it, as they are not confident about their ability to learn new material through this style. The reverse could also be true for highly self-efficacious learners. Supporting this finding, the interviews data shows that 62.5 per cent of the learners who expressed a preference for the kinaesthetic learning style also showed a high level of self-efficacy when learning English. For example, a kinaesthetic learner commented, "I feel I am able to learn difficult things" (Interviewee 8).

An alternative explanation for the positive relationship between perceptual learning styles and self-efficacy could be inferred from the findings that the participants in the present study were multimodal and their use of a variety of perceptual styles to learn English was positively correlated with their English language performance (see Section 5.5.1 in Chapter 5). That could have had an indirect effect of enhancing these learners' sense of self-efficacy for language learning.

7.2.4 The relationship between peer collaboration and anxiety

The data in Table 7.1 shows a weak positive correlation between peer collaboration and anxiety $r = .211$, $p < .000$, with high preferences for peer collaboration being associated with high levels of anxiety. The shared variance between these variables was 4.45 per cent. Figure 7.11. below shows the relationship between them.
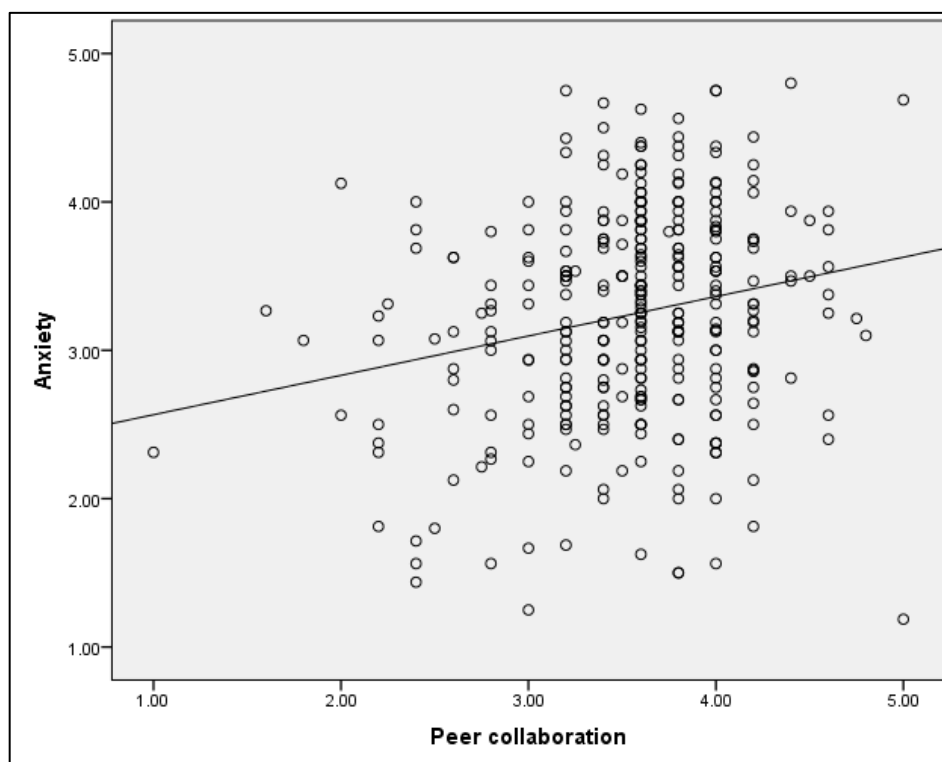
Figure 7.11. The relationship between peer collaboration
and anxiety.

The results of Pearson's correlation analysis also show weak positive correlations between peer collaboration and three components of language anxiety: general classroom anxiety, test anxiety, and fear of negative evaluation.

Consistently, the interview data revealed that all the participants in the present study (except for one) who expressed a preference for peer collaboration were also found to be anxious about their English language learning. As discussed in the previous chapter (Section 6.2.1), the majority (59.9%) of the learners were apprehensive about being misunderstood when communicating in English. In addition, almost half (48.2%) of them mentioned that they felt embarrassed when the teacher corrected their mistakes in front of their classmates, and 41.6 per cent of them were afraid that the other students might laugh at them when they spoke in English. Meanwhile, when learners where asked about the reasons why they

preferred to work in groups in their English class, the most stated reason was that it helped them learn from their peers and correct one another's mistakes. Therefore, it could be inferred that those learners might have felt less anxious about practicing the language and making mistakes in a small group than in front of the whole class.

This finding matches those of previous studies carried out with EFL learners in Asian contexts (e.g. Chang, 2011; Hashemi, 2011; Suwantarathip & Wichadee, 2010). These studies reported that the learners' anxiety level was lower when they worked in groups, as they cooperated with their classmates and learned from one another. This finding is also consistent with the suggestion made by some commentators (e.g. Crandall, 1999; Kagan, 1994; Oxford & Ehrman, 1993) that cooperative learning could help ease language anxiety. Crandall (1999), for example, points out:

> Debilitating anxiety or fear is reduced when the possibility of providing a correct or acceptable answer is increased and when learners have had an opportunity to try out their contributions with each other before being asked to offer them to the entire class. Time to think, opportunities to rehearse and receive feedback, and the greater likelihood of success reduce anxiety and can result in increased participation and language learning. (p. 233)

7.2.5 The relationship between peer collaboration and motivation

The data in Table 7.1 shows a weak positive correlation between peer collaboration and motivation $r = .127$, $p < .020$, with high preferences for peer collaboration being associated with high levels of motivation. The shared variance between these variables was only 1.61 per cent. Figure 7.12. below shows the relationship between them.
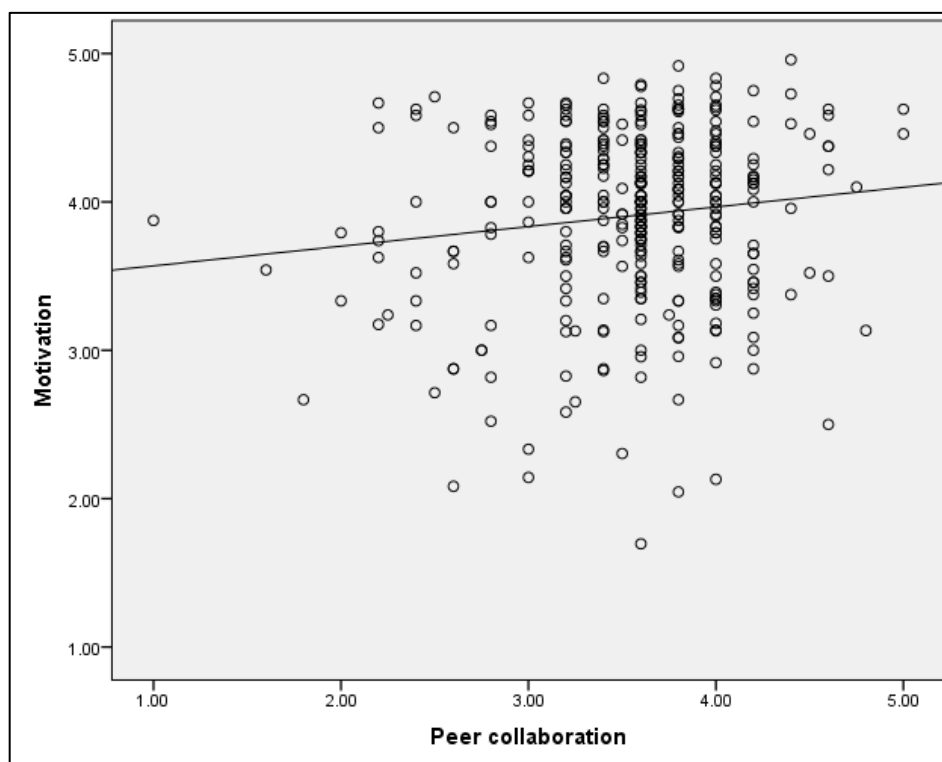
Figure 7.12. The relationship between peer collaboration
and motivation.

Similarly, the results of Pearson's correlation analysis show weak positive correlations
between peer collaboration and three motivation subscales: the Knowledge Scale, the
Extrinsic Motivation Scale and the External Regulation Scale. Such links between peer
collaboration and motivation could provide evidence for Dörnyei's (1997) argument that "CL
tends to produce a group structure (including peer relationships and learning norms) and a
motivational basis that provide excellent conditions for L2 learning" (p. 491). This is also
consistent with previous research (e.g. Chang, 2010; Hsu, 2007; Pan & Wu, 2013) which
found that peer collaboration had a positive impact on EFL learners' motivation.

Similar to the findings discussed in section 7.2.2 above, the relationship between peer
collaboration and motivation could have two alternative interpretations. First, in accordance
with the findings of previous research in other EFL learning contexts, learners in Saudi Arabia

could have found peer collaboration interesting and productive, which contributed to an increase in their motivation. Alternatively, since the majority of the participants in the current research were found to be motivated to learn English, this desire could have made them keener to collaborate with their peers in order to achieve their objective of learning the language. As discussed in Chapter 5 (Section 5.2.2), the participants believed that peer collaboration helped them learn more and understand new information better (i.e. they were motivated by knowledge). Further, as pointed out in Chapter 6 (Section 6.2.2), since the participants were found to be highly motivated by external regulation (i.e. they wanted to learn English in order to get good grades on the module, find a good job and travel abroad), they might have considered peer collaboration a useful means to achieve their goal, as it would help them learn the language better and faster.

7.2.6 The relationship between peer collaboration and self-efficacy

The data in Table 7.1 shows no significant correlation between peer collaboration and self-efficacy $r = -.074$, $p < .180$. This finding indicates that no relationship existed between these two variables among the participants of this study. In other words, the learners' preference for peer collaboration in their English class had no connection with their level of self-efficacy for learning the language. This finding is consistent with that of Farajee and Arabmofrad's (2015) study of English learners in Iran, which revealed that collaborative vocabulary learning did not have any effect on the learners' self-efficacy beliefs. In reviewing the literature, no other studies could be found on the relationship between these two variables in EFL learning contexts. This calls for further research in this area.

7.2.7 The relationship between TA and anxiety

The data in Table 7.1 shows a moderate positive correlation between scores on the Tolerance of Ambiguity Scale and the Anxiety Scale $r = .433$, $p < .000$, indicating that high levels of IA were associated with high levels of anxiety. The shared variance between these variables was 18.75 per cent. Figure 7.13. below shows the relationship between them.
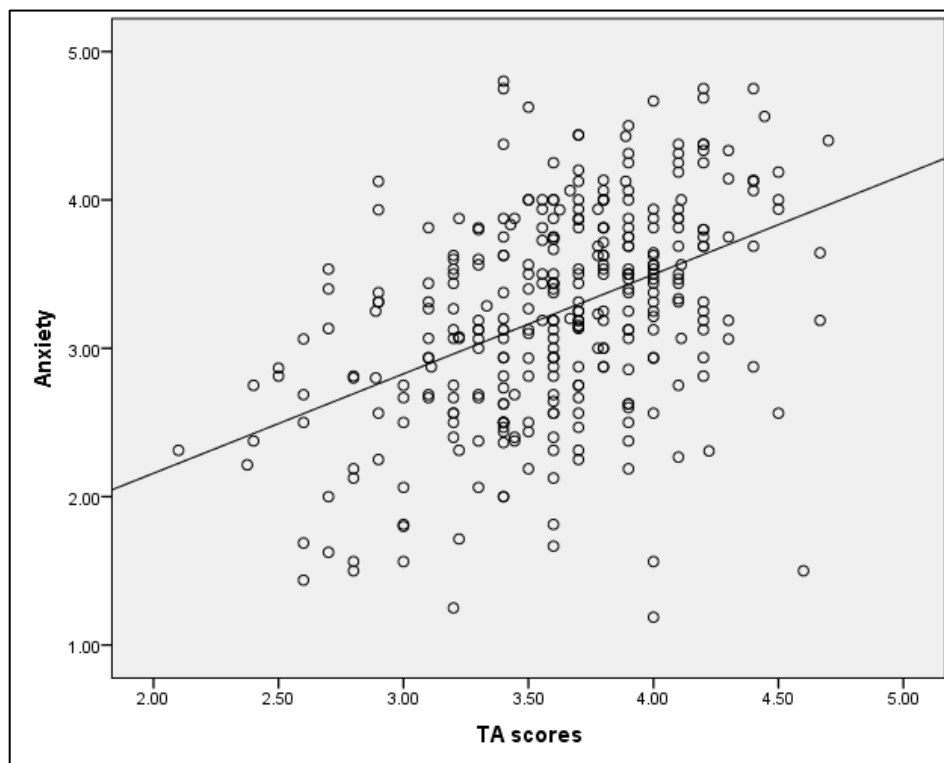
Figure 7.13. The relationship between TA scores and anxiety.

The results of Pearson's correlation analysis also show that IA correlated positively and significantly with all anxiety subscales. Interestingly, and in line with the quantitative findings, the qualitative data revealed that the 75 per cent of the interviewees who showed a high level of IA reported that they were anxious when learning the English language. A clear association between IA and anxiety was observed in Interviewee 3's comment: "When I listen to native speakers, I have difficulty understanding their accent. They speak fast, which makes

me nervous." Interviewee 8's responses also revealed a link between IA on the one hand and fear of negative evaluation and test anxiety on the other: "In class, I worry about losing marks if the ambiguous information comes on tests." She further commented, "I used to cry because I was afraid of failing the English module."

This finding supports the conclusions drawn by several commentators (e.g. Ehrman, 1999; Oxford, 1999; Thompson & Lee, 2014; White, 1999) that ambiguity in language learning can cause anxiety. It is also consistent with the finding of Dewaele and IP (2013) which showed that the students who were more intolerant of ambiguity when learning English were also more anxious in their English class.

An alternative possible interpretation for this correlation could be that the students' feeling of anxiety might have hindered their ability to focus on the material presented to them, which could have made them feel confused and less capable of handling ambiguity. This provides evidence for Tobias's (1986) observation that experiencing anxiety in the learning environment can result in cognitive deficits during the input, processing and output stages. Horwitz et al. (1986) also found that when EFL learners felt anxious, they had difficulty producing and interpreting the target language sounds and structures.

7.2.8 The relationship between TA and motivation

The data in Table 7.1 shows no significant correlation between the scores on the Tolerance of Ambiguity Scale and the Motivation Scale $r = .062$, $p < .256$. Similarly, all correlations between TA and the different types of motivation were insignificant, indicating that no relationship existed between these two variables among the participants of this study. In other words, the learners' tolerance/intolerance of ambiguity when learning English had no connection with how motivated they felt to learn the language. In reviewing the literature, I

could not find a single study on the relationship between these two variables in EFL learning

contexts. This lends to the uniqueness of the present study, and further research in this area

could well lead to some noteworthy findings.

7.2.9 The relationship between TA and self-efficacy

The data in Table 7.1 shows a weak negative correlation between the scores on the

Tolerance of Ambiguity Scale and the Self-efficacy Scale $r = -.221$, $p < .000$, with high levels

of IA being associated with low levels of self-efficacy. The shared variance between these

variables was 4.88 per cent. Figure 7.14. below shows the relationship between them.
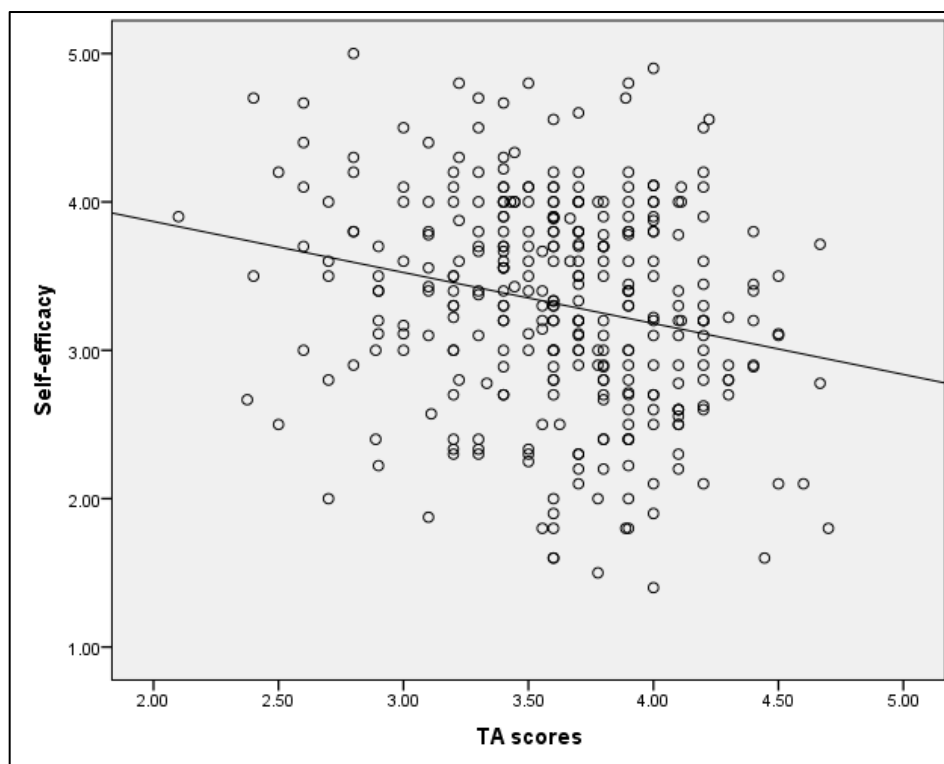
Figure 7.14. The relationship between TA scores and self-efficacy.

In line with this finding, the interview data shows that the learners in the middle

proficiency group were both more intolerant of ambiguity when learning English and less

self-efficacious than their peers in the other groups (see Sections 5.5.3 and 6.5.3 in the previous chapters). A further link was observed between the tasks that the participants found the least ambiguous and those they felt the most self-efficacious to carry out adequately. For example, ambiguity was reported to be acceptable for tasks such as reading comprehension, where meaning could be inferred from the context, while it was considered intolerable as far as grammar was concerned. Consistently, more than 70 per cent of the learners had a high sense of self-efficacy when carrying out reading comprehension tasks as opposed to only 46.4 per cent who felt self-efficacious when learning grammar (see Sections 5.4.3 and 6.2.3 in the previous chapters).

Again, there are two possible explanations for this finding. It is conceivable that those learning tasks that the students were able to tolerate their ambiguity contributed to an increased sense of confidence in their ability, as they were able to perform them appropriately. Alternatively, it could also be indicative that the learners' high confidence in their own ability to carry out certain language tasks successfully contributed to making them more capable of handling their ambiguity.

7.3 A profile of the relationships between the learning style preferences of Saudi learners of English and the affective factors influencing them

The following profile depicts the associations between learning styles and affective factors among Saudi learners of English.
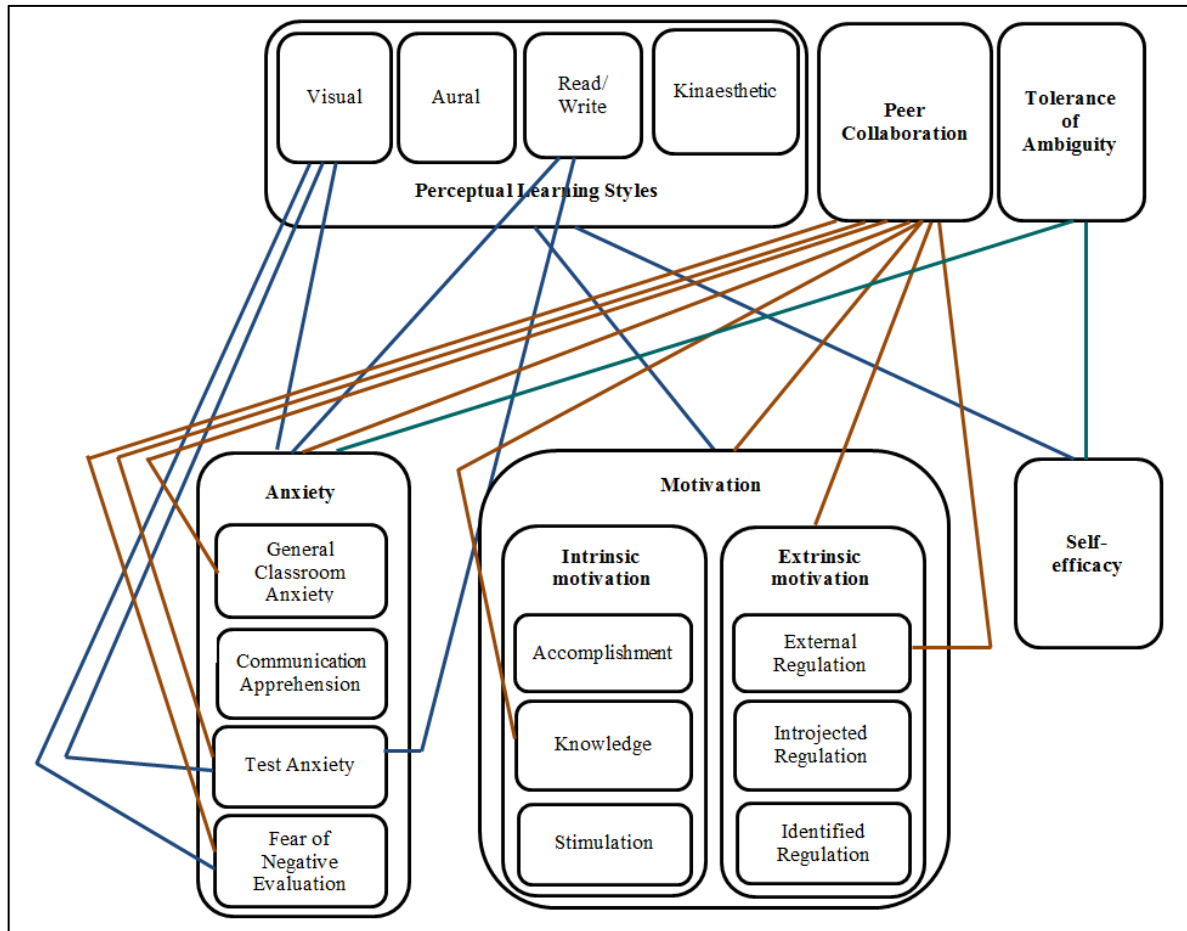
Figure 7.15. A profile of the relationships between learning styles and affective factors among Saudi learners of English.

7.4 Chapter summary

This chapter examined the relationships between the learning style preferences of English learners in Saudi Arabia and the affective factors that influenced them. It was found that all correlations between the three learning styles and three affective factors investigated in the present study were significant, except those between peer collaboration and self-efficacy and between TA and motivation. Moreover, all significant correlations were positive except that between IA and self-efficacy.

With regard to perceptual learning styles, the results of the correlation analysis revealed weak correlations between the visual learning style and total anxiety, test anxiety and fear of

negative evaluation. Weak correlations were also obtained between the read/write style and total anxiety and fear of negative evaluation. In addition, the visual and kinaesthetic learning styles correlated moderately with motivation, while the aural and read/write learning styles correlated weakly with it. Moreover, all four perceptual learning styles correlated positively and significantly with all types of motivation. Finally, a medium correlation was obtained between the kinaesthetic learning style and self-efficacy, while weak correlations were found between the other three perceptual learning styles and self-efficacy.

Peer collaboration was also found to correlate weakly with total anxiety, test anxiety, general classroom anxiety and fear of negative evaluation. In addition, a weak correlation was obtained between peer collaboration and total motivation, EM, external regulation and knowledge. On the other hand, no significant correlation was found between peer collaboration and self-efficacy.

Furthermore, TA correlated moderately with total anxiety and all its components. While no significant correlation was found between TA and motivation, a weak correlation was obtained between TA and self-efficacy.

The above findings were interpreted in light of the available literature and my experience as an English language teacher for seven years. Finally, a profile of the interrelationships between the learning styles of Saudi learners of English and the affective factors influencing them was presented. It is recommended that carefully designed experimental studies be conducted to further our understanding of the exact effects of these variables on one another.

Chapter 8: Conclusions and Recommendations

8.1 Introduction

This chapter draws a number of conclusions from the findings of the three research questions discussed in Chapters 5 to 7. It also critically considers the theoretical and practical implications that result from such findings. This is followed by a well-defined outline highlighting what could possibly be construed as the limitations of the current study. Lastly, recommendations for further research in the field are put forward.

8.2 Conclusions about the findings

The present study was set out to investigate the learning style preferences of freshman students enrolled in intensive English languages classes at a public university in Saudi Arabia. The study also sought to examine the affective factors influencing the students when learning English. The paramount objective was to explore the interrelationships that developed in relation to learning styles and affective factors and their impact on the learners' performance in the English module. As noted in the previous chapter, the general theoretical literature on this topic, especially in the context of the Arab world, is scarce. Hence, this study is an attempt to go some way towards enhancing our understanding of the links between these variables (learning styles, affective factors and English language performance) and to make several noteworthy contributions to the literature. To achieve this objective, a mixed methods design was employed, integrating the quantitative data obtained from the three questionnaires (DIQ, LLSQ and AFLLQ) developed for this study and the qualitative data obtained from in-depth semi-structured interviews. In the following section, I shed light on the major

311

conclusions drawn from the findings of the three research questions addressed in the present study and highlight their significance.

8.2.1 The learning style preferences of Saudi learners of English (Research Question 1)

A noteworthy issue to emerge from the findings was that the participants revealed no strong preferences for certain perceptual learning styles over the others. Hence, they were considered multimodal (Fleming & Mills, 1992). Similarly, the learners displayed equal preferences towards working alone or alternatively with their peers, and they exhibited a moderate level of TA. Taken together, these results suggest that although learning styles are commonly presented as opposites (e.g. visual vs. aural, tolerance vs. intolerance of ambiguity), they are not "dichotomous" but "operate on a continuum or on multiple, intersecting continua" (Oxford, 2003, p. 3). We can therefore, infer that no one particular learning style is more superior or more effective than the other and that those learners can essentially utilise a variety of learning styles.

Another significant finding that came about from this study was the participants' belief that their learning style preferences had changed over time. This result provides evidence for the notion that learning styles are "flexibly stable" and not steady phenomena which function in the same manner all the time (Coffield et al., 2004, p. 2). This suggests that learning styles should be regarded as typical or habitual approaches to learning rather than fixed types of behaviour that are unaffected by the learning task, situation or environment (Cuthbert, 2005).

The third and final major finding was that the participants' performance in the English module correlated significantly with the use of all perceptual learning styles. This finding provides support to the view that there is no one right way to learn a FL and that successful learners perceive and process information in various manners (Riding, 1997). Accordingly,

different learning styles should be regarded as "value-neutral" (MacKeracher, 2004, p. 80), and they should not be judged as better or worse. What contributes to learning success is the appropriateness of specific styles to specific learning tasks and contexts.

In summary, the findings presented above contribute to the existing knowledge on language learning styles by providing evidence related to a few controversial issues in the literature. In addition, studies that have examined the learning style preferences of Arab learners of English are limited and, to my knowledge, non-existent as far as TA is concerned. Moreover, the present findings expand our knowledge of language learning styles by providing a rich description of the participants' experiences that concurrently take into account the impact of a large number of personal and classroom factors.

8.2.2 The affective factors influencing Saudi learners of English (Research Question 2)

This study has found that the learners exhibited moderate levels of anxiety, motivation and self-efficacy. Indeed, this could be considered the largest study to date to examine three major affective factors in the context of Saudi Arabia and the Arab world at large. It reinforces a few of previous findings regarding anxiety and motivation of Saudi students. It also makes a contribution of additional evidence that suggests that although Saudis are very proud of their heritage, culture and literature, the majority of them are favourably disposed towards the study of the English language and undertake considerable efforts to learn it.

Additionally, the fact that the participants in this study were found to be both intrinsically and extrinsically motivated to learn the language supports the suggestion that IM and EM are best viewed as operating in conjunction with each other to promote learning (van Lier, 1996). Vallerand et al. (2008) also maintain that IM is not always the most appropriate

path to learning success. For example, when a task does not capture the interest of learners, EM could be the more effective of the two to achieving learning goals.

Moreover, the findings of this study provide a new understanding of self-efficacy in language learning in the context of the Arab world. To the best of my knowledge, there has been no other study that has investigated this topic in this context. By providing an accurate report of the students' self-efficacy beliefs, the background and classroom factors that influenced them and their relationships with English language proficiency and performance, it is hoped that this research will serve as a basis for future studies in the field.

Another important finding was that the vast majority of the participants revealed that their feelings of anxiety, motivation and self-efficacy had changed since they started to learn English. They attributed that change to several personal and classroom factors, as discussed in Chapter 6. This does not only provide evidence that supports Dörnyei's (2001b) proposition that motivation is a dynamically changing process, but it also suggests that the other two affective factors could also, to a certain extent, fluctuate within the same individual and contribute to success or failure in language learning.

Accordingly, careful measures should be taken by educators to reduce learners' anxiety and enhance their motivation and self-efficacy when learning English. This is especially important as all three factors were found to have significant relationships with English language performance. Practical suggestions to be implemented in this regard are provided in Section 8.3 below.

8.2.3 The relationships between the learning style preferences of Saudi learners of English and the affective factors influencing them (Research Question 3)

The present study has demonstrated that all correlations between the three learning styles and three affective factors investigated in the present study were significant, except those between peer collaboration and self-efficacy and between TA and motivation. Moreover, all significant correlations were positive except that between IA and self-efficacy. These findings are important and make a noteworthy contribution to the literature. They suggest that learning styles and affective factors do not work in isolation but there exists a dynamic interplay between them. For example anxious learners were found to exhibit more preferences for the visual and read/write styles than their less anxious peers. Additionally, a high level of IA could possibly be both a source and an effect of high anxiety and low self-efficacy in language learning.

These findings could provide a useful insight into the reasons underlying the learners' preferences for certain styles. The findings could also suggest that in order to succeed in encouraging the students to widen their preferences, educators need to gain some understanding of the affective factors influencing the students' choices. Reducing learners' anxiety and enhancing their motivation and self-efficacy when learning English could help the learners become more flexible and willing to use a variety of language learning styles. Consequently, this could have a positive impact on their English language performance, as discussed in Chapters 5-7.

8.3 Implications of the findings for theory

The findings of the current research have made a number of unique contributions to the literature on learning styles and affective factors.

1. The current findings add to a growing body of literature on learning styles and affective factors in language learning. They provide a comprehensive account of the learners' experiences with these variables that incorporates the influences of several background and classroom factors on language learning styles and affective factors and their relationships with English language proficiency and performance. As pointed out earlier, such a comprehensive study of EFL learners in the Arab world is scarce.

2. The present study has gone some way towards enhancing our understanding of TA and self-efficacy, given that these topics are generally under-researched in EFL learning contexts. Moreover, the findings of this study make a noteworthy contribution to the current literature by exploring the interrelationships between three learning styles and three affective factors in language learning. To my knowledge, this is the first large-scale study to address possible links between these variables. This contributes to its uniqueness and its attempts to fill this gap in the literature.

3. A further contribution of the current research is the development of valid and reliable learning styles and affective factors questionnaires (the LLSQ and AFLLQ), each consisting of three major scales that assess three major variables. Instead of using ready-made instruments, developing my own questionnaires added to the exploratory nature of my study by investigating the issues raised by my students during our prolonged discussions. The questionnaires are available in Arabic and English versions for use by EFL learners in the Arab world and beyond.

8.4 Implications of the findings for pedagogical practice

The findings derived from the present study have significant implications for future pedagogical practice.

1. Significantly, when the interviewees were directly asked if they believed that being aware of their preferred learning styles could help their English learning, all of them provided positive responses. Their reasons predominantly centred on the belief that awareness of their favourite styles would help them focus on learning through those means, which would facilitate their understanding of new information and help them remember it better. As a result, their proficiency in English would improve. As Interviewee 6 eloquently put it, "I will learn how to learn English well. Also, I will not get upset with ambiguity because I will realise that this is just a different style of learning and an individual difference." This finding provides some support for the conceptual premise that raising learners' awareness of their preferred learning styles can help them realise the value of these styles and make the necessary adjustments to maximise their learning (Santana-Williamson, 2002). A reasonable approach to tackling this issue could possibly be to administer a learning styles questionnaire to the learners at the start of the academic year. The data obtained could be used to explain to the learners how best they could embark on their journey of learning, as this could help them become more autonomous and responsible learners (Myers, 1992).

The next step could be the implementation of Oxford and Lavine's (1991) idea of *style-stretching*, discussed in Chapter 2. This is to encourage the learners to try out new approaches to learning and developing their capacities. Ultimately, the use of a variety of learning styles was found to positively influence language learning success (See section 5.5 in Chapter 5). It should however, be pointed out that mismatching should be implemented carefully, especially with low achievers as they may become intimidated by unfamiliar learning modes.

2. When the interviewees were asked for suggestions on the measures that could be undertaken to reduce their anxiety or to enhance their motivation or self-efficacy, their responses provided useful insights in this regard. To begin with, the learners suggested that in

317

order to reduce their FLA, they needed to have more practice with the four language skills of listening, speaking, reading and writing. They also believed that the teacher should explain new material clearly and assure them that although English is a FL, it is not impossible to learn it successfully. Finally, the learners thought that the teacher should be patient and understanding and should have a friendly attitude towards the students.

To promote motivation for language learning, the participants suggested that their English teacher should use interesting activities and a variety of ways to explain new information (e.g. PowerPoint shows, stories and games). They also felt that the teacher should explain new material clearly, stimulate students' curiosity and use English (instead of Arabic, their native language) when communicating with them. Last but not least, the students believed that the teacher should be encouraging and should assure them that English is not a difficult language to learn.

To enhance self-efficacy in language learning, the learners suggested that their English teacher should provide them with ample opportunities to practice the four language skills in class in order to improve their proficiency. They also believed that the teacher should employ different methods to encourage all students to learn and participate in class activities. Finally, the learners thought that the teacher should have faith in their ability and not judge them when they make mistakes.

The above pedagogical suggestions are important in that they were put forward directly by EFL learners in Saudi Arabia, and hence, they took several cognitive, psychological and social factors into consideration. Given that all three affective factors were found to have significant relationships with English language proficiency and performance in this study, there is a definite need for educators to cater for the different affective states of learners in the same language classroom.

3. The current study examined the differences in the participants' learning style preferences and the affective factors influencing them according to 12 internal and external background variables. Certain variables such as the track of study, knowledge of other foreign languages, frequency of using English outside the classroom setting and mother's educational level and knowledge of English were found to contribute to the differences observed in the participants' learning styles and/or the affective factors influencing them. An implication of these findings is that such individual differences should be taken into consideration in order to provide support for the disadvantaged groups and mitigate the negative effects that certain background circumstances could have on their learning.

4. A significant pedagogical implication that emerged from the participants' responses was the significance of the role that the teacher plays in the language learning process. It was found that the teacher had a significant influence on encouraging the learners to use a variety of styles when learning English and on increasing or decreasing their anxiety, motivation and self-efficacy levels. Particular attention needs to be paid to teaching methods and styles, teacher's personality and attitude displayed towards the students and the level of support offered to them. These factors were found to have a major impact on the learning style preferences and affective factors investigated in the present study. Equally important are the course book, the curriculum and the activities carried out in class, as the learners were found to use different learning styles and show different levels of anxiety, motivation and self-efficacy depending on the tasks they were required to do or the skills they needed to practice. Accordingly, using a variety of learning tasks, especially those that learners find interesting and relevant to their needs, are very likely to create a pleasant classroom atmosphere and influence the language learning process in a positive way.

5. The interplay between the learning style preferences of Saudi learners of English and the affective factors influencing them could provide a useful insight into the reasons behind the learners' preferences for certain styles, as discussed in Section 8.2.3 above.

8.5 Limitations of the study

The present study encountered a number of limitations which could not be avoided due to restrictions placed by practical every-day realities which impacted on the scope of this study.

1. The participants in this research were all from one public university in the western region of Saudi Arabia, which places a limitation on the generalisability of its findings. It would have been helpful to have included English learners from universities in other provinces in the country. However, due to the comprehensive nature of this study and the fact that it investigates the interplay of six learning styles and affective factors, comparing two or more groups would have broadened its scope and made the analysis and discussion of findings both complicated and protracted.

2. This study is also limited by the use of a cross sectional design. In order to provide more definite evidence for the fluctuations of language learning styles and the dynamic nature of the affective factors influencing the learners, a longitudinal study would have been more appropriate. This limitation could not be avoided due to time constraints. Additionally, this issue was not an objective of the present study.

3. In examining the influence of the participants' background characteristics on their learning style preferences and affective states, it was observed that some categories had very few participants in them, such as those who had resided abroad, those who spoke other foreign languages and those who always used English outside the classroom (see Section 4.5.1 in

Chapter 4). The small number of participants in these categories was anticipated given the nature of the Saudi society and the fact that English is a FL. Nonetheless, the generalisability of the relevant findings should be made with caution.

8.6 Recommendations for future research

The findings of the present study call for further research on language learning styles and affective factors in language learning that could contribute significantly to the body of theoretical literature and pedagogical practice.

1. More research that investigates TA and self-efficacy among English learners in Saudi Arabia and the Arab world is needed. It is also suggested that carefully designed experimental studies on language learning styles and affective factors be conducted to expand our knowledge of the influences of these variables on one another and on the language learning process.

2. Longitudinal research is also needed to determine whether the learning style preferences of the learners and the affective factors influencing them increase, decrease or remain the same over time. It would be useful to assess thoroughly the temporal dimension of these variables, as this could provide evidence that informs the debate about their propensity for change.

3. Further research could investigate language learning styles and affective factors in language learning across several higher education institutions in Saudi Arabia in order to yield more generalisable findings.

4. Future work could utilise indirect methods of eliciting data from various sources. These could include classroom observations and interviews with teachers and family members. The results could then be triangulated with those obtained from the learners to determine the extent to which they corroborate each other.

5. In connection with the previous point, the findings of the present study showed that the mother's educational level and knowledge of English contributed to the variations observed in TA, anxiety and/or self-efficacy among the participants. Further research needs to be carried out to examine more thoroughly the influence of parents' characteristics and involvement on the affective states of FL learners.

8.7 Concluding remarks

This study was an attempt to enhance our understanding of the individual differences among English learners in Saudi Arabia and to make noteworthy contributions to the literature by providing an empirical account of the learning style preferences of the learners and the affective factors influencing their learning. The choice of this topic was influenced by the general concern for the low performance of Saudi learners of English. When discussing this concern with my students, the issues of learning styles and affective factors gradually emerged and made me keen to explore their multifaceted nature together with a few personal and classroom variables that could influence them and their possible links with English language proficiency and performance. I am pleased that I have gained useful insights as a direct result of the current study, and I believe that I have also become more sensitive and attuned to the different needs of my students. It is my aspiration to conduct more research on learning styles and affective factors, incorporating a variety of social and environmental factors in a longitudinal, cross institutional research.

List of References

Abrahamsson, N., & Hyltenstam, K. (2008). The robustness of aptitude effects in near-native second language acquisition. *Studies in Second Language Acquisition*, *30*(4), 481–509.

Adey, P. (2007). "What's next? CPD and the whole school. In J. Dillon, & M. Maguire (Eds.), *Becoming a Teacher* (3rd ed.) (pp. 357–366). Maidenhead, UK: Open University Press.

Ahangari, S., & Samadian, Z. (2014). The effect of cooperative learning activities on writing skills of Iranian EFL learners. *Linguistics and Literature Studies*, *2*(4), 121–130.

Ahmad, J. (2011). Pronunciation problems among Saudi learners: A case study at the preparatory year program, Najran University Saudi Arabia. *Language in India*, *11*, 22–36.

Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, *78*(2), 155–167.

Aldosari, H. S. (2014). The entwined effects of attitude, motivation and gender on EFL learning: A correlation study. *Studies in Literature and Language*, *8*(1), 1–5.

Alghamdi, R. (2014). EFL learners' verbal interaction during cooperative learning and traditional learning (small group). *Journal of Language Teaching and Research*, *5*(1), 21–27.

Alkhatnai, M. (2011). *Learning styles of EFL Saudi college-level students in on-line and traditional educational environments* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3453565)

Almarefh Journal (2012, February 2). *The English Language Teaching Development Project*. Retrieved October 10, 2014, from http://www.almarefh.net/show_content_sub.php?CUV=393&SubModel=138&ID=1404

Almutairi, N. H. (2007). *The influence of educational and sociocultural factors on the learning styles and strategies of female students in Saudi Arabia*. (Unpublished doctoral dissertation). University of Leicester, Leicester, UK.

Alptekin, C. (2006). Cultural familiarity in inferential and literal comprehension in L2 reading. *System*, *34*(4), 494–508.

Alrabai, F. (2014). The influence of teachers' anxiety-reducing strategies on learners' foreign language anxiety. *Innovation in Language Learning and Teaching*, *9*(2), 163–190.

Al Rifai, N. (2010). Attitude, motivation, and difficulties involved in learning the English language and factors that affect motivation in learning it. *Procedia - Social and Behavioral Sciences*, *2*(2), 5216–5227. Retrieved February 15, 2012, from http://www.sciencedirect.com/science/article/pii/S187704281000889X

Al-Saraj, T. M. (2013). Foreign language anxiety in female Arabs learning English: Case studies. *Innovation in Language Learning and Teaching*, *8*(3), 257–278.

Al-Sharief, S. (2013). The interplay of motivation and demotivation: The case of EFL Learners majoring in English. *International Journal of Applied Linguistics & English Literature, 2*(1), 53–59.

Al-Shuaibi, J., Hamdan-Mansour, A. M., & Azzeghaiby, S. N. (2014). Foreign language anxiety among students studying foreign languages. *Life Science Journal*, *11*(8), 197–203.

Al-Tamimi, A., & Shuib, M. (2009). Motivation and attitudes towards learning English: A study of petroleum engineering undergraduates at Hadhramout University of Sciences and Technology. *GEMA Online Journal of Language Studies*, *9*(2), 29–55. Retrieved February 17, 2012, from http://journalarticle.ukm.my/2306/1/Vol.9_issue2_(3).pdf

Al-Tamimi, N. O. M., & Attamimi, R. A. (2014). Effectiveness of cooperative learning in enhancing speaking skills and attitudes towards learning English. *International Journal of Linguistics*, *6*(4), 27–45.

Alzubaidi E., Aldridge, J. M. Khine, M. S. (2016). Learning English as a second language at the university level in Jordan: Motivation, self-regulation and learning environment perceptions. *Learning Environments Research*, *19*(1), 133–152.

Al-Zubeiry, H. Y. A. (2012). The socio-psychological orientations of Saudi learners of English as a foreign language. *Umm Al-Qura University Journal & of languages & literature*, *8*, 13–52.

Andrade, M., & Williams, K. (2009). Foreign language learning anxiety in Japanese EFL university classes: Physical, emotional, expressive, and verbal reactions. *Sophia Junior College Faculty Journal, 29*, 1–24. Retrieved January 09, 2013, from https://www.jrc.sophia.ac.jp/pdf/research/bulletin/ver2901.pdf

Aqel, F., & Mahmoud, S. (2006). Learning styles of An-Najah National University students in learning English as a foreign Language. *An-Najah Research Journal*, *20*(2), 597–624.

Armstrong, S. J. (2004). The impact of supervisors' cognitive styles on the quality of research supervision in management education. *British Journal of Educational Psychology*, *74*, 599–616.

Arnold, J. (2009). Affect in L2 learning and teaching. *ELIA*, *9*, 145–151.

Avis, J., Fisher, R., & Thompson R. (2014). *Teaching in Lifelong Learning: A Guide to Theory and Practice* (2nd ed.). Maidenhead, UK: McGraw-Hill.

Babbie, E. (1990). *Survey Research Methods* (2nd ed.). Belmont, CA: Wadsworth.

Baker, S. C., & MacIntyre, P. D. (2003). The role of gender and immersion in communication and second language orientations. *Language Learning*, *53*(S1), 65–96.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. New York, NY: Freeman.

Bandura, A. (1999). Self-efficacy: Toward a unifying theory of behavioral change. In R. F. Baurneister (Ed.), *The self in Social Psychology* (pp. 285–298). New York, NY: Psychology Press.

Bandura, A. (2006). Guide for creating self-efficacy scales. In F. Pajares, & T. Urdan (Eds.), *Self-efficacy Beliefs of Adolescents* (pp. 307–337). Greenwich, CT: Information Age.

Bektaş-Çetinkaya, Y., & Oruç, N. (2010). Turkish students' motivation to learn English at public and private universities. *Procedia - Social and Behavioral Sciences*, *2*(2), 4662–4666. Retrieved March 11, 2014, from http://www.sciencedirect.com/science/article/pii/S187704281000786X

Benson, P., & Voller, P. (2014). *Autonomy and Independence in Language Learning*. London, UK: Routledge.

Bhatia, A., & Makela, C. J. (2010). Collaborative test reviews: Student performance. *Journal of Family and Consumer Sciences*, *102*(2), 23–26.

Boekaerts, M., & Cascallar, M. (2006). How far have we moved toward the integration of theory and practice in self-regulation? *Educational Psychology Review*, *18*(3), 199–210.

Bong, M. (2006). Asking the right question: How confident are you that you could successfully perform these tasks? In F. Pajares, & T. Urdan (Eds.), *Self-efficacy Beliefs of Adolescents* (pp. 287–305). Greenwich, CT: Information Age.

Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review*, *15*(1), 1–40.

Brace, N., Snelgar, R., & Kemp, R. (2012). *SPSS for Psychologists* (5th ed.). London, UK: Palgrave-McMillian.

Brickman, B., & Nuzzo, R. (1999). Curricula and programs for international and immigrant students. *Journal of Intensive English Studies*, *13*, 53–62.

Brophy, J. (1999). Research on motivation in education: Past, present, and future. In T. Urdan (Ed.), *The Role of Context, Advances in Motivation and Achievement* (Vol. 11) (pp.1–44). Stamford, CT: JAI Press.

Brown, H. D. (1973). Affective variables in second language acquisition. *Language Learning*, *23*, 231–244. Retrieved January 12, 2012, from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-1770.1973.tb00658.x/abstract

Brown, H. D. (1980). *Principles of Language Learning and Teaching*. Englewood Cliffs, NJ: Prentice-Hall.

Brown, H. D. (2007). *Principles of Language Learning and Teaching* (5th ed.). White Plains, NY: Pearson Education.

Brown, J. D. (2001). *Using Surveys in Language Programs*. Cambridge, UK: Cambridge University Press.

Budner, S. (1962). Intolerance of ambiguity as a personality variable. *Journal of Personality*, *30*, 29–50. Retrieved January 15, 2012, from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-6494.1962.tb02303.x/abstract

Burke, K., & Doolan, L. S. (2008). Learning styles and higher education: No adult left behind. In P. N. Blakely, & A. H. Tomlin (Eds.), *Adult Education: Issues and Developments* (pp. 205–216). New York, NY: Nova Science.

Calfee, R., & Sperling, M. (2010). *On Mixed Methods: Approaches to Research in Language and Literacy*. New York, NY: Teachers College Press.

Carrell, P. L., Prince, M. S., & Astika, G. G. (1996). Personality types and language learning in an EFL context. *Language Learning Journal*, *46*(1), 75–99.

Cassidy, S. (2004). Learning styles: An overview of theories, models, and measures. *Educational Psychology*, *24*(4), 419–444.

Castro, O., & Peck, V. (2005). Learning styles and foreign language learning difficulties. *Foreign Language Annals*, 38(3), 401–409.

Cattell, R. B., & Scheier, I. H. (1960). Stimuli related to stress, neuroticism, excitation, and anxiety response patterns: Illustrating a new multivariate experimental design. *The Journal of Abnormal and Social Psychology*, *60*(2), 195–204. Retrieved May 18, 2012, from http://dx.doi.org/10.1037/h0046347

Cesur, M. O., & Fer, S. (2009). What is validity and reliability study of learning style survey? *Journal of Theory and Practice in Education*, *5*(2), 289–315.

Chalak, A., & Kassaian, Z. (2010). Motivation and attitudes of Iranian undergraduate EFL students towards learning English. *GEMA Online Journal of Language Studies*, *10*(2), 37–56.

Chang, A. C.–S. (2008). Sources of listening anxiety in learning English as a foreign language. *Perceptual and Motor Skills*, *106*(1), 21–34.

Chang, H.–Y. (2011). *The effect of situational and contextual variables on Taiwanese university students' self-perceived language learning anxiety levels in the EFL classroom* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3451892)

Chang, L. Y.–H. (2010). Group processes and EFL learners' motivation: A study of group dynamics in EFL classrooms. *TESOL Quarterly*, *44*(1), 129–154.

Chen, H.–Y. (2007). *The relationship between EFL learners' self-efficacy beliefs and English performance* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3301534)

Chen, I.–J. (2004). Utilizing group work effectively in the English language classroom. *TESL Reporter*, *37*(1), 1–7. Retrieved June 23, 2014, from https://ojs.lib.byu.edu/spc/index.php/TESL/article/download/32529/30689

Chen, I.–J., & Chang, C. C. (2009). Cognitive load theory: An empirical study of anxiety and task performance in language learning. *Electronic Journal of Research in Educational Psychology*, *7*(2), 729–746. Retrieved June 23, 2014, from http://investigacion-psicopedagogica.org/revista/new/english/ContadorArticulo.php?348

Chen, L. (2014). Attitude and motivation for English learning. *Studies in Literature and Language*, *9*(1), 51–56.

Ching, L. C. (2002). Strategy and self-regulation instruction as contributors to improve students' cognitive model in an ESL program. *English for Specific Purposes*, *21*, 262–298.

Chiriac, E. H., & Frykedal, K. F. (2011). Management of group work as a classroom activity. *World Journal of Education*, *1*(2), 3–16.

Christison, M. A. (2003). Learning styles and strategies. In D. Nunan (Ed.), *Practical English Language Teaching* (pp. 267–288). New York, NY: McGraw-Hill.

Chu, M.–P., & Nakamura, T. (2010). A study of Chinese and Japanese college students' L2 learning styles. *Asian Culture and History*, *2*(2), 30–44. Retrieved October 25, 2011, from http://www.ccsenet.org/journal/html/ach/articles/6113.html

Claxton, C. S., & Murrell, P. H. (1987). Learning styles: Implications for improving educational practice. *ASHE-ERIC Higher Education Report*, *4*. Washington, DC: George Washington University.

MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a second language: A situational model of second language confidence and affiliation. *The Modern Language Journal*, *82*, 545–562.

Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004). *Should We be Using Learning Styles? What Research has to Say to Practice*. London: Learning and Skills Research Center. Retrieved July 25, 2012, from http://heer.qaa.ac.uk/SearchForSummaries/Summaries/Pages/CDS48.aspx

Cohen, A. D. (2014). *Strategies in Learning and Using a Second Language* (2nd ed.). New York, NY: Routledge.

Cohen, A. D., & Dörnyei, Z. (2002). Focus on the language learner: Motivation, styles and strategies. In N. Schmitt (Ed.), *An Introduction to Applied Linguistics* (pp. 170–190). London, UK: Arnold.

Cohen, A. D., Oxford, R. L., & Chi, J. C. (2002). Learning Style Survey: Assessing your own learning styles. In A. D. Cohen, & S. J. Weaver (2006), *Styles and Strategies-based Instruction: A Teachers' Guide* (pp. 15–21). Minneapolis, MN: Center for Advanced Research on Language Acquisition, University of Minnesota.

Cohen, E. G. (1994). *Designing Groupwork: Strategies for the Heterogeneous Classroom* (2nd ed.). New York, NY: Teachers College Press.

Cohen, J. W. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale, NJ: Erlbaum

Cook, V. (2008). *Second Language Learning and Language Teaching* (4th ed.). London, UK: Hodder Education.

Corbitt, K. (2012). The preferred learning styles and perceived strategy use of students in a modified foreign language program. *The TFLTA Journal*, *3*, 3–19. Retrieved March 20, 2013, from http://adenikeakinjobi.com/sites/default/files/publications/Akinjobi%20and%20Akindel etfltajournal3.pdf#page=6

Corder, S. P. (1967). The significance of learners' errors. *International Review of Applied Linguistics*, *5*(2–3), 161–169.

Cornett, C. (1983). *What You Should Know about Teaching and Learning Styles*. Bloomington, IN: Phi Delta Kappa.

Crandall, J. (1999). Cooperative language learning and affective factors. In J. Arnold (Ed.), *Affect in Language Learning* (pp. 226–245). Cambridge, UK: Cambridge University Press.

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Csizér, K., & Dörnyei, Z. (2005). Language learners' motivational profiles and their motivated learning behaviour. *Language Learning*, *55*(4), 613–659.

Cuthbert, P. (2005). The student learning process: Learning styles or learning approaches? *Teaching in Higher Education*, *10*(2), 235–250.

Dabaghmanesh, T., & Soori, A. (2014). The effect of cooperative learning approach on Iranian EFL students' proficiency among different majors in general English course. *International Review of Social Sciences and Humanities*, *7*(1), 285–293.

Dabaghmanesh, T., Zamanian, M., & Bagheri, M. S. (2013). The effect of cooperative learning approach on Iranian EFL students' achievement among different majors in general English course. *International Journal of Linguistics*, *5*(6), 1–11.

Dahbi, M. (2015). Training EFL students on relaxation techniques to manage test taking anxiety: An action research project. *International Journal of English Language Teaching*, *2*(1), 61–67. Retrieved January 03, 2016, from http://www.sciedupress.com/journal/index.php/ijelt/article/view/6185

Davis, R. (1997). Group work is NOT busy work: Maximizing success of group work in the L2 classroom. *Foreign Language Annals*, *30*, 265–279.

De Bello, T. C. (1990). Comparison of eleven major learning styles models: Variables, appropriate populations, validity of instrumentation, and the research behind them. *Reading, Writing, and Learning Disabilities International*, *6*(3), 203–222.

Deci, E. L. (1992). The relation of interest to the motivation of behavior: A self-determination theory perspective. In K. A. Renninger, S. Hidi, & A. Krapp (Eds.), *The Role of Interest in Learning and Development*. Hillsdale, NJ: Erlbaum.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York, NY: Plenum.

Desmedt, E., & Valcke, M. (2004). Mapping the learning styles 'jungle': An overview of the literature based on citation analysis. *Educational Psychology*, *24*(4), 444–464.

De Vita, G. (2001). Learning styles, culture, and inclusive instruction in the multicultural classroom: A business and management perspective. *Innovations in Education and Teaching international*, *38*(2), 165–175. Retrieved October 28, 2011, from http://www.tandfonline.com/doi/abs/10.1080/14703290110035437

Dewaele, J.–M. (2005). Investigating the psychological and emotional dimensions in instructed language learning: Obstacles and possibilities. *The Modern English Journal*, *89*, 367–80.

Dewaele, J.–M. (2013). The link between foreign language classroom anxiety and psychoticism, extraversion, and neuroticism among adult bi- and multilinguals. *The Modern Language Journal*, *97*, 670–684.

Dewaele, J.–M., & Ip, T. S. (2013). The link between foreign language classroom anxiety, second language tolerance of ambiguity and self-rated English proficiency among Chinese learners. *Studies in Second Language Learning and Teaching*, *3*(1), 47–66.

Dewaele, J.–M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *SSLLT*, *4*(2), 237–274. Retrieved April 10, 2015, from http://pressto.amu.edu.pl/index.php/ssllt/article/view/3941

Dewaele, J.–M., & Wei, L. (2013). Is multilingualism linked to a higher tolerance of ambiguity? *Bilingualism: Language and Cognition, 16*(1), 231–240.

Dewey J. (1913). Interest and Effort in Education. Cambridge, MA: Mifflin.

Dickinson, L. (1995). Autonomy and motivation: A literature review. *System*, *23*,165–174.

Dion, C. M. (2011). Tools to enhance second language writing autonomy: Can we do things better? In D. Gardner (Ed.), *Fostering Autonomy in Language Learning* (pp. 64–75). Gaziantep, Turkey: Zirve University. Retrieved December 11, 2012, from http://ilac2010.zirve.edu.tr

Dörnyei, Z. (1990). Conceptualizing motivation in foreign language learning. *Language Learning*, *40*(1), 45–78.

Dörnyei, Z. (1997). Psychological processes in cooperative language learning: Group dynamics and motivation. *The Modern Language Journal*, *81*, 482–493.

Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, *31*(3), 117–135.

Dörnyei, Z. (2001a). *Motivational Strategies in the Language Classroom*. Cambridge, UK: Cambridge University Press.

Dörnyei, Z. (2001b). New themes and approaches in second language motivation research. *Annual Review of Applied Linguistics*, *21*, 43–59.

Dörnyei, Z. (2003a). Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. In Z. Dörnyei (Ed.), *Attitudes, Orientations, and Motivations in Language Learning*, 3–32. Oxford, UK: Blackwell.

Dörnyei, Z. (2003b). *Questionnaires in Second Language Research: Construction, Administration, and Processing*. Mahwah, NJ: Erlbaum.

Dörnyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, NJ: Erlbaum.

Dörnyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford, UK: Oxford University Press.

Dörnyei, Z., & Csizér, K. (1998). Ten Commandments for motivating language learners: Results of an empirical study. *Language Teaching Research*, *2*, 203–229.

Dörnyei, Z., & Ottó, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics*, *4*, 43–69.

Dörnyei, Z., & Ryan, S. (2015). *The Psychology of the Language Learner Revisited*. New York, NY: Routledge.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and Researching Motivation* (2nd ed.). Harlow, UK: Longman.

Drago, W. A., & Wagner, R. J. (2004). VARK preferred learning styles and online education. *Management Research News*, *27*(7), 1–13. Retrieved May 18, 2012, from http://www.emeraldinsight.com/doi/abs/10.1108/01409170410784211

Drever, E. (1995). *Using Semi-Structured Interviews in Small-Scale Research: A Teacher's Guide*. Glasgow, UK: Scottish Council for Research in Education.

Drisko, J. (2011). Triangulation. *Oxford Bibliographies*. Retrieved December 10, 2014, from http://www.oxfordbibliographies.com/view/document/obo-9780195389678/obo-9780195389678-0045.xml

Duff, A. (2004). Approaches to learning: The revised approaches to studying inventory (RASI) and its use in management education. *Active Learning in Higher Education*, *5*(1), 56–72.

Dulay, H., & Burt, M. (1977). Remarks on creativity in second language acquisition. In M. Burt, H. Dulay, & M. Finnocchiaro (Eds.), *Viewpoints on English as a second language* (pp. 95–126). New York, NY: Regents.

Dulay, H., Burt, M., & Krashen, S. (1982). *Language Two*. Oxford, UK: Oxford University Press.

Dunn, R. S., & Dunn, K. J. (1979). Learning styles/teaching styles: Should they … can they … be matched? *Educational Leadership*, *36*(4), 238–244.

Dunn, R., Dunn, K., & Perrin, J. (1994). *Teaching Young Children Through Their Individual Learning Styles*. Boston, MA: Allyn and Bacon.

Durrheim, K., & Foster, D. (1997). Tolerance of ambiguity as a content specific construct. *Personality and Individual Differences*, *22*(5), 741–750.

Dwaik, R., & Shehadeh, A. (2010). Motivation types among EFL college students: Insights from the Palestinian context. *An-Najah Research Journal, 24*(1), 330–360.

Ebrahimi, H. R. R. (2013). Anxiety as a deterring element in learning English for oral communication among EFL students. *International Journal of Language Learning and*

Applied Linguistics World, *4*(3), 179–196. Retrieved April 10, 2014, from http://www.ijllalw.org/finalversion4316.pdf

Effiong, M. O. (2013). *Factors influencing foreign language classroom anxiety: An investigation of English learners in four Japanese universities* (Doctoral dissertation, University Of Southampton, Southampton, UK). Retrieved from http://eprints.soton.ac.uk/367372/

Effiong, O. (2016). Getting them speaking: Classroom social factors and foreign language anxiety. *TESOL Journal*, *7*(1), 132–161.

Egel, I. P. (2009). English language learning and teaching styles in two Turkish primary schools. *Social Behavior and Personality*, *37*(8), 1117–1128.

Ehrman. M. E. (1993). Ego boundaries revisited: Toward a model of personality and learning. In J. E. Alatis (Ed.), *Strategic Interaction and Language Acquisition: Theory, Practice, and Research* (pp. 331–362). Washington, DC: Georgetown University.

Ehrman, M. E. (1996). *Understanding Second Language Learning Difficulties: Looking Beneath the Surface*. Thousand Oaks, CA: Sage.

Ehrman, M. (1999). Ego boundaries and tolerance of ambiguity in second language learning. In J. Arnold (Ed.), *Affect in Language Learning* (pp. 68-86). Cambridge: Cambridge University Press.

Ehrman, M. E., Leaver, B. L., & Oxford, R. L. (2003). A brief overview of individual differences in second language learning. *System*, *31*(3), 313–330.

Ehrman, M., & Oxford, R. (1995). Cognition plus: Correlates of language learning success. *The Modern Language Journal*, *79*, 67–89.

Elliot, C. J., & Reynolds, M. (2014). Participative pedagogies, group work and the international classroom: An account of students' and tutors' experiences. *Studies in Higher Education*, *39*(2), 307–320.

Elliott, J. G., & Bempechat, J. (2002). The culture and contexts of achievement motivation. In J. Bempechat, & J. G. Elliott (Eds.), *Learning in Culture and Context: Approaching the Complexities of Achievement Motivation in Student Learning. New Directions for Child and Adolescent Development*, (No. 96) (pp. 7–26). San Francisco, CA: Jossey-Bass.

Ellis, R. (2003). *Task-based Language Learning and Teaching*. Oxford, UK: Oxford University Press.

Elsheikh, F. I. M., Babiker, A. A. A., & Abu Alhassan, A. K. (2014). A proposed strategy to improve the Saudi university students' motivation towards learning English as a foreign language. *American Journal of Research Communication*, *2*(4), 32–50. Retrieved March 13, 2015, from http://www.usa-journals.com/wp-content/uploads/2014/03/Elsheikh_Vol24.pdf

Ely, C. M. (1989). Tolerance of ambiguity and use of second language learning strategies. *Foreign Language Annals*, *22*(5), 437–445.

Ely, C. M. (1995). Second Language Tolerance of Ambiguity Scale. In J. M. Reid (Ed.), *Learning Styles in the ESL/EFL Classroom* (pp. 216–217). Boston, MA: Heinle & Heinle.

Ely, C. M. (1995). Tolerance of ambiguity and the teaching of ESL. In J. M. Reid (Ed.), *Learning Styles in the ESL/EFL Classroom* (pp. 87–95). Boston, MA: Heinle & Heinle.

Endres, M. L., Camp, R., & Milner, M. (2015). Is ambiguity tolerance malleable? Experimental evidence with potential implications for future research. *Frontiers in Psychology*, *6*, 1–7.

Entwistle, N. J., & Ramsden, P. (1983). *Understanding Student Learning*. London, UK: Croom Helm.

Erten, İ. H., & Topkaya, E. Z. (2009). Understanding tolerance of ambiguity of EFL learners in reading classes at tertiary level. *Novitas-ROYAL, 3*(1), 29–44. Retrieved April 10, 2012, from http://www.novitasroyal.org/Vol_3_1/erten_topkaya.pdf

Erton, İ. (2010). Relations between personality traits, language learning styles and success in foreign language achievement. *H. U. Journal of Education*, *38*, 115–126.

Eyesenck, M. W. (1979). Depth, elaboration and distinctiveness. In L. S. Cermak, & F. I. M. Craik (Eds.), *Levels of Processing in Human Memory* (pp. 89–118). Hillsdale, NJ: Erlbaum.

Ezzi, N. A. A. (2012). The impact of gender on the foreign language anxiety of the Yemeni university students. *International Journal of Applied Linguistics & English Literature*, *1*(2), 65–75.

Farajee, M., & Arabmofrad, A. (2015). The effect of collaborative strategic vocabulary learning on EFL learners' self-efficacy. *Journal of Applied Linguistics and Language Research*, *2*(6), 103–118.

Faruk, S. M. G. (2013). English language teaching in Saudi Arabia: A world system perspective. *Transactions on Modern Languages*, *12*(1–2), 73–80.

Felder, R. M. (1993). Reaching the second tier – learning and teaching styles in college science education. *Journal of College Science Teaching*, *23*(5), 286–290.

Felder, R. M. (2010, September 27). Are learning styles invalid? (Hint: No). *On-Course Newsletter*. Retrieved April 27, 2012, from http://oncourseworkshop.com/life-long-learning/learning-styles-invalid-hint/

Felder, R. M. (n.d.). *Learning Styles*. Retrieved February 20, 2015, from http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Learning_Styles.html

Felder, R. M., & Brent, R. (2005). Understanding student differences. *Journal of Engineering Education*, *94*(1), 57–72.

Felder, R., Felder, G., & Dietz, E. J. (2002). The effects of personality type on engineering student performance and attitudes. *Journal of Engineering Education*, *91*(1), 3–17.

Felder, R. M., & Spurlin, J. (2005). Applications, reliability and validity of the Index of Learning Styles. *International Journal of Engineering Education*, *21*(1), 103–112.

Fielding, M. (1994). Valuing difference in teachers and learners: Building on Kolb's learning styles to develop a language of teaching and learning. *The Curriculum Journal*, 5(3), 393–417.

Fink, A. (2016) *How to Conduct Surveys: A Step-by-Step Guide* (6th ed.). Thousand Oaks, CA: Sage.

Fishman, J. A. (1965). Bilingualism, intelligence and language learning. *The Modern Language Journal*, *49*, 227–237.

Fleming, N. D. (2001). *Teaching and Learning Styles: VARK Strategies*. Christchurch, New Zeland: Fleming.

Fleming, N., & Baume, D. (2006). Learning styles again: VARKing up the right tree! *Educational Developments*, *SEDA*, *7*(4), 4–7. Retrieved November 10, 2015, from http://www.johnsilverio.com/EDUI6702/Fleming_VARK_learningstyles.pdf

Fleming, N. D., & Mills, C. (1992). Not another inventory, rather a catalyst for reflection. *To Improve the Academy*, *11*, 137–155.

Foote, M., Davis, W. L., & Marks, S. E. (1975). Tolerance of ambiguity: A variable in client and counsellor pairing. *Conseiller Canadien*, *9*(1), 63–68.

Fowler, F. J., Jr. (2013). *Survey Research Methods* (5th ed.). Thousand Oaks, CA: Sage.

Frey, N., Fisher, D., & Everlove, S. (2009). *Productive Group Work: How to Engage Students, Build Teamwork, and Promote Understanding*. Alexandria, VA: ASCD.

Frykedal, K. F., & Chiriac, E. H. (2012). Group work management in the classroom. *Scandinavian Journal of Education Research*, 13, 162–178. Retrieved November 09, 2013, from http://www.tandfonline.com/doi/abs/10.1080/00313831.2012.725098

Furnham, A., & Marks, J. (2013). Tolerance of ambiguity: A review of the recent literature. *Psychology*, *4*(9), 717–728.

Furnham, A., & Ribchester, T. (1995). Tolerance of ambiguity: A review of the concept, its measurement and applications. *Current Psychology*, *14*(3), 179–199.

Galton, M. (2009). Group work and whole class teaching with 11 to 14 year olds compared. *Cambridge Journal of Education*, *39*(1), 119–140.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.

Gardner, H. (1999). *Intelligence reframed: Multiple intelligences for the 21st century*. New York, NY: Basic Books.

Gardner, R. C. (1985). *Attitude/Motivation Test Battery: International AMTB Research Project*. Retrieved July 14, 2012, from http://publish.uwo.ca/~gardner/docs/englishamtb.pdf

Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London, UK: Arnold.

Gardner, R. C., & Lambert, W. E. (1972). Motivational variables in second language acquisition. In R. C. Gardner & W. Lambert (Eds.), *Attitudes and Motivation in Second Language Learning* (pp. 119–216). Rowley, MA: Newbury House.

Gardner, R. C., & MacIntyre, P. D. (1992). A student's contributions to second language learning. Part 1: Cognitive variables. *Language Teaching*, *25*, 211–220.

Gardner, R. C., & MacIntyre, P. D. (1993). On the measurement of affective variables in second language learning. *Language Learning*, *43*, 157–194.

Gardner, R. C., & Tremblay, P. F. (1994). On motivation, research agendas, and theoretical frameworks. *The Modern Language Journal*, *78*, 359–368.

Gibson, J. T., & Chandler, L. A. (1988). Educational Psychology–Mastering Principles and Applications. Boston, MA: Allyn and Bacon.

Gilakjani, A. B. (2012). Visual, auditory, kinaesthetic learning styles and their impacts on English language teaching. *Journal of Studies in Education, 2*(1), 104–113.

Gilbert, J. E., & Swanier, C. A. (2008). Learning styles: How do they fluctuate? *Institute for Learning Styles Journal*, *1*, 29–40.

Gillham, B. (2007). *Developing a Questionnaire* (2nd ed.). London, UK: Continuum

Gilovich, T., Keltner, D., & Nisbett, R. E. (2006). *Social Psychology*. New York, NY: Norton.

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York, NY: Aldine de Gruyter.

Gliner, J. A., Morgan, G. A., & Leech, N. L. (2011). *Research Methods in Applied Settings: An Integrated Approach to Design and Analysis*. New York, NY: Routledge.

Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th ed.). London, UK: RoutledgeFalmer.

Graham, S., & Weiner, B. (1995). Theories and principles of motivation. In D. Berliner, & R. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 63–84). New York, NY: MacMillan.

Gregersen, T., & Horwitz, E. K. (2002). Language learning and perfectionism: Anxious and non-anxious language learners' reactions to their own oral performance. *The Modern Language Journal*, *86*(4), 562–570.

Gregory, G. H., & Chapman, C. (2002). *Differentiated Instructional Strategies: One Size Doesn't Fit All.* Thousand Oaks, CA: Corwin.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 105–111). Thousand Oaks, CA: Sage.

Guiora, A. (1979). Personality and language behavior: A restatement. *Language Learning*, *29*, 193–204.

Hadfield, J. (2006). Teacher education and trainee learning style. *Regional Language Centre Journal*, *37*(3), 367–386.

Han, M. (2015). An empirical study on the application of cooperative learning to English listening classes. *English Language Teaching*, *8*(3), 177–184. Retrieved January 05, 2016, from http://www.ccsenet.org/journal/index.php/elt/article/view/45426

Harkness, J. A., & Schoua-Glusberg, A. (1998). Questionnaires in translation. *ZUMA-Nachrichten Spezial*, *3*, 87–126. Retrieved June 15, 2013, from http://isites.harvard.edu/fs/docs/icb.topic506406.files/znspez3_04_Harkness_Glusberg.pdf

Harley, B., & Hart, D. (2002). Age, aptitude, and second language learning on a bilingual exchange. In P. Robinson (Ed.), *Individual Differences and Instructed Language Learning* (pp. 301–330). Amsterdam, the Netherlands: Benjamins.

Harmer, J. (2001). *The Practice of English Language Teaching* (3rd ed.). London, UK: Pearson Education.

Harvard University. (2008). *Foundations of Qualitative Research in Education*. Retrieved September 29, 2015, from http://isites.harvard.edu/icb/icb.do?keyword=qualitative&pageid=icb.page340910

Hashemi, M. (2011). Language stress and anxiety among the English language learners. *Procedia - Social and Behavioral Sciences*, *30*, 1811–1816. Retrieved October 20, 2014, from http://www.sciencedirect.com/science/article/pii/S1877042811021744

Healey, M., Kneale, P., & Bradbeer, J. (2005). Learning styles among geography undergraduates: A geographical comparison', *Royal Geographical Society*, *37*(1), 30–42.

Heidari, F., Izadi, M., & Ahmadian, M. V. (2012). The relationship between Iranian EFL learners' self-efficacy beliefs and use of vocabulary learning strategies. *English Language Teaching*, *5*(2), 174–182. Retrieved October 22, 2013, from http://www.ccsenet.org/journal/index.php/elt/article/view/14573

Heppner, P. P., Wampold, B. E., Kivlighan, D. M. (2008). *Research Design in Counseling* (3rd ed.). Belmont, CA: Thompson.

Hewitt, E., & Stephenson, J. (2012). Foreign language anxiety and oral exam performance: A replication of Phillips's MLJ study. *Modern Language Journal*, *96*, 170–189.

Hickson, J., & Baltimore, M. (1996). Gender related learning style patterns of middle school pupils. *School Psychology International*, *17*(1), 59–70.

Holloway, I. (2005). *Qualitative Research in Health Care*. Maidenhead, UK: Open University Press.

Horwitz, E. K. (1991). *Language Anxiety: From Theory and Research to Classroom Implications*. Upper Saddle River, NJ: Prentice Hall.

Horwitz, E. K. (2000). It ain't over til it's over: On foreign language anxiety, first language deficits, and the confounding of variables. *The Modern Language Journal*, *84*, 256–259.

Horwitz, E. K. (2016). Reflections on Horwitz (1986), "Preliminary evidence for the validity and reliability of a foreign language anxiety scale". *TESOL Quarterly*. Retrieved April 18, 2016, from http://onlinelibrary.wiley.com/doi/10.1002/tesq.295/abstract

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, *70*(2), 125–132.

Horwitz, E. K., & Young, D. J. (1991). *Language Anxiety: From Theory and Research to Classroom Implications*. Englewood Cliffs, NJ: Prentice Hall.

Hsu, T.–C. (2007). *A cooperative task-based learning approach to motivating low achieving readers of English in a Taiwanese university* (Doctoral dissertation, University of Durham, Durham, UK). Retrieved from http://etheses.dur.ac.uk/1896/

Huang, Q. (2012). Study on correlation of foreign language anxiety and English reading anxiety. *Theory and Practice in Language Studies*, *2*(7), 1520–1525.

Huang, S., Eslami, Z., & Hu, R.–J. S. (2010). The relationship between teacher and peer support and English-language learners' anxiety. *English Language Teaching*, *3*(1), 32–

40. Retrieved November 14, 2011, from
http://www.ccsenet.org/journal/index.php/elt/article/view/5200

Irvine, J. J., & York, D. E. (1995). Learning styles and culturally diverse students: A literature review. In J. A. Banks (Ed.), *Handbook of Research on Multicultural Education* (pp. 484–497). New York, NY: Macmillan.

Javid, C. Z. (2014). Measuring language anxiety in an EFL context. *Journal of Education and Practice*, *5*(25), 180–192.

Javid, C. Z., Al-Asmari, A., & Farooq, U. (2012). Saudi undergraduates' motivational orientations towards English language learning along gender and university major lines: A comparative study. *European Journal of Social Sciences, 27*(2), 283–300.

Johnson, B., & Christensen, L. (2004). *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (2nd ed.). Boston, MA: Pearson Education.

Johnson, D. W., & Johnson, R. T. (2012). Cooperative learning. In D. J. Christie (Ed.), *The Encyclopedia of Peace Psychology* (Vol. 1) (pp. 263–267). Chichester, UK: Wiley-Blackwell.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14–26.

Joy, S., & Kolb, D. A. (2009). Are there cultural differences in learning style? *International Journal of Intercultural Relations*, *33*(1), 69–85.

Kagan, S. (1994). *Cooperative Learning*. San Juan Capistrano, CA: Kagan Cooperative Learning.

Kamran, S. K. (2011). Effect of gender on ambiguity tolerance of Iranian English language learners. *Journal of Education and Practice, 2*(11&12), 25–33.

Kamran, S. K., & Maftoon, P. (2012). An analysis of the associations between ambiguity tolerance and EFL reading strategy awareness. *English Language Teaching*, *5*(3), 188–196. Retrieved July 10, 2013, from
http://www.ccsenet.org/journal/index.php/elt/article/view/15279

Kayaoğlu, M. N., & Sağlamel, H. (2013). Students' perceptions of language anxiety in speaking classes. *Journal of History Culture and Art Research*, *2*(2), 142–160.

Keefe, J. W. (1979). Learning style: An overview. In *NASSP's Student learning styles: Diagnosing and prescribing programs*, 1–17. Reston, VA: National Association of Secondary School.

Keefe, J. W. (1987). *Theory and Practice*. Reston, VA: National Association of Secondary School Principals.

Khan, I. A. (2011). Learning difficulties in English: Diagnosis and pedagogy in Saudi Arabia. *Educational Research*, *2*(7), 1248–1257.

Killen, R. (2006). *Effective Teaching Strategies: Lessons from Research and Practice* (4th ed.). South Melbourne, Australia: Thomson Social Science Press.

Kim, Y. (2008). The contribution of collaborative and individual tasks to the acquisition of L2 vocabulary. *The Modern Language Journal*, *92*, 114–130.

Kim, Y.–K., & Kim, T.-Y. (2011). The effect of Korean secondary school students' perceptual learning styles and ideal L2 self on motivated L2 behavior and English proficiency. *Korean Journal of English Language and Linguistics*, *11*(1), 21–42.

King, N., & Horrocks, C. (2010). *Interviews in Qualitative Research*. London, UK: Sage.

Kinsella, K. (1995). Understanding and empowering diverse learners in the ESL classroom. In J. M. Reid (Ed.), *Learning Styles in the ESL/EFL Classroom*, 170–194. Boston: Heinle & Heinle.

Kinsella, K., & Sherak, K. (1994). Classroom Work Style Survey. In J. M. Reid (Ed.), *Understanding Learning Styles in the Second Language Classroom* (pp. 235–237). Upper Saddle River, NJ: Prentice Hall.

Kinsella, K., & Sherak, K. (1998). Designing ESL classroom collaboration to accommodate diverse work styles. In J. M. Reid (Ed.), *Understanding Learning Styles in the Second Language Classroom* (pp. 85–99). Upper Saddle River, NJ: Prentice Hall.

Kneff, T. M. (2012). Language learning spaces: Creating a communicative classroom. In K. Bradford-Watts, R. Chartrand, & E. Skier (Eds.), *The 2011 Pan-SIG Conference Proceedings* (pp. 128–148). Matsumoto, Japan: JALT.

Kolb, A. Y., & Kolb, D. A. (2005). *The Kolb Learning Style Inventory - Version 3.1 2005 Technical Specifications*. Boston, MA: Hay Group Transforming Learning.

Kolb, D. A. (1981). Experiential learning theory and the learning style inventory: A reply to Freedman and Stumpf. *Academy of Management Review*, *6*(2), 289–296. Retrieved April 18, 2013, from http://amr.aom.org/content/6/2/289.short

Kormos, J., & Csizér, K. (2008), Age-related differences in the motivation of learning English as a foreign language: Attitudes, selves, and motivated learning behavior. *Language Learning*, *58*, 327–355.

Kormos, J., & Smith, A. M. (2012). *Teaching Languages to Students with Specific Learning Differences*. Bristol, UK: Multilingual Matters.

Krashen, S. D. (1981). *Second Language Acquisition and Second Language Learning*. Retrieved March 22, 2013, from

http://testing.greenlitex.com/sites/mmea.greenlitestaging.com/files/Second%20Languag e%20Acquisition%20%26%20Learning%20by%20S.%20Krashen.pdf

Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. London, UK: Longman.

Kvale, S. (1996). *InterViews: An Introduction to Qualitative Research Interviewing*. Thousand Oaks, CA: Sage.

Lankshear, C., & Knobel, M. (2004). *A Handbook for Teacher Research: From Design to Implementation.* Maidenhead, UK: Open University Press.

Leite, W. L., Svinicki, M., & Shi, Y. (2010). Attempted validation of the scores of the VARK: Learning styles inventory with multitrait–multimethod confirmatory factor analysis models. *Educational and Psychological Measurement*, *70*, 323–339.

Li, C. (2012). An investigation of Chinese students' learning styles at an English-medium university in Mainland China. *Theory and Practice in Language Studies*, *2*(1), 6–13.

Little, D. (2000). Learner autonomy: Why foreign languages should occupy a central role in the curriculum. In S. Green (Ed.), *New Perspectives on Teaching and Learning Modern Languages* (pp. 24–45). Clevedon, UK: Multilingual Matters.

Liu, M. (2006). Anxiety in Chinese EFL students at different proficiency levels. *System*, *34*, 301–316.

Liu, M. (2007). Chinese students' motivation to learn English at the tertiary level. *Asian EFL Journal*, *9*(1), 126–146. Retrieved March 15, 2012, from http://asian-efl-journal.com/1042/quarterly-journal/2007/03/

Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *The Modern Language Journal*, *92*(1), 71–86.

Liu, M., & Ni, H. (2015). Chinese university EFL learners' foreign language writing anxiety: Pattern, effect and causes. *English Language Teaching*, *8*(3), 46–58. Retrieved January 22, 2016, from http://www.ccsenet.org/journal/index.php/elt/article/view/45414

Loewen, S., & Plonsky, L. (2015). *An A–Z of Applied Linguistics Research Methods*. New York, NY: Palgrave.

MacIntyre, P. D. (1995). How does anxiety affect second language learning?: A reply to Sparks and Ganschow. *Modern Language Journal*, *79*, 1–32.

MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in Foreign Language and Second Language Learning: A Practical Guide to Creating a Low-Anxiety Classroom Atmosphere* (pp. 24–45). Boston, MA: McGraw-Hill.

MacIntyre, P. D., & Gardner, R. C. (1991). Methods and results in the study of anxiety in language learning: A review of the literature. *Language Learning*, *41*, 85–117.

MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, *44*, 283–305.

MacIntyre, P. D., Noels, K. A., & Clément, R. (1997). Biases in self-ratings of second language proficiency: The role of language anxiety. *Language Learning*, *47*, 265–287.

MacKeracher, D. (2004). *Making Sense of Adult Learning* (2nd ed.). Toronto, Ontario, Canada: University of Toronto.

Magogwe, J. M. (2006). The relationship between proficiency and self-efficacy beliefs of the University of Botswana students learning ESL. *Marang: Journal of Language and Learning*, *16*, 121–131.

Mahib ur Rahman, M., & Alhaisoni, E. (2013). Teaching English in Saudi Arabia: Prospects and challenges. *Academic Research International*, *4*(1), 112–118.

Makrami, B. H. (2010). *Motivation and attitude of Saudi university's learners of English for specific purposes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3402118)

Manner, B. M. (2001). Learning styles and multiple intelligences in students. *Journal of College Science Teaching*, *30*(6), 390–393.

Marzban, A., Barati, H., & Moinzadeh, A. (2012). An investigation into ambiguity tolerance in Iranian senior EFL undergraduates. *English Language Teaching*, *5*(1), 76–85. Retrieved March 22, 2013, from http://www.ccsenet.org/journal/index.php/elt/article/view/13879

McBurney, D. H., & White, T. L. (2009). *Research Methods* (8th ed.). Belmont, CA: Wadsworth.

McCollum, D. L. (2003). Utilizing non-cognitive predictors of foreign language achievement. *Applied Language Learning*, *13*(1), 19–32.

McDonough, J., Shaw, C., & Masuhara, H. (2012). *Materials and Methods in ELT: A Teacher's Guide*. Chichester, UK: Wiley-Blackwell.

McLain, D. L. (1993). The MSTAT-1: A new measure of an individual's tolerance for ambiguity. *Educational and Psychological Measurement*, *53*, 183–189.

McNamara, C. (n.d.). *General Guidelines for Conducting Research Interviews*. Retrieved September 30, 2015, from http://managementhelp.org/businessresearch/interviews.htm#anchor566521

McNamara, M. J., & Deane, D. (1995). Self-assessment activities: Toward language autonomy in language learning, *TESOL Journal*, *5*(1), 17–21.

Mehrpour, S., & Vojdani, M. (2012). Globalization and EFL learning motivation: a new perspective on integrative vs. instrumental motivation among Iranian learners of English. *Journal of Modern Linguistics*, *2*(2), 43–50.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2012). *Learning in Adulthood: A Comprehensive Guide*. San Francisco, CA: Wiley.

Moghaddam, M. Y., & Faruji, L. F. (2013). Cooperative tasks and lexical development of EFL learners. *TESL-EJ*, *17*(2), 1–10. Retrieved January 05, 2014, from http://www.tesl-ej.org/wordpress/issues/volume17/ej66/ej66a2/

Morgan, J. A., & Fonseca, M. C. (2004). Multiple intelligence theory and foreign language learning: A brain-based perspective. *International Journal of English studies*, *4*(1), 119–136.

Muijs, D. (2004). *Doing Quantitative Research in Education with SPSS*. London, UK: Sage.

Murphy, R. J., Gray, S. A., Straja, S. R., & Bogert, M. C. (2004). Student learning preferences and teaching implications: Educational methodologies. *Journal of Dental Education*, *68*(8), 859–866. Retrieved November 07, 2012, from http://www.jdentaled.org/content/68/8/859.short

Murray, B. (2005). *Self-determination theory in a collectivist educational context: Motivation of Korean students studying English as a foreign language* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3176308)

Myers, I. B. (1992). *Introduction to Type*. Palo Alto, CA: Consulting Psychologists Press.

Naghadeh, S. A., Naghadeh, N. A., Naghadeh, M. A., & Aminpour, H. (2014). The relationship between anxiety and Iranian EFL learners' listening comprehension. *Journal of Educational and Management Studies*, *4*(2), 278–284.

Nan, H. (2014). A feasible study on cooperative learning in large class college English teaching. *Theory and Practice in Language Studies*, *4*(9), 1862–1868.

Naqeeb, H., & Awad, A. (2011). Learning styles as perceived by learners of English as a foreign language in the English Language Center of the Arab American University - Jenin, Palestine. *An-Najah Research Journal*, *25*(8), 2231–2256.

Naseri, F., & Ghabanchi, Z. (2014). The relationship between self-efficacy beliefs, locus of control and reading comprehension ability of Iranian EFL advance learners. *International Journal of Language Learning and Applied Linguistics World*, *5*(1), 156–174.

Naseri, M., & Zaferanieh, E. (2012). The relationship between reading self-efficacy beliefs, reading strategy use and reading comprehension level of Iranian EFL Learners. *World Journal of Education*, *2*(2), 64–75.

Neuman, W. L. (2006). *Social Research Methods: Quantitative and Qualitative* (6th ed.). London, UK: Pearson Education.

Nezhad, H. Y., Atarodi, I., & Khalili, M. (2013). Why on earth is learners' patience wearing thin: The interplay between ambiguity tolerance and reading comprehension valence of Iranian intermediate level students. *Theory and Practice in Language Studies*, *3*(8), 1490–1495.

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, *7*(2) 133–144.

Noels, K. A. (2001). New orientations in language learning motivation: Towards a model of intrinsic, extrinsic and integrative orientations. In Z. Dörnyei, & R. Schmidt (Eds.), *Motivation and Second Language Acquisition* (pp. 43–68). Honolulu, HI: Second Language Teaching and Curriculum Centre, University of Hawaii.

Noels, K. A., Pelletier, L. G., & Clément, R. (1999). Perceptions of teacher communicative style and students' intrinsic and extrinsic motivation. *The Modern Language Journal*, *83*, 23–34.

Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Language Learning Orientations Scale: Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales (LLOS – IEA). Retrieved January 05, 2012, from http://www.psych.ualberta.ca/~knoels/personal/lab/doc/LLOS.pdf

Noels, K. A., Pelletier, L. G., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, *50*(1), 57–85.

Norton, B. (2013). *Identity and Language Learning: Extending the Conversation* (2nd ed.). Bristol, UK: Multilingual Matters.

Nunan, D. (1992). *Research Methods in Language Learning*. Cambridge, UK: Cambridge University Press.

Nunan, D. (2010). *Teaching English to Young Learners*. Anaheim, CA: Anaheim University Press.

Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York, NY: McGraw-Hill.

Oliver, P. (2003). *The Student's Guide to Research Ethics*. Maidenhead, UK: Open University Press.

Ormrod, J. E. (1999). *Human Learning* (3rd ed.). Upper Saddle River, NJ: Pearson Education.

Ormrod, J. E. (2014). *Educational Psychology: Developing Learners*. Upper Saddle River, NJ: Pearson Education.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. New York, NY: Newbury House.

Oxford, R. L. (1992). Who are our students?: A synthesis of foreign and second language research on individual differences with implications for instructional practice. *TESL Canada Journal*, *9*(2), 30–49.

Oxford, R. L. (1996). *Language Learning Strategies around the World: Cross-Cultural Perspectives*. Honolulu, Hi: University of Hawai'i Press.

Oxford, R. L. (1997). Cooperative learning, collaborative learning, and interaction: Three communicative strands in the language classroom. *The Modern Language Journal*, *81*, 443–446.

Oxford, R. L. (1999). Anxiety and the language learner: New insights. In J. Arnold (Ed.), *Affect in Language Learning* (pp. 58–67). Cambridge: Cambridge University Press.

Oxford, R. L. (2001). Language learning styles and strategies. In M. Celce-Murcia (Ed.), *Teaching English as a Second or Foreign Language* (3rd ed.) (pp. 359–366). Boston, MA: Heinle & Heinle.

Oxford, R. L. (2003). Language learning styles and strategies: An overview. *GALA*, *41*, 1–25.

Oxford, R. L., & Ehrman, M. E. (1993). Second language research on individual differences. *Annual Review of Applied Linguistics*, *13*, 188–205.

Oxford, R. L., Ehrman, M. E., & Lavine, R. Z. (1991). Style wars: Teacher-student style conflicts in the language classroom. In S. S. Magnan (Ed.), *Challenges in the 1990s for College Foreign Language Programs* (pp. 1–35). Boston, MA: Heinle & Heinle.

Oxford, R. L., Hollaway, M. E., & Horton-Murillo, D. (1992). Research and practical implications for teaching in the multicultural tertiary ESL/EFL classroom. *System*, *20*(4), 439–456.

Oxford, R. L., & Lavine, R. (1991). Teacher-student "style wars" in the language classroom: Research insights and suggestions. *Journal of the Association of Foreign Language Departments*, *23*(2), 38–45.

Oxford, R. L., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *The Modern Language Journal*, *78* (1), 12–28.

Pajares, F. (1996). Self-efficacy in academic settings. *Review of Educational Research*, *66*, 543–578.

Pajares, F. (2006). Self-efficacy during childhood and adolescence: Implications for teachers and parents. In F. Pajares, & T. Urdan (Eds.), *Self-Efficacy Beliefs of Adolescents* (pp. 339–367). Greenwich, CT: Information Age.

Pajares, F., Miller, M., & Johnson, M. J. (1999). Gender differences in writing self-beliefs of elementary school students. *Journal of Educational Psychology*, *91*(1), 50–61.

Pallant, J. (2013). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS* (5th ed.). Maidenhead, UK: Open University Press.

Pallapu, P. (2007). Effects of visual and verbal learning styles on learning. *Institute for Learning Styles Journal*, *1*, 34–39.

Paltridge, B., & Phakiti, A. (2015). *Research Methods in Applied Linguistics: A Practical Resource*. London, UK: Bloomsbury Academic.

Pan, G., Zang, Y., & Wu, D. (2010). A survey of English learning motivation of students in Qingdao Agricultural University. *Journal of Language Teaching and Research*, *1*(2), 151–156.

Park, G.–P., & French, B. F. (2013). Gender differences in the Foreign Language Classroom Anxiety Scale. *System*, *41*, 462–471.

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2009). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, *9*(3), 105–119.

Patten, M. L. (2005). *Understanding Research Methods* (5th ed.). Glendale, CA: Pyrczak.

Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods* (4th ed.). Thousand Oaks, CA: Sage.

Peacock, M. (2001). Match or mismatch? Learning styles and teaching styles in EFL. *International Journal of Applied Linguistics*, *11*(1), 1–20.

Phantharakphong, P. (2012). English learning styles of high and low performance students of the Faculty of Education, Khon Kaen University. *Procedia - Social and Behavioral Sciences*, *46*, 3390–3394. Retrieved March 22, 2015, from http://www.sciencedirect.com/science/article/pii/S1877042812018083

Pica, T. (2002). Subject-matter content: How does it assist the interactional and linguistic needs of classroom language learners? *The Modern Language Journal*, *86*, 1–19.

Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in Education: Theory, Research, and Applications* (2nd ed.). Upper Saddle River, NJ: Pearson Education.

Pishghadam, R. (2009). A quantitative analysis of the relationship between emotional intelligence and foreign language learning. *Electronic Journal of Foreign Language Teaching*, *6*(1), 31–41.

Pittan, T. S., Boggiano, A. K., & Ruble, D. N. (1983). Intrinsic and extrinsic motivational orientation: Limiting conditions on the undermining and enhancing effects of reward on intrinsic motivation. In J. M. Levine, P. R. Pintrich, & M. Wang (Eds.), *Teacher and Student Perceptions: Implications for Learning*, (pp. 319–340). Hillsdale, NJ: Erlbaum.

Psaltou-Joycey, A., & Kantaridou, Z. (2011). Major, minor, and negative learning style preferences of university students. *System*, 39, 103–112.

Rahimi, A., & Abedini, A. (2009). The interface between EFL learners' self-efficacy concerning listening comprehension and listening proficiency. *Novitas-ROYAL*, *3*(1), 14–28. Retrieved March 22, 2013, from http://www.novitasroyal.org/Vol_3_1/rahimi_abedini.pdf

Rayner, S., & Riding, R. (1997). Towards a categorisation of cognitive styles and learning styles. *Educational Psychology*, *17*(1–2), 5–27.

Reid, J. M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, *21*(1), 87–110.

Reid, J. M. (1984). Perceptual Learning Styles Preference Questionnaire. In J. M. Reid (Ed.), *Learning Styles in the ESL/EFL Classroom* (1995) (pp. 202–207). Boston, MA: Heinle & Heinle.

Reid, J. M. (1995). *Learning Styles in the ESL/EFL Classroom*. Boston, MA: Heinle & Heinle.

Reid, J. M. (1998). *Understanding Learning Styles in the Second Language Classroom*. Upper Saddle River, NJ: Prentice Hall.

Reiff, J. C. (1992). *Learning Styles*. Washington, DC: National Education.

Rezazadeh, M., & Tavakoli, M. (2009). Investigating the relationship among test anxiety, gender, academic achievement and years of study: A case of Iranian EFL university students. *English Language Teaching*, *2*(4), 68–74. Retrieved November 25, 2011, from http://www.ccsenet.org/journal/index.php/elt/article/view/4449

Riazi, A. M. (2016). *The Routledge Encyclopedia of Research Methods in Applied Linguistics*. New York, NY: Routledge.

Richards, J. C., & Bohlke, D. (2011). *Creating Effective Language Lessons*. New York, NY: Cambridge University Press.

Richards, K. (2009). Trends in qualitative research in language teaching since 2000. *Language Teaching*, *42*(2), 147–180.

Riding, R. J. (1997). On the nature of cognitive style. *Educational Psychology*, *17*(1&2), 29–49.

Riding, R. J., & Cheema, I. (1991). Cognitive styles—An overview and integration. *Educational Psychology*, *11*(3), 193–215.

Rossman, G. B., & Rallis, S. F. (2012). *Learning in the Field: An Introduction to Qualitative Research*. (3rd ed.). Thousand Oaks, CA: Sage.

Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, *9*(1), 41–51.

Ryan, R. (2009). Self-determination theory and wellbeing. *WeD Research Review*, 1. Bath, UK: Wellbeing in Developing Countries, University of Bath.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*, 54–67.

Sa'dabadi, N. (2014). The Relationship among level of ambiguity tolerance and cloze test performance of Iranian EFL learners across gender. *International Journal of Language Learning and Applied Linguistics World*, *6*(4), 337–347. Retrieved October 11, 2015, from http://www.ijllalw.org/finalversion6427.pdf

Salehi, M., & Bagheri, M. S. (2011). The relationship between Reid's learning styles and Oxford's language learning strategies in adult EFL learners of Iran Language Institute. *The Iranian EFL Journal*, *7*(4), 120–142.

Santana-Williamson, E. (2002). Raising students' awareness of different learning styles. *TESOL Journal*, *11*(4), 36–37.

Sarasin, L. C. (1999). *Learning Style Perspectives: Impact in the Classroom*. Madison, WI: Atwood.

Schunk, D. H. (1996). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal*, *33*(2), 359–382.

Schunk, D. H., & Miller, S. D. (2002). Self-efficacy and adolescents' motivation. In F. Pajares, & T. C. Urdan (Eds.), *Academic Motivation of Adolescents* (pp. 29–52). Charlotte, NC: IAP.

Schunk, D. H., & Pajares, F. (2009). Self-efficacy theory. In K. R. Wentzel, & A. Wigfield (Eds.), *Handbook of Motivation at School* (pp. 35–53). New York, NY: Routledge.

Scott, C. (2010). The enduring appeal of 'learning styles'. *Australian Journal of Education*, *54*(1), 5–17. Retrieved May 22, 2014, from http://aed.sagepub.com/content/54/1/5.short

Scovel, T. (1978). The effect of affect on foreign language learning: A review of the anxiety research. *Language Learning*, *28*(1), 129–42. Retrieved February 11, 2012, from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-1770.1978.tb00309.x/abstract

Seidman, I. (2006). *Interviewing as Qualitative Research: A Guide for Researchers in Education and Social Sciences* (3rd ed.). New York, NY: Teachers College Press.

Seifoori, Z., & Zarei, M. (2011). The relationship between Iranian EFL learners' perceptual learning styles and their multiple intelligences. *Procedia - Social and Behavioral Sciences*, *29*, 1606–1613. Retrieved May 22, 2014, fromhttp://www.sciencedirect.com/science/article/pii/S1877042811028709

Serraj, S., & Noordin, N. (2013). Relationship among Iranian EFL students' foreign language anxiety, foreign language listening anxiety and their listening comprehension. *English Language Teaching*, *6*(5), 1–12. Retrieved May 09, 2014, from http://www.ccsenet.org/journal/index.php/elt/article/view/26233

Shaikholeslami, R., & Khayyer, M. (2006). Intrinsic motivation, extrinsic motivation, and learning English as a foreign language. *Psychological Reports*, *99*, 813–818.

Shaw, R.–S. (2012). A study of the relationships among learning styles, participation types, and performance in programming language learning supported by online forums. *Computers & Education*, *58*, 111–120.

Shi, C. (2011). A study of the relationship between cognitive styles and learning strategies. *Higher Education Studies*, *1*(1), 20–26.

Silver, H., Strong, R., & Perini, M. (1997). Integrating learning styles and multiple intelligences. *Educational Leadership*, *55*(1), 22–29.

Sims, R. R. (2006). *Human Resource Development: Today and Tomorrow*. Charlotte, NC: Information Age.

Slater, H. L., Lujan, H. L., & Di Carlo, S. E. (2007). Does gender influence learning style preferences of first-year medical students? *Advances in Physiology Education*, *31*, 336–342.

Smith, I. (2005). Different in similar ways: Making sense of learning styles. Paisley, UK: Learning Unlimited.

Smith, P. L., & Ragan, T. J. (1999). *Instructional Design*. New York, NY: Wiley.

Snowman, J., & McCown, R. (2011). *Psychology Applied to Teaching* (13th ed.). Belmont, CA: Wadsworth.

Sparks, R. (2006). Learning styles—Making too many "wrong mistakes": A response to Castro and Peck. *Foreign Language Annals*, *39*, 520–528.

Sparks, R. L., & Ganschow, L. (1991). Foreign language learning differences: Affective or native language aptitude differences? *The Modern Language Journal*, *75*(1), 3–16.

Sparks, R. L., & Ganschow, L. (2007). Is the Foreign Language Classroom Anxiety Scale measuring anxiety or language skills? *Foreign Language Annals*, *40*(2), 260–287.

Sparks, R. L., Ganschow, L., & Javorsky, J. (2000). Deja vu all over again: A response to Saito, Horwitz, and Garza. *The Modern Language Journal*, *84*(2), 251–255.

Spielberger, C. D. (1980). *Test Anxiety Inventory: Preliminary Professional Manual*. Palo Alto, CA: Consulting Psychologists.

Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Spitzlinger, R. (2011). *Mixed Method Research: Qualitative Comparative Analysis*. Norderstedt, Germany: Grin Verlag.

Sprenger, M. (2008). *Differentiation through Learning Styles and Memory* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Srichanyachon, N. (2012). The relationships of learning styles, learning motivation and academic success in EFL learning context. *Mediterranean Journal of Social Sciences*, *3*(3), 211–216.

Stengal, E. (1939). On learning a new language. *International Journal of Psychoanalysis*, *20*, 471–479. Retrieved January 14, 2013, from http://search.proquest.com/openview/c592a74ce782c9adcbdbea2ffa9c0b0a/1?pq-origsite=gscholar&cbl=1818729

Stirling, P. (1987, June). Power lines. *New Zealand Listener*, 1315.

Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. Denzin, & Y. Lincoln (Eds.), *The Handbook of Qualitative Research* (pp. 273–285). Thousand Oaks, CA: Sage.

Su, C. T., & Parham, L. D. (2002). Generating a valid questionnaire translation for cross-cultural use. *American journal of Occupational Therapy, 56*, 581–585.

Suwantarathip, O., & Wichadee, S. (2010). The impacts of cooperative learning on anxiety and proficiency in an EFL class. *Journal of College Teaching & Learning*, *7*(11), 51–58.

Thompson, A. S., & Lee, J. (2014). The impact of experience abroad and language proficiency on language learning anxiety. *TESOL Quarterly*, *48*(2), 1–23.

Tileston, D. W. (2004). *What Every Teacher Should Know: Diverse Learners*. Thousand Oaks, CA: Corwin Press.

Tilfarlioğlu, F. T., & Cinkara, E. (2009). Self-efficacy in EFL: Differences among proficiency groups and relationship with success. *Novitas-ROYAL*, *3*(2), 129–142. Retrieved February 12, 2013, from http://www.novitasroyal.org/Vol_3_2/tilfarlioglu.pdf

Tilfarlioglu, F. Y., & Ciftci, F. S. (2011). Supporting self-efficacy and learner autonomy in relation to academic success in EFL classrooms (a case study). *Theory and Practice in Language Studies*, *1*(10), 1284–1294.

Tobias, S. (1986). Anxiety and cognitive processing of instruction. In R. Schuwarzer (Ed.), *Self-related Cognition in Anxiety and Motivation* (pp. 35–54). Hillsdale, NJ: Erlbaum.

Trang, T. T. T. (2012). A review of Horwitz, Horwitz and Cope's theory of foreign language anxiety and the challenges to the theory. *English Language Teaching*, *5*(1), 69–75. Retrieved February 12, 2013, from http://www.ccsenet.org/journal/index.php/elt/article/view/13878

Tripp, O., & Moore, S. (2007). Examination of pre-service teachers' learning styles and temperament styles within an elementary science methods course. *Institute for Learning Styles Journal*, *1*, 23–33.

Tuan, L. T., & Nhu, N. T. K. (2010). Theoretical review on oral interaction in EFL classrooms. *Studies in Literature and Language*, *1*(4), 29–48.

Turner, M., & Lowe, R. (2014). Foregrounding learner research for TBL activities. In R. Chartrand, G. Brooks, M. Porter, & M. Grogan (Eds.), *The 2013 Pan-SIG Conference Proceedings* (pp. 138–144). Nagoya, Japan: JALT.

Ushioda, E. (2008). Motivation and good language learners. In C. Griffiths (Ed.), *Lessons from Good Language Learners* (pp. 19–34). Cambridge, UK: Cambridge University Press.

Vahedi, V. S., & Fatemi, A. H. (2016). The role of emotional intelligence and tolerance of ambiguity in academic Iranian EFL learners' willingness to communicate. *Journal of Language Teaching and Research*, *7*(1), 178–184.

Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. *Advances in Experimental Social Psychology*, *29*, 271–360.

Vallerand, R. J., Pelletier, L. G., & Koestner, R. (2008). Reflections on self-determination theory. *Canadian Psychology*, *49*(3), 257−262.

van Compernolle, R. A. (2016). Are multilingualism, tolerance of ambiguity, and attitudes toward linguistic variation related? *International Journal of Multilingualism*, *13*(1), 61–73.

van Lier, L. (1996). *Interaction in the Language Curriculum: Awareness, Autonomy and Authenticity*. Harlow, UK: Longman.

Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational psychologist*, *41*(1), 19−31.

VARK. (n.d.). VARK: A Guide to Learning Styles. Retrieved November 23, 2011, from http://vark-learn.com/

Walliman, N. (2005). *Your Research Project* (2nd ed.). London, UK: Sage.

Wang, F. (2008). Motivation and English achievement: An exploratory and confirmatory factor analysis of a new measure for Chinese students of English learning. *North American Journal of Psychology*, *10*(3), 633–646.

Wang, S. (2010). An experimental study of Chinese English major students' listening anxiety of classroom learning activity at the university level. *Journal of Language Teaching and Research*, *1*(5), 562–568.

Wang, Y. (2010). A survey of the foreign language learning motivation among polytechnic students in China. *Journal of Language Teaching and Research*, *1*(5), 605–613.

Welsh, E. (2002). Dealing with data: Using NVivo in the qualitative data analysis process. *Forum: Qualitative Social Research*, *3*(2), Art. 26. Retrieved May 17, 2015, from http://www.qualitative-research.net/index.php/fqs/article/view/865/1880#gcit

White, C. (1999). Expectations and emergent beliefs of self-instructed language learners. *System* 27(4), 443–457.

White, M. N. (1977). Social motivation in the classroom. In S. Ball (Ed.), *Motivation in. Education* (pp. 67–89). New York, NY: Academic Press.

Williams, M., & Burden, R. L. (1997). *Psychology for Language Teachers: A Social Constructivist Approach*. Cambridge, UK: Cambridge University Press.

Wong, L. L. C., & Nunan, D. (2011). The learning styles and strategies of effective language learners. *System*, *39*, 144–163.

Woolfolk, A. E. (1993). *Educational Psychology*. Boston, MA: Allyn and Bacon.

Wu, H.–J. (2011). Anxiety and reading comprehension performance in English as a foreign language. *Asian EFL Journal*, *13*(2), 273–307. Retrieved March 15, 2012, from http://asian-efl-journal.com/PDF/Volume-13-Issue-2-wu.pdf

Wu, K.-H. (2010). The relationship between language learners' anxiety and learning strategy in the CLT classrooms. *International Education Studies*, *3*(1), 174–191.

Xiao, L. (2006). Bridging the gap between teaching styles and learning styles: A cross-cultural perspective. *TESL-EJ*, *10*(3), 1–15. Retrieved February 12, 2012, from http://www.tesl-ej.org/ej39/a2.pdf

Xu, F. (2011). Anxiety in EFL listening comprehension. *Theory and Practice in Language Studies*, *1*(12), 1709–1717.

Yan, J. X., & Horwitz, E. K. (2008). Learners' perceptions of how anxiety interacts with personal and instructional factors to influence their achievement in English: A qualitative analysis of EFL learners in China. *Language Learning*, *58*(1), 151–183.

Young, D. J. (1994). New directions in language anxiety research. In C. A. Klee (Ed.), Faces in a Crowd: The Individual Learner in Multisection Courses (pp. 3–46). Boston, MA: Heinle & Heinle.

Zeinolabedini, M., & Gholami, J. (2014). The effect of the cooperative learning method advocated by multiple intelligence theory on Iranian EFL learners' writing achievement. *The TFLTA Journal*, *5*, 67–79.

Zhang, J., & Evans, M. S. (2013). An empirical study on the multidimensional learning styles of Chinese EFL students. *International Proceedings of Economics Development & Research*, *68*, 61–69.

Zhao, N. (2007). A study of high school students' English learning anxiety. *Asian EFL Journal*, *9*(3), 22−34. Retrieved March 15, 2012, from http://asian-efl-journal.com/1070/quarterly-journal/2007/09/a-study-of-high-school-students-english-learning-anxiety/

Zheng, Y. (2010). *Chinese university students' motivation, anxiety, global awareness, linguistic confidence, and English test performance: A causal and correlational investigation* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. NR65101)

Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, *31*(4), 845–862.

Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, *29*, 663–676. Retrieved March 05, 2013, from http://aer.sagepub.com/content/29/3/663.abstract

Zimmerman, B. J., & Cleary, T. J. (2006). Adolescents' development of personal agency: The role of self-efficacy beliefs and self-regulatory skill. In F. Pajares, & T. Urdan (Eds.), *Self-Efficacy Beliefs of Adolescents* (pp. 45–69). Greenwich, CT: Information Age.