Analysing Affective Factors in Relation to Students' Achievement and Behaviour in EFL in Saudi Arabia

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Abstract

This study investigates the relationships between attitude, motivation and anxiety in relation to students' effort and achievement in learning English as a foreign language (EFL). It examines the influence of affect on the foreign language learning of Saudi secondary students (years 10–12, aged 16–18 years) to elucidate the obstacles that hinder successful English language learning in Saudi Arabia. The study uses a mixed-methods approach, which combines data from questionnaires and semi-structured interviews. One hundred and thirty-three students completed a questionnaire that was created with input from Gardner (2004) and Dörnyei (2001) to measure attitude, Noels (2003) and Aljasir (2016) to measure motivation, and Horwitz et al. (1986) to measure anxiety. Descriptive statistics and partial least squares structural equation modelling (PLS-SEM) were employed to analyse data collected from the questionnaire. In addition, 18 interviewees participated in this study and the data collected were analysed qualitatively. The analysis produced interesting results, which highlight the significant role of affective factors in language learning. All affective factors, albeit to varying degrees, predict students' effort and achievement. Examining students' effort in addition to their achievement helps to gain better insights into the relationships between the study variables. Moreover, the year of study and the education situation influence the relationship between affective factors and learning outcomes, resulting in increasing controlled motivation with age and increased anxiety for year 11 students. In addition, language attitude is more effective when it is related to the importance of learning the language for pragmatic values independent of the classroom experience. When attitude is related to learning English only as a school requirement, they will have less effect on the learning process. The findings highlight the significant role of teachers to enhance students' autonomous motivation for more effective learning. Based on these results, the study has much to offer stakeholders in the Saudi context as regards developing language teaching and learning practices in Saudi Arabia.

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AFLLQ	Affective Factors in Language Learning Questionnaire
AM	Amotivation
AMTB	Attitudes/Motivation Test Battery
AVE	The Average Variance Extracted
CB-SEM	Covariance-Based Structural Equation Modelling
CR	Composite Reliability
EFL	English as a Foreign Language
EM	Extrinsic motivation
FL	Foreign Language
FLA	Foreign language anxiety
FLCAS	Foreign Language Classroom Anxiety Scale
HTMT	Heterotrait-Monotrait Ratio
IM	Intrinsic motivation
L2	Second Language
LLS	Language Learning Strategies
LLOS-IEA	Language Learning Orientations Scale-Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales
PLS-SEM	Partial Least Squares Structural Equation Modelling
SDT	Self-Determination Theory
SEM	Structural Equation Modelling
SPSS	Statistical Package for Social Science

1. Introduction

Research is not merely scientific investigation; it involves personal needs, emotions and lives and targets personal development (Coffey 1999). Therefore, the rationale for this study is based, first, on my personal and professional interests as a language learner and, second, as a language instructor at Taif University in Saudi Arabia. I am always keen to explore the factors that hinder successful English learning in Saudi Arabia and what can be done to improve the quality of English learning in the Saudi context.

1.1 Overview of English education in Saudi Arabia

In Saudi Arabia, English is taught as a compulsory subject across all levels of education. It was introduced in intermediate and secondary schools in the late 1950s (Al-Johani 2009). At university level, English is not only a compulsory subject in all colleges, but also the language of instruction in some disciplines, such as medicine and science (Assulaimani 2015). Initially, the Ministry of Education in Saudi Arabia was against the teaching of English in elementary schools as it was feared that it would affect the learners' mother tongue (Alshammary 2002). However, since 2004, in recognition of the importance of English in the age of globalisation, the Ministry of Education has undertaken crucial reforms to improve the quality of the learning outcomes of Saudi EFL learners, including the compulsory introduction of English at the elementary stage (Grade 6 in 2004, Grade 4 in 2010, Grade 1 in 2021; see Alrashidi and Phan 2015; Elyas and Picard 2019; Ministry of Education 2022), curriculum reforms and the launch of the King Abdullah Scholarship Programme (KASP) for students to pursue their undergraduate and postgraduate studies in 2005 (Alrahaili 2019; Moskovsky 2019). However, it is broadly agreed that these reforms fail to achieve the desired outcomes, and the English proficiency of Saudi learners is still below expectations (Alqahtani 2019).

Previous research has shown that low English proficiency in the Saudi context can be attributed to various factors, including sociocultural factors (e.g. first language, cultural and religious reasons), curriculum-related factors (e.g. large crowded classrooms, time constraints, inadequate training for teachers, shortages of technology and learning resources) and learner-related factors (e.g. autonomy, motivation, attitude, aptitude, anxiety, learning strategies) (Alrabai 2019; Alqahtani 2019), the latter being of particular interest to this study. Despite the reforms implemented by the Ministry of Education to improve the quality of learning, classrooms in Saudi Arabia continue to be teacher-centred: the teacher is a spoon-feeder rather

than a facilitator of learning. As a result, teachers control everything in the classroom and students have a passive role in learning because they rely on their teacher as the main source of knowledge. This limited participation of students in classroom learning contributes to their low achievement (Alkubaidi 2014; Alrabai 2014a, 2019; Alrashid and Phan 2015; Alqahtani 2019).

In addition, a new EFL curriculum based on the Communicative Language Teaching (CLT) approach was released in 2013. Teachers supported the use of this method being effective than traditional methods (i.e. Grammar Translation and Audio-Lingual methods) (Al Asmari 2015a). However, many teachers have identified some obstacles that hinder the use of the Communicative approach in teaching English, such as crowded classrooms, time constraints and the low English proficiency of students (Al Asmari 2015a; Farooq 2015; Alqahtani 2019). Therefore, many teachers are still using traditional methods. For instance, they use Arabic in the English classroom (i.e. codeswitching between English and Arabic) (Almutairi 2008; Alrashidi and Phan 2015), claiming that, in this way, they spend less time explaining difficult words or concepts (Alshammari 2011). Indeed, teachers' use of Arabic contributes to the low proficiency of Saudi learners because it reduces students' chances to practise the target language (Alrabai 2019). Moreover, the long exposure to these traditional methods in Saudi Arabia makes students more inclined to engage in rote learning or memorisation. As a result, students progress through their courses without really mastering useful language skills (Alrashidi and Phan 2015; Alrabai 2019).

Furthermore, Saudi learners have limited exposure to English because it is only taught as a school subject (45-minute classes given twice per week for primary students, four times per week for intermediate and secondary students). In addition, given that Arabic is the only official language in the country and the main means of communication between Saudi people, students have limited chance to practise English outside the school context (Khan 2011; Alharbi 2015). Furthermore, the large number of students in the classroom (ranging from 40 to 50) further minimises students' chances to interact in English or participate in learning activities (Al-Seghayer 2014).

1.2 Rationale of this study

This study examines the relationships between different affective factors to address the low English proficiency of Saudi learners because, as Stevick puts it, successful language learning "depends less on materials, techniques and linguistic analyses and more on what goes on inside

and between the people in the classroom" (1980, p.4). Here, *inside* and *between* refer to affect in the language classroom. *Inside the learner* (intrapersonal) refers to individual factors including self-esteem, motivation, attitude and anxiety, whereas *between people* (interpersonal) concerns the relationships between students, between students and their teacher, or even between students, the language and culture (Arnold 2021). In addition, Arnold (2011, 2019, 2021) emphasises the role of affective factors because they make the teaching process easier, more enjoyable and more effective.

Research on affective factors in the Saudi context has been steadily increasing since 2010 (Alrabai 2020). However, many of these studies, such as Al-Khasawneh (2016) and Gawi (2020), only describe one specific factor in isolation (e.g. the level and sources of anxiety among Saudi students). Whereas some studies do examine affective factors such as motivation in connection with achievement (e.g. Alrabai 2014; Alqahtani 2015), and Alrabai and Moskovsky (2016) do combine several affective factors (motivation, attitude, anxiety, self-esteem, autonomy) with achievement, to the best of my knowledge, there are no studies that investigate the relationship between affective factors, effort and achievement simultaneously. As noted by Moskovsky (2019), studies on affective factors in the Saudi context have revealed that, in general, students hold a positive attitude towards learning English and are motivated to do so. However, these positive emotions are not translated into effective effort and, in turn, higher achievement. Therefore, examining students' effort as the mediating link between affective factors and achievement can explain the inconsistencies between positive learning factors and achievement. Thus, this study extends the research on the influence of affective factors on foreign language learning through measuring these factors in relation to both effort and achievement.

Furthermore, most of these studies have focused on the role of affective factors in language learning for university students. The present study focuses on secondary school students because, in this transitional stage between school and university education, students still have the chance to decide on their future (i.e. how to take English language learning further). Thus, the criticality of such a decisive period for students' futures encouraged me to focus on this stage. In addition to students' motivation and attitude towards English, identifying the sources of anxiety in FL learning at an early stage may help students to address this issue and subsequently improve their level of achievement. Furthermore, recognising these affective factors (attitude, motivation, anxiety) in relation to students' effort as well as achievement can help to paint a more comprehensive picture of these relationships. Accordingly, four research questions (RQs) are addressed in the present study:

1- What are Saudi secondary school students' attitude towards learning English and the learning situation?

2- What types of motivation do Saudi secondary students have for learning English?

3- Which component(s) of foreign language anxiety is/are evident in the experiences of students when learning EFL?

4- To what extent do learning affective factors (attitude, motivation, anxiety) influence students' reporting of behaviour and achievement in EFL?

To answer these research questions and achieve the ultimate goal, the present study applies a mixed-methods approach (questionnaire and semi-structured interviews) to the collection and analysis of data in order to answer the research questions. Applying a mixed-methods approach to examine affective factors simultaneously with effort and achievement helps to gain deeper insights into the learning process. In this regard, Scovel (2000) points out that affective factors may not be understood easily by researchers, in part due to the fact that research in this field is frequently of a quantitative nature, but the use of qualitative research helps to gain deeper insights into the learning process. And insight into these factors is expected to be beneficial both professionally and pedagogically. It can help policymakers design better language curriculums and implement practical interventions more appropriately, based on students' learning experience. In addition, this investigation is of additional importance following the announcement of Saudi Vision 2030 in 2016, which is based upon three pillars: a vibrant community, a prosperous economy and ambitious people (Saudi Government 2016, para. 2). In view of this, high proficiency in English, as a global language, plays a significant role in Saudi people achieving this vision. Furthermore, this study can be beneficial, given the recent introduction of compulsory English learning in year 1 (ages 6–7) in Saudi state schools from September 2021 (Alrashidi and Phan 2015; Elyas and Picard 2019; Ministry of Education 2022). This extension of the compulsory period of learning English from 9 years (in 2014) to 12 years (in 2021) creates some urgency in determining the factors that hinder successful English learning in Saudi Arabia.

1.3 Outline of this thesis

After this introduction, Chapter 2 conducts a review of relevant literature. It provides background information about affective factors relevant to this dissertation (namely, attitude, motivation, anxiety), including theories that the study is based on along with other theories in the field. Then, the chapter reviews previous studies on affective factors in the Saudi context.

Finally, the chapter offers an overview of language learning strategies so as to help contextualise the qualitative analysis of students' effort in Chapter 4.

Chapter 3 provides an overview of the methodology employed in this study. It includes a discussion of the research design and the rationale for using a mixed-methods approach. The chapter also gives a detailed account of the research participants, the data-collection tools (i.e. questionnaire and semi-structured interviews) and the steps that were taken throughout the data-analysis process. Finally, validity and reliability issues and ethical principles are also discussed in this chapter.

Chapter 4 considers the results obtained from the questionnaire from a quantitative perspective. It presents descriptive statistics to answer the research questions on attitude, motivation and foreign language anxiety, respectively. Then, the chapter conducts partial least squares structural equation modelling analysis, which explores the relationships between the study variables (i.e. affective factors, effort, achievement) using PLS-SEM.

Chapter 5 analyses the students' responses in the interviews from a qualitative perspective, including effort and the three affective factors considered in this dissertation. The chapter sheds light on the affective variables individually, and in relation to effort and achievement, in order to address the research questions. Additionally, the chapter presents the findings on the interrelationships between affective factors, effort and achievement relating to the fourth research question, in particular.

Chapter 6 discusses the findings, integrating the results obtained from both the questionnaire and interviews. It discusses the findings for students' attitude, motivation and anxiety in relation to relevant literature. Then, the results for the correlation between affective factors, students' effort and achievement are discussed. Finally, the chapter concludes with a demonstration of the main demotivating factors and the significance of students' autonomy in light of relevant literature.

The final chapter provides a summary of the findings and methods adopted for this study. It highlights the contribution of this study to foreign language research in general, and in the Saudi context in particular. Then, the chapter presents the implications for pedagogical practice. Finally, the limitations of the present study are stated and recommendations for future research are made at the end of the chapter.

2. Literature Review

2.1 Introduction

This chapter reviews relevant literature on affective factors in learning English as a foreign language. It starts with a brief introduction to the focus of the study and the rationale for examining affective factors in relation to students' effort and achievement. Then, the definition of motivation and different theories of it are reviewed in Section 2.2.1. The next Section, 2.2.2, sheds light on theories of language learning anxiety, with a review of relevant studies. Section 2.2.3 presents an overview of the nature and definitions of language attitude and a review of related research. Finally, the last section, 2.3, reviews previous studies on affective factors in relation to students' effort and achievement, followed by a summary of the chapter.

The context of this study is foreign language learning. However, since many previous studies have been conducted on either second (L2) or foreign (FL) learning, because the issues addressed apply to both of them, I use an umbrella term, 'language learning', here (as opposed to language acquisition, which is for one's first language) in contexts where it is not necessary to distinguish between L2 and FL. This study focuses on the relationships between affective factors, attitude, motivation, and anxiety, in relation to secondary students' effort and achievements in learning English as a foreign language (EFL). It aims to elucidate the challenges that might hinder successful language learning in the Saudi context. In order to conceptualise this study, studies that have examined language attitude, motivation and anxiety in isolation will be taken into account, while studies that have dealt with various language learning variables together will also be reviewed because they are closely related to my study.

2.2 Affect in language learning

Considerable attention has been paid by researchers to the influence of affective factors on language learning and what causes individual differences among language learners, i.e. why some learners are simply better than others. When learning a language, affect needs to be considered since, as Stern notes, "the affective component contributes at least as much and often more to language learning than the cognitive skills" (1983, p.386). Affect is defined as "aspects of motion, feeling, mood or attitude which condition behaviour" (Arnold and Brown 1999, p.1). According to Brown (2007), affective factors include various individual differences

and personality variables such as motivation, attitude, self-esteem and anxiety. In language learning contexts, affective factors play important roles because feelings influence how learners process the FL. Any learning situation can be influenced by affective factors. However, in language learning, the influence of affect is crucial because students may lack confidence when they do not fully control the language, as William (1994, p.77) notes:

> …there is no question that learning a foreign language is different to learning other subjects. This is mainly because of the social nature of such a venture. Language, after all, belongs to a person's whole social being: it is part of one's identity.

In other words, since FL learners need to express themselves and present their thoughts in the FL, even if they do not have enough knowledge or experience in it, their feelings and emotions will be influenced either negatively (e.g. they become anxious) or positively (they are motivated to learn the FL and hold a positive attitude towards it). Thus, teachers need to find the means to help their students avoid the negative aspects (e.g. anxiety), because they can block the student's mind and prevent them learning. At the same time, teachers have to work on enhancing the positive aspects (e.g. motivation), because they can contribute to more effective learning. Additionally, Arnold (2021) points out that there are many studies which show that a key element for the brain to have optimal performance is when students are interested in the learning material. In contrast, the brain can be impacted negatively when students feel anxious. It is, therefore, important that teachers provide their students with a positive affective environment to improve their learning. The present study examines the relationship between the positive and negative aspects of affect in language learning. In the following sections, a review of motivation, attitude and anxiety, along with previous studies, is conducted. In addition, I will review several studies that correlate some language learning affective variables in L2 and foreign language settings.

2.2.1 Motivation

Since the 1960s, motivation has been identified as one of the key factors influencing the performance of individual language learners. While we can state that the term 'motivation' derives from the Latin verb 'movere', which means 'to move', it is difficult to give an exact definition of the term because of its complex nature. In fact, the precise nature of motivation and which aspects of it should be stressed have been the subject of extensive debate. For his

part, Brown (1994, p.152) defines motivation as “an inner drive, impulse, emotion or desire that moves one to a particular action”, while White’s definition of motivation considers the sustainability of action in his description of the term as “the process involved in arousing, directing and sustaining behaviour” (1977, p.22). However, perhaps the most influential definition with regard to the focus of this study (i.e. second language (L2) motivation) comes from Gardner, who defines motivation as “the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes toward learning the language" (1985, p.10). In other words, the language learner tries hard to learn the L2 because they have a strong wish to do so, and because doing so brings them satisfaction.

As Dörnyei points out, between the 1960s and early 1990s, L2 motivation research considered motivation to be a stable learner attribute resulting from:

> …the learner’s social perceptions of the L2, its speakers as reflected by various language attitudes, generalised attitudes towards the L2 learning situation such as the appraisal of the course or the teacher, and interethnic contact and the resulting degree of linguistic self-confidence. (2001a, p. 44)

In fact, in the 1990s, researchers proposed more detailed definitions of motivation, adding a number of cognitive and situation-specific variables to the motivation model. These approaches focus on converting learners’ thoughts, beliefs and emotions into action. For example, William and Burden (1997, p.121) define motivation 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” (cf. Ushioda 2008; Schunk et al. 2012). As all of these definitions show, motivation involves several mental processes that instigate and sustain action. Or, to be more specific, these definitions characterise motivation as a driving force and a process that underpins the choice to pursue an action until it has been completed and its goals attained.

Later, research began to incorporate the time dimension of motivation. Indeed, several researchers pursued a new direction that considers motivation to be a more dynamic factor influenced by internal and external factors (e.g. Ushioda 1996; Dörnyei and Ottó 1998; Dörnyei 2000, 2001b). Dörnyei (1998a, p.118), for example, describes motivation as “a process whereby a certain amount of instigation force arises, initiates action, and persists as long as no other force come into play to weaken it and thereby terminate action, or until the planned outcome has been reached”.

To summarise, several attempts have been made to interpret motivation (particularly L2 motivation), first as a static trait, then as a cognitive concept incorporating various variables, and, most recently, as a concept that incorporates a chronological aspect. This conceptualisation shows the importance of the language variable 'motivation' for encouraging learners and directing them to attain their goals. Indeed, because of its significance to EFL, 'motivation' is one of the key language learning affective factors in this study.

2.2.1.1 Motivation in language learning

L2 motivation research began with the pioneering work of the Canadian social psychologists Gardner and Lambert in 1959. They initially became interested in L2 learning because of the existence of English-speaking (anglophone) and French-speaking (francophone) communities in Canada's social and political environments. They thus regarded L2s as mediators between different ethnolinguistic communities, and subsequently viewed the motivation to learn an L2 as a main factor encouraging or discouraging intercultural communication. In their study, Gardner and Lambert (1959) examined various language learning variables (e.g. verbal intelligence, linguistic aptitude, certain motivational and attitudinal features) in relation to L2 (French) achievement for high school students in Montreal. Their findings revealed that motivation and aptitude are key factors that are equally related to L2 achievement (Gardner and Lambert 1959).

In fact, the importance of motivation to learn a language is agreed upon by many researchers, such as Corder (1967), Gardner (1985) and Dörnyei (2001c). In this respect, Corder (1967 p.164) states: "[l]et us say that, *given motivation*, it is inevitable that a human being will learn a second language if he is exposed to the language data". Elsewhere, in addition to motivation, Rubin (1975) stresses the importance of aptitude and opportunities to practise the language for good language learning, while Dörnyei seems to suggest that, on the basis of his personal experience, motivation is much more important than aptitude: "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" (2001c, p.2). He then adds that "without sufficient motivation, however, even the brightest learners are unlikely to persist long enough to attain any really useful language" (Dörnyei 2001c, p.5).

2.2.1.2 Motivation theories

Due to the complexity of motivation and the challenge of explaining why people think and behave the way they do in a single theory, it is inevitable that researchers choose to focus on certain aspects of motivation rather than on the term as a whole (Dörnyei and Ushioda 2011). Indeed, researchers have tended to conceptualise motivation from different perspectives, resulting in the emergence of different motivation theories.

L2 motivation studies were initially influenced by Gardner and Lambert's (1972) socio-psychological approach, until their model was modified in the 1980s. Their approach suggests that, in order to succeed in learning an L2, a language learner must be psychologically ready "to identify with members of another ethnolinguistic group and to take on very subtle aspects of their behaviour, including their distinctive style of speech and their language" (Gardner and Lambert 1972, p.135). This approach focuses on how the individual's attitude and beliefs regarding specific events influence their behaviour, generally in terms of a transformation of mental processes into action. In short, a learner's success in learning the L2 is determined by their attitude toward the target language community and its speakers which, in turn, influences their motivation to learn the L2.

In fact, Gardner and Lambert (1972) claim that cognitive factors (such as ability or aptitude) and opportunities to learn a language fail to account for the variability among individuals as regards language learning success. Indeed, they see motivation as a significant cause of this variability. Since then, Gardner and Lambert's socio-psychological model has been modified several times to examine social and educational motivation features and their effects on language learning. In fact, in 1985, Gardner developed the socio-educational model, where motivation comprises effort, desire and attitude towards language learning (see Section 2.2.1). In line with the importance attached to social communication in Gardner's theory is the linguistic self-confidence model that was developed by Clément (1980, 1986) during that period. His model applies to contexts where different language communities coexist and regards socio-motivational factors (how much and how good is the communication between different language communities) as determinants of target language learning competence, future willingness for multicultural communication and the extent to which a learner identifies with the L2 group. Meanwhile, in 1994, Clément and his colleagues extended this model to FL contexts, and this can be regarded as an important addition to Gardner's 1985 model. In fact, Clément and his colleagues claim that because learners cannot usually have direct contact with

native speakers of the target language, they can indirectly communicate with L2 culture through media.

Elsewhere, Dörnyei (2001c) explains that researchers were keen to bridge the gap between theories of motivation in educational psychology and L2 research. The claim was that, by focusing on the social aspects of motivation, extant research had neglected other important motivational aspects. Consequently, several new L2 motivation approaches have since emerged (Dörnyei 2001c). To begin with, however, we will now examine the most influential model – that of Gardner and Lambert – before moving on to the present model.

Socio-educational model

The most influential L2 motivation approach was Gardner and Lambert's (1972) socio-psychological model, based on the idea that a language learner's success in acquiring an L2 is influenced by their attitude towards the target language group (Gardner 1985). This idea is supported by Dörnyei (2001c), who stated that, on the basis of his experience in Hungary, few language learners succeed in learning the language of a community they dislike. In 1985, the 1972 socio-psychological model was modified to produce the socio-educational model. The most general form of the socio-educational model is based on the idea that learning an L2 involves adopting the features of another cultural community, that is, one must depart from one's own cultural background. The claim here, then, is that the process of learning another language includes making a number of adjustments, beginning with minor ones that become major ones as the language learning process progresses. In fact, it is possible for some language learners to think like and hold the same beliefs as members of the target language community and, while language learners are only learning words, grammatical features, sounds etc., such items characterise the L2 cultural and linguistic community. Therefore, the socio-educational model proposes that learning another language is distinct from learning other subjects. Indeed, this model suggests that language learners' goals are twofold: integrative orientation and instrumental orientation. Here, 'integrative orientation' refers to the reasons why a learner considers learning an L2 important for interacting with a particular target language community, while 'instrumental orientation' refers to the economical or practical benefits gained from learning the L2. Although both types of orientation are familiar in L2 research, the most researched facet in Gardner's (1985) theory of motivation is the integrative aspect. This

concept of integrative motivation is a complex construct comprising three main components and their corresponding sub-components:

- *Integrativeness* (or integrative orientation or integrative motive; see Gardner 2005) reflects a language learner's openness to adopting the characteristics of another cultural/ linguistic community (Gardner 2005). It refers to a learner's psychological and emotional identification with the L2 community (Gardner 1985).
- *Attitude towards the learning situation* refers to a language learner's reaction to formal instruction (i.e. the L2 teacher and L2 course). The learning situation influences the language learner's motivation level. Here, Gardner (2005, p.6) states that "an interesting, devoted skilled teacher with a good command of the language, an exciting curriculum, carefully constructed lesson plans, and meaningful evaluation procedures" will foster a higher level of motivation than a teacher lacking these characteristics.
- *Motivation* is the combination of a learner's attitude, desire and effort to learn the language (Gardner and MacIntyre 1993).

Although the socio-educational model has been influential in L2 motivation research for several decades, by the end of 1980 and the beginning of 1990, some researchers stated that alternative and new research views were essential to revive and focus on L2 motivation research. Researchers have critiqued the key point of the socio-educational model, i.e. integrative motive. Here, the main argument revolves around the fact that, in a world of globalisation, many people learn an L2 as a means of communicating with foreigners. In other words, critics suggest that the concept of integrative motivation needs to be reinterpreted to consider foreign language contexts and the rise of international languages, such as English (Csizér and Dörnyei 2005). In 1990, Dörnyei questioned Gardner's (1985) concept of L2 community identification, proposing that, in language learning contexts where an L2 is taught as a school subject and L2 members are not immersed in the learning environment, such identification may be attached to the L2's cultural values and the L2 itself. This interpretation is supported by Yashima (2002), who proposes a more applicable concept similar to 'integrativeness'. In fact, Yashima (2002), and later Yashima and her colleagues (2004), introduced a construct called 'international posture' (a tendency to associate an individual with the international community rather than a specific L2 community) as a more relevant concept for FL contexts (Yashima 2009) to account for internal posture as "a general attitude towards the international community that influences English learning and communication among

Japanese learners" (Yashima 2002, pp.62–63). With the use of structural equation modelling (a statistical technique that tests the relationships between variables), it has been shown that one's international posture does indeed have an influence on motivation which, in turn, has an influence on achievement in EFL (Yashima 2002).

Working on the basis of integrative motivation but with adaptation to FL contexts, Csizér and Dörnyei (2005) found a different possible solution to the problem from the one highlighted by Yashima (2002). In fact, they agree that the term 'integrativeness' may not be fully appropriate, since foreign language learning contexts do not involve any real integration. Thus, on the basis of Markus and Nurius's (1986) work in social psychology concerning possible and ideal selves, Csizér and Dörnyei (2005) proposed another conceptualisation of 'integrativeness' based on a cognitive interpretation. Here, they conceptualise motivation as part of the learner's 'self-system', where L2 motivation is closely linked to the learner's ideal L2 self, i.e. the learner tries to bridge the gap between their self-perceived status and what they should ideally be. For their part, Markus and Nurius (1986, p.954) explain that "possible selves represent individuals' ideas of what they might become, what they would like to become, what they are afraid of becoming, and thus provide a conceptual link between cognition and motivation". Among an individual's possible selves, the 'ideal self' is the most important, as it represents the attributes the individual would like to have. Thus, in their interpretation, Csizér and Dörnyei (2005) equate 'integrativeness' with the ideal L2 self and indicate that this interpretation does not contradict Gardner's (1985) original concept of the term. To clarify, this equation comes from the fact that, if the ideal self is linked to highly proficient L2 learners, these learners can be depicted in Gardner's (1985) theory as having an integrative orientation.

While the concept of international posture does not seem to have gathered many followers (e.g. Kormos and Csizér 2008), the ideal-self theory has garnered numerous ones, including Kim (2009), Al-Shehri (2009) and Magid and Chan (2012). Nonetheless, Yashima (2009) conducted a study to examine possible and ideal L2 selves in relation to international posture in the Japanese EFL context. The findings revealed that students with a high level of international posture tend to show the vision of the ideal self more strongly.

In 1991, the different views on motivation resulted in the publication of Crookes and Schmidt's article, which mainly criticises the socio-psychological perspective for not emphasising motivation in education. They call for reopening the research framework of motivation. Their seminal critique indicated a new wave in L2 motivation research that began in the 1990s. During this period, research on motivation was expanded and shifted towards the

cognitive situated period, or what Dörnyei (2001b) calls an 'educational-friendly' and classroom-based approach. Thus, during the 1990s, the research focus shifted from social psychology to cognitive psychology and concentrated on motivation in the learning classroom context. The research resulted in many different cognitive motivation theories that included expectancy value theory, achievement motivation theory, self-efficacy theory, self-worth theory, goal-setting theory, self-determination theory, attribution theory, goal-orientation theory and social-motivation theory (for a review, see Dörnyei 2001b). It is beyond the scope of the present study to discuss all these theories. Particularly relevant to the present study is self-determination theory (SDT), explained in detail in the next section below.

Self-determination theory (SDT)

As pointed out above, Gardner's theory (1985) is the most influential in L2 motivation research and has been used by many scholars, though it has been strongly criticised because it is not applicable to FL settings, and it does not take into account the classroom setting. However, self-determination theory does not have these problems because it understands motivation in a different way. To be more specific, in this regard, Noels and her colleagues (2003, p.35) state that "SDT offers a parsimonious, internally consistent framework for systematically describing many different orientations in a comprehensive manner". Self-determination theory takes into account the classroom setting, as Brophy (1999) points out that SDT is the most influential work that applies 'intrinsic motivation' in that setting. Additionally, it regards the role of the teacher as fundamental. As Niemiec and Ryan (2009) explain, if a teacher fosters the basic psychological needs for autonomy, competence and relatedness, this will result in better learning outcomes and well-being. They add that "SDT has strong implications for both classroom practice and educational reform policies" (Niemiec and Ryan 2009, p.133). Similarly, Noels and her colleagues state that "[i]ts (i.e. self-determination theory framework) clear predictions may also be particularly valuable in applying the theory in language teaching and programme development" (2003, p.35) Given these views on self-determination theory and the fact that this study explores the impact of affective factors on language learning at a time when the educational system in Saudi Arabia is undergoing significant reforms, in terms of both practice and educational policies, the application of self-determination theory in the present study is helpful.

Deci and Ryan's (1985) self-determination theory is "a macro-theory of motivation, personality development and wellbeing that focuses on volitional or self-determination behaviour and the social and cultural conditions that promote it" (Ryan 2009, p.1). This theory distinguishes between two types of motivation: intrinsic and extrinsic. Intrinsic motivation (IM) "refers to doing something because it is inherently interesting or enjoyable", while extrinsic motivation (EM) "refers to doing something because it leads to a separable outcome" (Ryan and Deci 2000, p.55). According to Ryan and Deci (2000), there is yet another type of motivation, called amotivation (AM), in which the learner lacks the intention to perform an activity. This occurs when a learner disvalues an activity (Ryan 1995), feels unqualified to perform it (Deci 1975) or does not trust that it will lead to a desirable result (Seligman 1975). Although many researchers support intrinsic motivation as a unitary construct, Vallerand and his colleagues (1997; Vallerand and Ratelle 2002) suggest three subtypes of intrinsic motivation:

- *Intrinsic motivation to know* refers to doing an activity for the pleasure and satisfaction of learning or exploring new ideas (e.g. "chess players who play because they enjoy finding out more about the game" (Vallerand 1997, p. 280);
- *Intrinsic motivation towards accomplishment* refers to doing an activity for the pleasure and satisfaction of accomplishing or creating something. The focus is not on the final result but rather on the process of accomplishing something (e.g. "students who work on a term paper for the pleasure they experience while trying to create an excellent product" (Vallerand 1997, p.280);
- *Intrinsic motivation to experience stimulation* refers to doing an activity to experience pleasant feelings. This type of intrinsic motivation is mainly related to one's senses (e.g. people who swim because they enjoy the pleasant feeling of their body gliding through water) (Vallerand 1997).

Self-determination theory assumes that intrinsic motivation is maintained when students' basic psychological needs for autonomy, competence and relatedness are satisfied. The need for autonomy refers to "the experience of behaviour as volitional and reflectively self-endorsed" (Niemiec and Ryan 2009, p.135). For example, students who devote time and effort to their studies are said to be autonomous. The need for competence refers to "the experience of behaviour as effectively enacted" (Niemiec and Ryan 2009, p. 135). For example, students who feel that they are able to successfully address their schoolwork challenges are said to be

competent. Finally, relatedness refers to a student's feeling that they are liked, valued and respected by the teacher. When this is the case, the student shows integrated regulation (regulation is the ability to exercising control over one's individual's behaviour) for even the most difficult learning tasks. However, when this is not the case, the student will not experience intrinsic motivation and will only respond to external regulation (Niemiec and Ryan 2009).

Deci (1992, p.44) explains that performing an activity "with a full sense of wanting, choosing and personal endorsement" is a feature of an intrinsically satisfied behaviour. However, Van Lier (2014) indicates that, even when learners' basic psychological needs for autonomy, competence and relatedness are satisfied, intrinsic motivation alone is not adequate 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. (Van Lier 2014, p.110)

Niemiec and Ryan (2009) explain that numerous empirical studies that have applied self-determination theory show that intrinsic motivation (IM) and the most self-determined forms of extrinsic motivation (EM) result in better learning in educational settings (see Section 6.3). Although intrinsic motivation is important for learning, some aspects of education, such as difficult maths problems, might not be enjoyable for students. In such situations, learners need other stimuli (i.e. extrinsic motivation) in order to value and self-regulate their schoolwork and complete it independently. Self-determination theory perceives such situations as involving a process of internalising and integrating values and behavioural regulations (Deci and Ryan 1985). Ryan and Deci (2000, p.71) suggest that "internalisation 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". Research by Deci, Ryan and colleagues (e.g. Deci and Ryan 1985; Chandler and Connell 1987; Ryan and Connell 1989) has explored the existence of subtypes of extrinsic motivation. Extrinsic motivation refers to learners' engagement in an activity to earn a reward or avoid punishment, rather than to enjoy the activity. Deci and Ryan (1985, 1991) and Ryan and Deci (2000) present four sub-types of extrinsic motivation:

1. External regulation: This type is controlled motivation in which the behaviour is driven by an external force to earn a reward or avoid punishment (Ryan and Deci 2020).

2. Introjected regulation: This also represents a controlled type of motivation. It takes the form of ego-involvement in which behaviour is "determined by the internal rewards of self-esteem for success and by avoidance of anxiety, shame, or guilt for failure", resulting in regulation that is internally controlled (Ryan and Deci 2020, pp. 2–3).

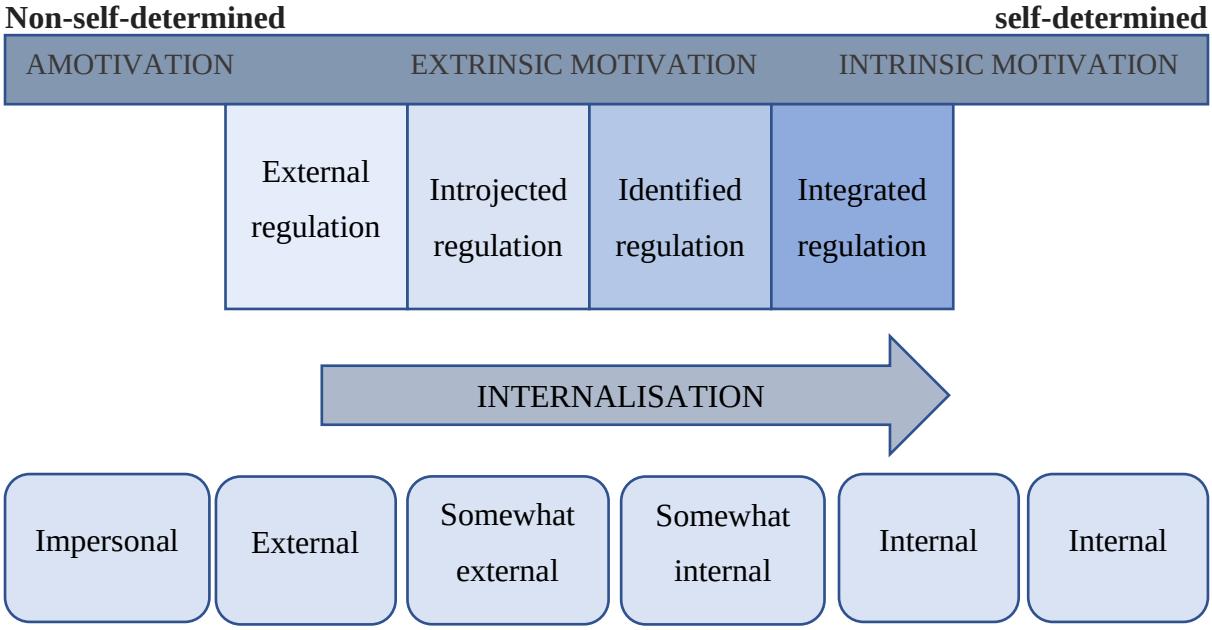
3. Identified regulation: is an autonomous type of motivation which involves performing an activity with a high degree of willingness or volition because it is has personal value (Ryan and Deci 2020).

4. Integrated regulation: is the most autonomous type of motivation in which an activity is performed for personal value which is also congruous with one's other main interests and values (Ryan and Deci 2020).

Pittman et al. (1983) state that learners who are extrinsically motivated to perform an activity exert less effort, which may negatively influence the learning process. Similarly, Vallerand (1997) suggests that when a learner is extrinsically motivated, they perform an activity for the satisfaction of external factors. Therefore, it can be said that extrinsic motivation is based on short-term aims (Vallerand 1997). In contrast, when learning an L2, intrinsic motivation tends to predict better language learning outcomes because this motivation emanates from a learner's inherent interest in performing the activity; thus, the learner is likely to pursue their goals with less pressure. However, it has also been argued that intrinsic motivation does not always indicate success in learning, e.g. if an activity does not interest the learner, extrinsic motivation will be more effective in promoting successful learning (Vallerand et al. 2008). Therefore, it can be concluded that both intrinsic and extrinsic motivation are important, and they work together to motivate learning (Van Lier 2014).

The present study examines the concept of motivation on the basis of the above assumptions of self-determination theory. According to Ryan and Deci (2000), the internalisation concept is a continuum where a learner's motivation ranges from amotivation or unwillingness, through passive engagement (extrinsic motivation) to active personal engagement (intrinsic motivation). When internalisation and integration increase, they result in greater persistence, a more positive self-concept and a higher degree of engagement. This continuum is presented in Figure 2.1, below.

Figure 2.1: Self-Determination Theory's Taxonomy of Motivation (Adapted from Ryan, R.M. and Deci, E. L. 2020, p.2)



Ryan (1995) explains that although the process of internalisation is developmentally important, because social values and regulations are internalised continuously throughout an individual's life, the continuum explained above is not developmental in itself. That is, an individual does not have to progress through each stage of internalisation; rather, they can adopt any form of behavioural regulation at any point along the continuum based on previous experience and the current situation. While a learner may become engaged in an activity because of a reward (i.e. external regulation), if the learner does not consider this reward controlling, the learner's orientation might shift from external to an internal one, and the learner may begin to focus on interesting features of the activity (Ryan and Deci 2000). As presented in Figure 1, integrated regulation is the most self-determined or autonomous type of extrinsic motivation. The more a learner internalises or assimilates their reasons for performing an activity, the more the extrinsic motivation becomes self-determined or autonomous. Thus, though integrated regulation is autonomous (like intrinsic motivation), it is still external because it is implemented to achieve extrinsic (instrumental) value. This is supported by Murray, who states that "[d]espite the [fact that] internalisation and integration that may occur, even to the fully integrated level, 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" (2005, p.15). Furthermore, as Noels (2001) explains, though language learners may have more than one reason to learn a language, some are more important than others. Indeed, Ryan and Deci suggest that social factors play an important role in maintaining intrinsic motivation and fostering autonomy in extrinsic motivation, stating that "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" (2000, p. 65).

Self-determination theory clearly distinguishes between extrinsic and intrinsic types of motivation. In fact, the taxonomy of motivation in L2 motivation theories can be attributed to different perspectives of language learning (see Section 2.2.1.3). Several researchers argue that the distinction between intrinsic and extrinsic motivation is similar to that between integrative and instrumental motivation (see above the discussion of the socio-educational model). Indeed, intrinsic motivation stresses the activity to be performed and the language learning context, while integrative orientation is associated with one's social attitude towards the L2 community and one's willingness to communicate with L2 speakers (MacIntyre et al. 1998). For instance, Dickinson (1995) equates intrinsic motivation with integrative motivational orientation, and extrinsic motivation with instrumental motivational orientation, while others (e.g. Schmidt et al. 1996) argue that both integrative and instrumental orientation can be considered as elements of extrinsic motivation because they focus on goals. In this regard, I agree with Schmidt et al. (1996), who hold that both integrative and instrumental orientation are subtypes of extrinsic motivation.

2.2.1.3 Motivation research in the EFL context

This section reviews previous studies that aimed to investigate motivation in FL contexts in different regions of the world. The findings of most of these studies show that instrumental motivation tends to motivate students much more than integrative motivation (e.g. Al-Tamimi and Shuib 2009; Al Rifai 2010; Liu 2007; Chen 2014; Aldosari 2014; Altasan 2016; Holbah 2015). In fact, these studies refer to instrumental and integrative motivation because they follow Gardner's (1985) theory of motivation. Meanwhile, other studies (e.g. Alnasari and Lori 1999; Javid et al. 2012) follow the self-determination theory of motivation proposed by Deci and Ryan (1985), which, as noted above, distinguishes between intrinsic and extrinsic

motivation. Their findings reported that students had high extrinsic motivation, with stronger intrinsic motivation in English-major students.

Alnasari and Lori (1999) examined the motivation and attitude towards EFL learning of English-major and Arabic-major university students at the University of Bahrain. Their findings revealed that English-major learners had higher intrinsic motivation and a more positive attitude towards the target language and its culture in comparison to the other group, who were largely extrinsically motivated. Similarly, Javid et al. (2012) investigated the motivation for EFL learning in relation to gender via a study of 709 male and female undergraduates at Taif University. The findings showed that the students had high extrinsic motivation, with moderately high intrinsic motivation. Both studies followed Deci and Ryan's (1985) self-determination theory and used a self-developed questionnaire in their investigations. Generally speaking, students that study English as a major tend to be more intrinsically motivated than students in other majors. Students who are not majoring in English and where their use of English as a lingua franca is important tend to be more extrinsically motivated. It can thus be concluded that both intrinsic and extrinsic motivation facilitate the learning process, but that motivational intensity varies according to the context in which it is situated. That is, English-major students have high intrinsic motivation due to the fact that it is a pleasure for them to learn English, while students majoring in other subjects have high extrinsic motivation because they learn English for utilitarian reasons, such as securing a better job in the future or because it is a compulsory university course.

With regard to studies that followed Gardner's (1985) theory of motivation (e.g. Liu 2007; Al-Tamimi and Shuib 2009; Chen 2014; Aldosari 2014; Altasan 2016), most used Gardner's Attitude/ Motivation Test Battery (AMTB) questionnaire in their investigation, while some adapted other questionnaires, such as those of Clement et al. (1994), LoCastro (2000), Kormos and Dörnyei (2004) and AlMaiman (2005). In general, the results of these studies showed that university students tend to be more instrumentally than integratively motivated: they learn English for pragmatic reasons, such as better job opportunities. For instance, in the Saudi context, Aldosari (2014) conducted a study to investigate the motivation to learn EFL among 50 students at King Khalid University using an adapted version of LoCastro's (2000) questionnaire. The findings showed that the learners were almost exclusively instrumentally motivated, with the exception of a few who were integratively motivated. Similarly, in the Chinese context, Chen (2014) investigated the motivation to learn EFL among 66 non-English-major students (30 participants were from the art department and

36 from the science department). Chen adapted a questionnaire from Kormos and Dörnyei's (2004) work. Her data showed that students were more instrumentally motivated and that science department students were more motivated than art department students.

Similar findings were obtained at the school level by Holbah (2015), who examined the motivation to learn EFL among 223 Saudi intermediate school students (level 9, aged 15). To conduct the study, the researcher used a modified version of AlMaiman's (2005) questionnaire along with six individual interviews with students, teacher and parents, and focus-group interviews with 12 students. Similar to the aforementioned study that was conducted at the university level, the students here were more instrumentally than integratively motivated.

The results of studies relying on either theory of motivation are, to an extent, comparable because, as discussed in the previous section, extrinsic motivation has been equated with instrumental orientation and intrinsic motivation with integrative orientation, while both orientations have been seen as subtypes of extrinsic motivation. In these studies, instrumental motivation seems to be the primary example, along with extrinsic motivation, while one must be very careful when reading specific analyses because different studies interpret language learning motivation in slightly different ways. In short, followers of Deci and Ryan's model consider extrinsic and intrinsic motivation, while followers of Gardner's theory consider instrumental and integrative orientation. However, there are a number of studies that mix these models and, in these cases, the interpretation of motivation is not very clear because of the different perspectives regarding motivation types in different theories.

With regard to the types of measurement used in motivation studies, many have looked at motivation by following Gardner's (1985) framework. Indeed, many of his followers have used his set of questions (Attitude/ Motivation Test Battery or AMTB), while others have used adaptations of other models. Similarly, in studies that followed Deci and Ryan's (1985) framework, different adaptations of questionnaires have been used. Nonetheless, as has been shown, while the above studies have used different kinds of questionnaires, similar results have been found among the participants. The findings generally suggest that instrumental and extrinsic motivation are more powerful than integrative orientation and intrinsic motivation in EFL contexts, hence, there is overall comparability of the results.

2.2.1.4 Motivation in relation to language achievement

As motivation is an important language learning affective variable, many researchers have examined motivation in relation to language proficiency. In contrast to Gardner's followers,

Deci and Ryan's followers have not reported any information concerning their participants' achievement. Some studies have reported a positive correlation between instrumental motivation and language proficiency (e.g. Liu 2007), while others suggest there is no significant correlation between motivation and language achievement (e.g. Altasan 2016).

In the Chinese context, Liu (2007) examined motivation and attitude towards EFL learning among 202 Chinese university students in relation to their English proficiency. Liu used modified versions of Gardner's ATMB (1985) and Clement et al.'s (1994) questionnaire. The findings of the study suggested that the participants were more instrumentally than integratively motivated. However, a positive correlation was found between the variables examined and English proficiency, i.e. students who were instrumentally motivated to learn English had a high level of proficiency.

In contrast, Altasan (2016) examined the motivation to learn EFL among 200 Saudi college students who were not majoring in English in relation to their achievement scores. The students were studying at two technical colleges in different cities, Dammam and ArRass (100 students from each). He analysed their motivation on the basis of a modified version of Gardner's AMTB (1985). The findings reported showed that both groups of participants were more instrumentally than integratively motivated. Meanwhile, in terms of their achievement scores, the results revealed that the Dammam group had better achievement scores than the ArRass group, indicating that their level of achievement was influenced by other factors (see Section 2.3). Thus, it is important to investigate motivation among other language learning variables to determine how they influence student achievement and behaviour.

2.2.2 Anxiety

In this section, I offer an overview of anxiety and discuss early research into language learning anxiety. Following this, a description of the foreign language anxiety model that is used in this study is presented. Finally, I review relevant studies on foreign language anxiety.

In some instances, foreign language learners may suffer from a mental block when learning a new language, although they may be competent in other subjects and motivated to learn. This situation indicates that such learners ma have anxiety that hinders a successful language learning process (Horwitz et al. 1986). Before focusing on the connection between anxiety and foreign and second language learning, a general definition of anxiety will be

provided. According to Horwitz and her colleagues, anxiety is "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system" (1986, p.125). Research focused on second language learning has paid considerable attention to the interference of anxiety in language learning (e.g. Horwitz et al. 1986; Young 1991; Aida 1994; MacIntyre and Gardner 1994; MacIntyre 1998; Chen and Chang 2004; Liu 2006; Coryell and Clark 2009; Rezazadeh and Tavakoli 2009; Anyadubalu 2010; Atasheneh and Izadi 2012; Alrabai 2014a). For example, Rezazadeh and Tavakoli (2009) examined the relationship between test anxiety and language achievement. The findings revealed a negative relationship between them.

Research into language learning anxiety started in the 1960s. Curran (1961) observed that many people felt anxious when they tried to learn an FL and, on the basis of his clinical experience, he developed the Counselling-Learning model. In this model, the student is classified as a 'learner' or 'client', and the teacher as a 'knower' or 'counsellor'. The role of the teacher (counsellor or he knower) is to support the student by showing empathy and listening to them without criticising, thus an interpersonal relationship with the counsellor is established. In this way, the level of anxiety will be reduced in the educational context and the learner's language skills will be developed until they can communicate independently in the foreign language. In Curran's model, language learning is a five-stage process.

In the first stage, the learners are arranged in a circle, and interact and form relationships in their native language. In the second stage, in order to learn the FL, the learners talk to the teacher in their native language while the teacher (counsellor) then translates messages into the target language and presents them to the group of learners without evaluation. Following that, the learners repeat what they have said in the target language as their teacher did. In the next stage, the learners express their ideas in the native language to the teacher, and then to the group, in the target language without any help from the teacher (counsellor). At this stage, any interference from the counsellor only comes if some help is needed. In the third stage, the learners express their ideas immediately in the target language, and if any other learners in the group request translation into the native language, that is provided. Meanwhile, in the fourth stage, the students gain in confidence and accept the counsellor's corrections while they are speaking to their peers. Finally, in the last stage, the students become more independent, and the teacher's role is reduced to one of suggesting more appropriate wording or phrasing. Curran concluded that the process of students' interaction with the teacher and how they become more independent in expressing their ideas in the FL is similar to the process of counselling, when

an individual tries to describe his personal problems. This model sheds light on the important role of the teacher in lowering the level of anxiety that learners might experience when learning an FL, which is, in turn, important to succeed in learning an FL. Later, this model was expanded and called Community Language Learning.

Chastain (1975) examined the influence of three affective characteristics compared to ability factors on test scores in L2 courses (French, German, Spanish) of first-year university students. He used self-reporting questionnaires to evaluate anxiety, reserved versus outgoing personalities and creativity when expressing oneself in L2. To measure anxiety, he used Sarason's Anxiety Scale (1958) and Taylor's Manifest Anxiety Scale (1953). The results showed that less anxiety is associated with positive results, while experiencing high anxiety is associated with negative results. Meanwhile, he used the Marlowe-Crown Scale (Crown and Marlowe 1964) to assess personality and found that outgoing learners tended to have better results than reserved learners. Finally, to measure creativity, Feldhusen et al.'s (1965) scale was used. Chastain found that some creativity types are associated with better learning outcomes, while other creativity types are associated with bad results. As regards ability characteristics, they were measured using the Scholastic Aptitude Test (SAT), and they also correlated with course grades. Since Chastain addressed the correlation between course grades and affective factors as well as ability factors, this makes his research important. In fact, he indicates that test anxiety and having an outgoing personality are related to course scores, especially in German and Spanish classes. However, he also notes that the relationship between course grades and anxiety is inconsistent. Chastain (1975) questions whether too much anxiety might be debilitating, while low anxiety might be facilitating. He points out that the findings implied that a strong relationship was found between course grades and affective characteristics, especially anxiety, as well as course grades and ability factors. Thus, Chastain called for further investigation regarding the relationship between affective factors and learning.

In 1977, Kleinmann investigated the syntactic avoidance behaviour (a strategy learners use to hide their linguistic inefficiency) of two groups learning English as a second language (ESL): 24 native speakers of Arabic and 15 native speakers of other languages (13 native speakers of Spanish, two native speakers of Portuguese). He investigated four structures (present progressive, passive, infinitive complement, direct object pronoun) and administered four tests to the participants. The first of these was a multiple-choice test of grammatical structures. The second test was an indirect preference assessment task in which the learners

were shown seven pictures, four of them designed to elicit the passive and three designed to elicit the present progressive, while a third test was to measure anxiety using an adapted version of Alpert and Haber's (1960) Achievement Anxiety Test. This anxiety test was designed to investigate the facilitating and debilitating influences of anxiety on academic achievement. Lastly, a fourth test sought to measure the power of learners' motivation to succeed and avoid failure through use of the Success-Failure Inventory.

The findings of the study revealed that the Arabic participants avoided using passive structures, whereas the Spanish and Portuguese participants avoided using infinitive complement and direct object pronoun structures. According to Kleinmann (1977) the difficulty of those structures for the students was manifested in avoidance behaviour. He also noted that those students who had high levels of facilitating anxiety (anxiety that motivates the learners to perform a new learning task) used grammatical structures that other students avoided because they differed from their native language structures. That is to say, the Arabic speakers were less anxious than the Spanish-Portuguese ones. In contrast, learners with high levels of debilitating anxiety (anxiety that motivates a learner to avoid a new learning task) avoided difficult structures in the target language. In other words, they tried not to use structures that differ from the structures of their native language. He added that a learner's confidence is associated with their choice to use, or not, a given structure. Therefore, confidence does not reflect a learner's knowledge of a certain structure; rather, it reflects how the learner perceives what they know. Thus, the usage or avoidance of structures that diverge from a learner's first language might rely on the learner's affective state, involving motivation, anxiety and confidence.

In the 1970s, Scovel (1978) reviewed a number of research studies that examined the influence of anxiety on language learning achievement and found confusing results. Intuitively, one can assume that anxiety would indeed hinder language learning. Yet, Scovel realised that anxiety is not a simple construct whose quantity can be easily determined to be in "high or low amounts" (Scovel 1978, p.137). While several studies showed a consistent correlation between anxiety and language performance, others revealed inconsistent relationships. Indeed, anxiety is a multi-faceted concept and psychologists have recognized different types, including state anxiety, trait anxiety, situation-specific anxiety, facilitating and debilitating anxiety. He thus concluded that a clear-cut relationship between anxiety and target language performance could not be established because of inconsistent findings due to the different anxiety measures used by researchers. On the basis of these inconsistent findings,

Scovel proposed two types of anxiety: *facilitating anxiety* and *debilitating anxiety*. He stated that "facilitating anxiety motivates the learner to 'fight' the new learning task; it gears the learner emotionally for approach behaviour. Debilitating anxiety, in contrast, motivates the learner to flee the new learning task..." (Scovel 1978, p.139).

In his review, Scovel (1978) discusses anxiety in relation to motivation. He associates positive motivation to learn the language with facilitating anxiety, and negative motivation with debilitating anxiety. Furthermore, he shows how anxiety influences achievement in learning a language. A high level of anxiety in the initial stages of learning tasks debilitates or weakens achievement, while high anxiety in the later stages of the learning process promotes achievement. Scovel then concludes that "it is perhaps premature to relate it [anxiety] to the global and comprehensive task of language acquisition" (1978, p.132) and thus suggest that it is important to take the different anxiety types into consideration when investigating anxiety. In short, researchers should specify which anxiety type is to be measured. For instance, he explains that debilitating anxiety causes avoidance behaviour, which has been examined by Kleinmann (1977). Scovel's view is advocated by Gardner (1985) and Horwitz et al. (1986). For his part, Gardner (1985) claims that:

> …a construct of anxiety which is not general but instead is specific to the language acquisition context is related to second language achievement. There does not appear to be much justification to conclude that in general anxious individuals are less successful than non-anxious ones in acquiring a second language, but rather that the individuals who become anxious in the second language learning context will be less successful than those who do not. (1985, p.34)

That is to say, not all types of anxiety affect language learning achievement, only a specific type, which is foreign language anxiety (FLA). Therefore, as argued by Scovel (1978), in examining anxiety, the different types of anxiety (e.g. facilitating anxiety, debilitating anxiety etc.) should be taken into consideration; otherwise, inconsistent types of relationships between anxiety and language performance will result.

In addition, anxiety has also been categorised as trait anxiety, state anxiety and situation-specific anxiety (MacIntyre and Gardner 1991a). *Trait anxiety* is defined as an individual's intrinsic propensity to become anxious in different situations (Spielberger 1972; Scovel 1978), meaning an individual with high levels of trait anxiety is likely to be anxious in different situations. This, in turn, will damage the individual's cognitive performance and might cause avoidance behaviour (MacIntyre and Gardner 1991a).

Situation-specific anxiety is triggered by specific stimuli, such as speaking in front of people or taking final exams (MacIntyre and Gardner 1991b). This idea is supported by researchers such as Horwitz et al. (1986) and MacIntyre and Gardner (1991b). For their part, Horwitz et al. state that "when anxiety is limited to the language learning situation, it falls into the category of specific anxiety reactions" (1986, p.125). Thus, foreign language anxiety, which is the focus of the current study, is a situation-specific anxiety (see further Section 2.2.2.1),

Finally, *state anxiety* is defined by Brown (2007, p.390) as "a relatively temporary feeling of worry experienced in relation to some particular event or act". MacIntyre and Gardner (1991a) consider that state anxiety is a mixture of trait anxiety and situation-specific anxiety because, while each person has a tendency to experience anxiety, having or not having anxiety depends on the situation the person is in. It can thus be concluded that state anxiety is a temporary situation that vanishes once the source of anxiety disappears. In other words, it is not fixed but varies from one situation to another. Furthermore, MacIntyre and Gardner (1991a) point out that state anxiety correlates strongly with trait anxiety: high levels of state anxiety are associated with high levels of trait anxiety. According to Young (1999), state anxiety influences an individual's cognition, feelings, behaviour and physiology. In short, individuals with high levels of state anxiety become very sensitive to how other people perceive them, which, in turn, influences their cognitive function. With regard to emotions, increased levels of state anxiety result in a more sensitive nervous system, while in terms of behaviour, individuals with high levels of state anxiety frequently imagine failure and try to flee from such a situation. In addition, some physiological symptoms might occur, such as sweaty palms or raised heartbeat.

In fact, language learners often experience some state anxiety in the early stages of learning, but as the learners become more experienced in the language, their anxiety levels decrease. This is supported by Gardner et al. (1977) who examined learners at introductory, intermediate and advanced levels who were learning French as an L2 at summer school. They used AMTB to measure the learners' anxiety and the results revealed that as the learners became more proficient and experienced in L2, their anxiety levels decreased.

To conclude, early studies showed that inconsistent results for the relationship between anxiety and achievement due to the diversity of anxiety types used in those studies (Horwitz 2010). In 1986, Horwitz and her colleagues supported Scovel's claim and stated that the absence of the clear-cut relationship was caused by the lack of a specific measure for

determining foreign language learning anxiety. Thus, they developed the foreign language anxiety framework and introduced its measuring scale, which is explored in the next section (2.2.2.1).

2.2.2.1 Foreign language anxiety (FLA) theory

The theoretical framework of foreign language anxiety, from Horwitz et al. (1986), is adopted in the present study to measure students' anxiety. Horwitz et al. (1986) were pioneers in the presentation of a theoretical model for foreign language anxiety as a distinct type of anxiety specific to foreign language learning. In fact, their foreign language anxiety model has been highly influential in the study of language anxiety. Horwitz et al. (1986) argue that students' discomfort in the language learning classroom is caused by foreign language anxiety. In fact, they claim that foreign language anxiety is "a phenomenon related to but distinguishable from other specific anxieties" (Horwitz et al. 1986, p.129). Based on this assumption, they define foreign language anxiety as "a distinct complex of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of the language learning process" (Horwitz et al. 1986, p.128) (cf. MacIntyre and Gardner 1994).

In native languages, adults can be perceived as socially clever beings who can communicate with others easily; but when learning another language, it is a different case since communication with others might become a challenge for the new language learner. Indeed, Aveni (2005 p.7) states that "[t]he process of language study is like no other. To learn another language is to redefine yourself publicly, socially, and personally. No other topic of education so deeply affects the individual's own self-presentation in society". Horwitz et al. (1986) add that because language learners do not know how they are going to be evaluated and perceived by others, communication in language learning might become risky and problematic. Furthermore, the learner's self-perception as a competent person who can communicate with others easily in their native language might be affected negatively in the language learning classroom. Thus, fear, self-consciousness or panic may ensue. In addition, in language learning classes, authentic communication can be problematic because language learners do not have a good command of the target language in comparison to their native language. Therefore, the learner's self-esteem is influenced by their ability to communicate in the L2 or FL. The learner feels anxious when they are unable to communicate or express ideas and this is what differentiates FLA from other academic anxieties, such as those in maths or science classes.

As more attention was being paid to language learning anxiety, Horwitz et al. (1986) developed a 33-item Likert-scale called *the Foreign Language Classroom Anxiety Scale* (FLCAS) to measure three anxiety components (communication anxiety, test anxiety, fear of negative evaluation) (see Section 3.7.2). They regard these components as responsible for the detrimental effects caused by anxiety when learning a foreign language. These components are explained in detail in the following sections.

2.2.2.2 Components of foreign language anxiety

Communication apprehension

Communication anxiety refers to the "type of shyness characterized by fear of or anxiety about communicating with people" (Horwitz et al. 1986, p.127). People who find it difficult to speak in pairs or in a group, or to deliver a spoken message, have communication apprehension. Moreover, they are liable to experience more difficulty in communicating with others in the foreign language classroom. The explanation for that lies in their limited control of the communication situation and other people (i.e. teacher and peers) continuously monitoring their performance. As such, students usually avoid communicating in this learning situation because they think it is difficult to understand others or make themselves understood (Horwitz et al. 1986).

Test anxiety

Test anxiety has been identified as another factor of foreign language anxiety, being "a type of performance anxiety stemming from a fear of failure" (Horwitz et al. 1986, p.127). Students who have test anxiety usually think that they will fail if their test performance is not perfect. This type of anxiety can potentially provoke both test anxiety and communication apprehension at the same time, because performance is constantly evaluated in foreign language classes (Horwitz et al. 1986).

Fear of negative evaluation

Fear of negative evaluation is the third factor and refers to "apprehension about others' evaluation, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively" (Horwitz et al. 1986, p.128). Fear of negative evaluation is much broader than test anxiety, because it might, for instance, arise in any social situation such as a job interview. In addition, in language classes, students are subject to evaluation by their teacher

and peers. Thus, they are reluctant to participate in learning to avoid making mistakes in front of others (Horwitz et al. 1986).

Howitz and her colleagues (1986) argue that foreign language anxiety is composed of more than these three components, as defined above, but these do help to understand sources of anxiety for foreign language learners. The next section (2.2.2.3) considers research on foreign language anxiety in the Saudi context.

2.2.2.3 Studies on foreign language anxiety in Saudi Arabia

Over the last 20 years, the influence of FLA on language achievement among Saudi students in different contexts has become an important research area (e.g. Abu-Ghararah 1999; Hamouda 2013; Alrabai 2014a). The findings of numerous studies covered here show that foreign language anxiety is of crucial importance in language learning in the Saudi context. In fact, in this context, as in many other contexts, language anxiety has been examined from different perspectives. For instance, several studies have investigated the factors that cause FLA, such as those by Hamouda (2013) and Alrabai (2014a). Hamouda (2013) conducted a study to investigate the causes of Saudi students' willingness or not to participate in EFL classrooms; his participants were 159 students at university level. The findings revealed that the students were in fact reluctant, and this was due to many factors, such as low English proficiency, fear of negative evaluation (in connection with speaking in front of others and making mistakes), shyness and lack of confidence or preparation. Similarly, moderate to high levels of anxiety caused by communication as well as comprehension anxiety and a negative attitude towards English classes were found among 1,389 Saudi EFL learners in Alrabai's (2014a) study. Finally, teacher-related variables that caused anxiety among female Saudi college students (e.g. teaching methods and teacher-student interaction) were explored in Al-Saraj's (2011) study.

Other studies have examined foreign language anxiety in relation to specific language skills. This includes that by Aljafen (2013), who investigated the influence of writing-anxiety on 296 EFL Saudi learners in science colleges (engineering, pharmacy, preparatory year). The results showed there were moderate levels of anxiety around English writing among the three groups, which were caused by poor previous English education, a fear of negative evaluation and a lack of confidence in writing.

With regard to the influence of foreign language anxiety on language achievement, the focus of the present study, literature on the Saudi context reports a significant trend for a negative correlation between foreign language anxiety and language achievement (e.g. Abu-Ghararah 1999 and Alshahrani 2016). Such studies have been carried out in various contexts and on different age groups. Since they find evidence for the negative influence of foreign language anxiety, they support Horwitz et al.'s theory that the nature of foreign language anxiety is a situation-specific anxiety, not a group-specific one. For instance, Abu-Ghararah (1999) examined the influence of foreign language anxiety on the language achievement of 240 university and high school students. The results showed that there was a negative correlation between language anxiety and language achievement. Similarly, a negative correlation between foreign language anxiety and language achievement was revealed among the 75 Saudi university students in Alshahrani's (2016) study. Thus, these results are in agreement with the studies by, for example, Chastain (1975), MacIntyre and Gardner (1989) and Rezazadeh and Tavakoli (2009). However, few studies have considered the influence of anxiety on FL achievement and behaviour among other language learning affective variables. This study attempts to fill this gap, at least in connection with its specific educational context.

2.2.3 Attitude

The focus on 'attitude' in this study as a component of language learning affective factors is based on Gardner's socio-educational model. Given that attitudes are complex in nature, they have been examined from different perspectives. The second language learning perspective will be presented here, because this is of greatest relevance to the present study. Before discussing attitude in language learning, a brief overview of the nature and definition of attitude is presented in this section.

From the 1920s onwards, 'attitudes' have been the focus of attention in social psychology, and since that time, many studies have been conducted on this topic (McKenzie 2008). Indeed, in 1935, Allport argued that attitude was a very important concept in both social psychology and sociolinguistics. Labov (1966) conducted pioneering work on the social classification of speech communities, examining whether language is affected by association to a speech community and how language change is affected by the prestige given by a speech community to certain linguistic features. 'Attitude', then, has been examined in depth in terms of social psychology and language learning. However, the focus of this examination is on

attitude as a language learning affective variable. In Gardner's (1985) theory of L2 motivation, a positive attitude is a component of motivation (see Section 2.2.1).

In fact, there have been considerable disagreements in defining the term 'attitude' in social psychology and language learning research. Fishbein and Ajzen (1975, p.1) observe that the term 'attitude' is "characterised by an embarrassing degree of ambiguity and confusion". Indeed, it is not easy to agree on a definition of 'attitude' because its definitions differ in their degree of elaboration (the length of time it takes for a participant to state their attitude and how carefully it is stated) and in the importance given to different attitudinal features (cognitive: beliefs and perceptions; affective: emotions and feelings; behavioural: direct actions or behaviour) (Garrett 2010). Some researchers (e.g. Aronson et al. 1994; Eagly and Chaiken 1993; Olson and Zanna 1993) chose to concentrate on the cognitive aspect of attitude. For their part, Aronson et al. point out that, although there is no complete consensus among social psychologists on the precise definition of attitude, most of them agree that "an attitude consists of an enduring evaluation – positive or negative – of people, objects and ideas" (1994, p.287). Indeed, attitudes endure, which means that they persist over time. Furthermore, attitudes are evaluative, meaning that they include positive or negative reactions towards certain things. In short, people are persistent evaluators of what they see in the world (Aronson et al. 1994). Meanwhile, other researchers have focused on the emotional component of attitude. For example, Edwards (1983, defines an attitude as "the degree of positive or negative affect associated with a psychological object" (1983, p. 8). Finally, a third group of researchers have focused on the behavioural aspect of attitudes, as exemplified on Gergen's (1974) definition of attitude: "the disposition to behave in particular ways toward specific objects" (Gergen 1974, p.620).

However, perhaps the most commonly accepted definition of attitude is Allport's (1954, p.810): "a learned disposition to think, feel and behave towards a person (or object) in a particular way" (as cited in Garrett 2010, p.19). This definition indicates that attitude is not only a feeling but also extends to behaviour and thought. Similarly, Oppenheim includes cognitive and behavioural components in his definition, although he also includes a description of the ways in which attitudes are shown. In fact, he suggests that an attitude is:

> …a construct, an abstraction which cannot be directly apprehended. It is an inner component of mental life which expresses itself, directly or indirectly, through much more obvious processes as stereotypes, beliefs, verbal statements or reactions, ideas and opinions, selective recall, anger or satisfaction or some other emotion and in various other aspects of behaviour. (1982, p.39)

Oppenheim's (1982) definition of attitude starts with the word 'construct'. In fact, a psychological construct cannot be observed directly; rather, the researcher must draw inferences from the kind of things listed in Oppenheim's definition (e.g. beliefs, verbal statements etc.). Although there are a number of characteristics common to several definitions, as has been shown, attitude theorists have tended to propose different definitions from different perspectives. Therefore, a brief overview of some of these definitions is provided in this study. However, notwithstanding the complex nature of attitude, it is helpful to consider one core definition and explain it in more detail through the various aspects of attitude where there is reasonable agreement. For example, Sarnoff (1970, p.279) defines attitude as "a disposition to react favourably or unfavourably to a class of objects". In this respect, attitude relates to appraising a social object, such as a new policy or language, the focus of this study. Accordingly, this study follows this definition when examining students' attitude towards EFL, and towards their teachers and the course.

According to Baker (1988), several specific characteristics are attributed to attitudes. He states that attitudes are hypothetical constructs that cannot be observed directly; they need to be inferred from a person's behaviour or responses. In addition, attitudes are not inherited but are 'learned' dispositions. Furthermore, although attitudes are comparatively stable over time, there is the possibility of attitude modification or change as a person matures or gains more experience.

2.2.3.1 Measuring attitude

Part of the complexity of studying attitudes lies in the methods that scholars have used to measure them. While some researchers have focused on the affective component alone to measure attitudes (e.g. Shaw and Wright 1967; Fishbein and Ajzen 1975), others seem to believe in also measuring their behavioural and cognitive components (e.g. Cooper and Fishman 1977). Rokeach (1972, as cited in Van Els et al. 1984) chose a different perspective and suggested the possibility of examining attitudes by either measuring all three of the constituents of attitudes or by measuring any one of them, given the strong relationship among these constituents.

With this in mind, Breckler (1984) carried out two studies concerning people's attitudes to snakes to examine to what extent cognition, behaviour and affect work separately. In the first study, a snake was present when individuals' attitudes were examined, while in the second,

individuals had to depend on their imagination as no snake was present. The results of his studies revealed a moderate (in the first study) to high (in the second) correlation between behaviour, cognition and affect. Based on these results, the degree of correlation among the components of attitude differs according to how a study is designed. In fact, according to Ostrom (1969), a considerable amount of research shows some alignment with affect. For example, Thurstone defines attitude as "affect for or against a psychological object" (Garrett 2010, p.19).

There are three types of rating scales to measure attitude: Likert (1932), semantic differential (Osgood et al. 1957) and Thurstone (1928). The Likert attitude scale is one in which participants' responses are given scores according to a range of options, such as "5 for the most favourable and 1 for the least favourable" (Garrett et al. 2003, p.40). The semantic-differential scale of attitudes uses a method in which "judges record their rating on a number of semantic-differential scales, for instance, sincere/ insincere, rich/ poor" (Garrett et al. 2003, p.63), while the last one, the Thurstone scale, is constructed by building a group of statements related to attitudes. A group of judges must then evaluate each statement separately before placing it in one of (commonly) eleven piles, the most favourable in Pile 1 and the least favourable in Pile 11. The following steps involve dispensing with all of the statements placed in different piles by the different judges, before the remaining statements are organized and scored by the researcher (Henerson et al. 1987, p.84; Oppenheim 1992, p.190). However, since a Likert scale is regarded as more reliable and requires less effort in preparation and analysis than Thurstone and semantic-differential scales (Oppenheim 1992), Likert scales are used in this study. Latent attitudes can be indicated by behavioural observation or self-reports, while future behaviour can be better predicted through assessing attitudes than through observing present behaviour (Baker 1992). Therefore, one of the aims of this study is to investigate students' attitudes on the basis of their self-reports in relation to language achievement and their effort. After providing a brief description of attitudes from different perspectives and measuring scales, the next section presents attitudes from an L2 perspective because it is more relevant to my study.

2.2.3.2 Language learning attitudes

The importance of attitudes in language learning has been the focus of some previous research studies (e.g. Gardener et al. 1976; Cooper and Fishman 1977; Genesee and Hamayan 1980).

In fact, research has shown that attitudes toward the target language and its community correlate with L2 achievement (e.g. Gardner 1985). It is assumed that a positive attitude towards the target language learning situation leads to better learning outcomes. Learners' beliefs, feelings and desire to learn another language shape their attitudes towards it, and learners who feel that learning another language may lead to a loss of identity will not succeed in their learning. In contrast, learners who believe that a readiness to adopt the target language is beneficial will succeed in learning it (Gardner 1985), which highlights the important role of attitude in language learning. A number of studies have indicated that there is a relation between success in language learning and language learning attitude afterwards, or in subsequent years of study. For instance, Kraemer and Zisenwine (1989) found that children who succeeded in language learning held more positive attitudes towards the subject and gained better scores later or in subsequent years of study.

In formulating a socio-educational model, Gardner (1985) conceptualised a positive attitude towards language learning as a component of the motivation to learn a second language, along with a desire to attain learning goals and the effort to achieve those goals (see Section 2.2.1). The socio-educational model is based on the Canadian language context, where both first (English) and second (French) languages are used, both formally and informally. Since speakers in both communities have access to each other directly, this sociocultural situation is different from the context of this study because, in the Saudi context, English language learners might not have the chance to communicate with native English speakers or use English in their daily lives. Thus, when stating their opinions on the community of the target language and their disposition towards language learning, English language learners in the Saudi context, as in other foreign language settings (e.g. Chambers 1999), may depend on the media for their views, or on the opinions of relatives and friends, or perhaps they may travel abroad for holidays or study. This focus on the social aspect of attitude formation, emphasized in Gardner's research, is highly relevant to the present study. Indeed, this study measures attitudes toward the learning situation (language learning, teacher, course) in accordance with Gardner's (2004) Attitude Motivation Test Battery (AMTB) and Dörnyei and Taguchi's (2010) questionnaire (see Section 3.3.1). The next section (2.2.3.3) discusses the factors that can influence learners' attitudes towards language learning.

2.2.3.3 Factors that influence attitudes

There are a number of factors that can influence a person's attitude towards language learning. For instance, as mentioned in Section 2.2.3.2, Chambers (1999) claims that students' attitudes are initially formed at home under their parents' influence, while later, other agents, such as friends, teachers and the media, have an influence on shaping these attitudes. Indeed, according to Wilkins (1976), children's attitudes are often almost the same as their parents, so the influence of parents should not be ignored in the success or failure of children in language learning. In short, learners' attitudes affect their language achievement; and their level of achievement, in turn, has an influence on their attitudes. In other words, favourable attitudes are fostered by success, and unfavourable attitudes are supported by a low level of achievement, while, of course, one must take into account the opposite process, and this is precisely what other researchers have done (e.g. see Ellis 1994, below). Furthermore, there are some cases in which learners' positive attitudes can change into negative ones if there is a lack of achievement (Ellis 1994).

Another factor that influences one's attitude towards language learning is the cultural aspect of the language, as indicated by Gardner and Lambert (1972). They state that a learner's attitude towards the target language culture is a very important factor in terms of influencing the process of language learning. Furthermore, Brown (2000) indicates that language and culture are interlinked; he stresses that it is important to understand and accept the differences in the foreign language culture because this can help to attain proficiency in the target language.

One further factor that has an influence on language learning is one's attitude towards target language native speakers. In fact, it has been stated that a positive attitude towards target language speakers is necessary for successful language learning. In short, there should exist no prejudices towards the target language community (Littlewood 1984). Indeed, a favourable attitude towards the target language culture and its speakers facilitates learning that language, while an unfavourable one hinders such learning (Ellis 1994). In that regard, Mitchell et al. (2019, p.24) state that "the attitudes of the learner towards the target language, its speakers, and the learning context, may all play some part in explaining success or lack of it".

Finally, the role of the teacher in language learning cannot be ignored. Good teachers realise that students reflect their attitudes because they are often role models for their students. Thus, they have an important part to play in influencing students' attitudes and motivation towards learning the language. Indeed, Cook (1994, p.75) asserts that teachers must "be aware

of the reservations and preconceptions of their students. What they think of the teacher, and what they think of the course heavily affect their success."

2.2.3.4 Attitude and achievement

A very significant amount of research has shown that examining second or foreign language learners' attitudes towards the target language and its culture has important implications for achieving positive results in language learning (e.g. Gardner 1985; Morgan 1993; Noels et al. 2003; Al-Tamimi and Shuib 2009). For example, Morgan (1993) emphasises the importance of examining the attitudes of foreign language learners. He states that "pupils' attitudes to the foreign language that they are learning or to the foreign culture(s) with which it is associated are recognised as crucial to language learning success" (Morgan 1993, p.15). Noels and her colleagues (2003, p.40) affirm that "positive attitudes towards the learning situation have consistently been associated with L2 achievement and related outcomes". Elsewhere, Al-Tamimi and Shuib (2009) carried out a study to investigate the attitudes of 81 petroleum engineering students towards learning English at Hadhramout University of Science and Technology. The findings of the study revealed that most of the students had a favourable attitude towards the English language and that these positive attitudes were related to their success in learning the language.

Given the importance of attitude in language learning in relation to other language learning variables, a considerable amount of research has been conducted worldwide. However, little attention has been paid to this research area in foreign language contexts, especially in Saudi Arabia. The present study is therefore, in part, an attempt to fill this gap by identifying the factors that promote or hinder effective EFL learning.

2.3 Language learning variables

Many language learning variables have been considered as "possible characteristics of individuals that influence how successful different individuals will be at learning another language (Gardner et al. 1997, p.344). These variables can be divided into three categories:

> …*cognitive variables* (intelligence, language aptitude, language learning strategies, previous language training and experience), *affective variables* (attitudes, motivation, language anxiety, self-confidence about the language, personality attributes and learning styles) and *miscellaneous category* (age, socio-cultural experience which

could have either cognitive or affective implications). (Gardner and MacIntyre 1992, p.211)

When reviewing related studies, it became difficult to categorise the factors examined (as affective, cognitive and so on) in different studies because researchers considered a mixture of them. For instance, Gardner and his colleagues (1997) examined cognitive and affective factors plus other miscellaneous factors, which made it complicated in terms of categorization. Therefore, in a follow-up review of related studies, the variables examined – e.g. attitude, motivation, anxiety, self-efficacy, autonomy, learning style and so on – will not be categorized to avoid confusion. In fact, much of the research in L2 or FL contexts focuses on measuring language learning variables in isolation. That is, researchers examine either attitudes towards language learning (e.g. Dörnyei 2003a; Al-Tamimi and Attamimi 2014), motivation for learning a language (e.g. Gardner 1985; Deci and Ryan 1985; Dörnyei 1990, 1998; Al-Tamimi and Shuib 2009; Bektaş-Çetinkaya and Oruç 2010; Javid et al. 2012; Alzubaidi et al. 2016), foreign language anxiety (e.g. Scovel 1978; Horwitz et al. 1986; Chang 2008; Andrade and Williams 2009; Al-Saraj 2011), autonomy (e.g. Benson and Voller 2014) or learning style (e.g. Aqel and Mahmoud 2006; Burke and Doolan 2008), among others. Meanwhile, various studies have shown how a learner's level of achievement is influenced by these variables in isolation while various others have examined achievement in relation to two or more variables (e.g. Wang 2008; Dewaele and Ip 2013; Aldosari 2014; Chen 2014) (see Section 2.2.1.3). In addition, it has been demonstrated that there are relationships among some of these variables. For instance, Gardner (1985) indicated that attitudes are clearly related to motivation because he considered the former a component of the latter (see Section 2.2.1). Elsewhere, Clément and Kruidenier (1985) reported that there are relationships between aptitude, attitude and motivation, while Chamot (1994) noted that self-efficacy is related to the frequency of using language learning strategies. By the same token, some researchers (e.g. Politzer 1983; Politzer and McGroarty 1985) suggest that attitude and motivation can affect the frequency of using different language learning strategies. As the examples above indicate, scholars have looked at either a combination of some affective and cognitive categories, or have focused on one or two variables in either category. In the present study, a combination of different categories (e.g. affective and cognitive) is not explored due to time constraints and the difficulty of looking at different categories in one study. Nonetheless, while motivation is the key affective factor in language learning (see Section 2.2.1), as noted above, studies have shown that motivation is not the only important factor (cf. Gardner et al. 1997, p.347). Therefore, language attitude and

anxiety have to be taken into consideration as well, because they are closely interlinked (as will be discussed in Section 2.3.1).

Despite the extensive research on foreign language learning, there are some existing limitations that need to be considered. One limitation is that few studies have investigated the relationships among affective variables (particularly attitude, motivation, and anxiety) in particular, or among other different language learning variables simultaneously to specify to what extent they work together to influence the level of achievement. Exceptions include, for example, Brown et al. (1996), Gardner et al. (1997), Yamashiro and McLaughlin (2001) and Wan (2012) (for more see Section 2.3.1). Therefore, in the present study, the influence of the factors examined (attitude, motivation, anxiety) on language achievement, as well as behaviour, is taken into consideration to make a more rounded contribution to the existing literature, where behaviour is neglected in favour of focusing on achievement alone (see also Section 2.3.2).

Another limitation is that few studies have paid attention to the importance of using a technique such as structural equation modelling (SEM), which is "a multivariate statistical technique, like factor analysis" and can be used "to interpret the relationship among several variables within a single framework" (Csizer and Dörnyei 2005, p.19). In addition, it includes a directional path to indicate how variables correlate. Thus, this technique is helpful to examine comprehensive models that comprise several interlinked variables, which is exactly the situation with the variables involved in learning an L2 (Csizer and Dörnyei 2005). Therefore, this study uses this technique to interpret the correlations between affective variables in language learning in order to provide a clear understanding of how these affective factors interact with one another and thus impact on the process of learning EFL.

Finally, in addition to the little attention that has been paid to using statistical techniques (such as SEM) in such studies, all the studies that have addressed the relationships between affective variables have tended to target university students. Thus, examining the relationships between affective variables in the context of secondary schools in Saudi Arabia should extend the research context and make a valuable contribution to existing knowledge in the area of affective variables in foreign language learning. After all, the secondary stage is a transitional stage between school and university education. Thus, in this stage, English is important because students still have the opportunity to make decisions about their future, which differentiates them from the majority of university students who have already decided on their future path.

The following sections review previous studies on affective factors in relation to achievement in Section 2.3.1, and to effort in Section 2.3.2.

2.3.1 Research on affective factors and achievement

The interconnection between motivation and attitudes has been explored in various studies. For instance, it is assumed that if an individual has a positive attitude toward an objects or behaviour, they will be inclined to show a favourable behaviour intention associated with it and will thus probably act in agreement with this intention (see, for example, Ajzen and Fishbein 1977 and Ajzen 2005). Thus, when learning a language, a learner with a favourable attitude towards the language will make more effort and put in more time to learn it. However, this relationship might not lead to the expected learning outcomes if the motivation elements are not satisfied properly, because then there will be little or no effort. As indicated by Gardner (1985), effort is a key component of motivation (see Section 2.2.1). For instance, in FL contexts, and in the Saudi context in particular, while some students show a positive attitude towards EFL, at the same time they may not put in the amount of effort they are supposed to spend on learning. They may not study at home. In addition, perhaps as a sign of anxiety, they might skip classes or become reluctant to participate in English classes. These behaviours of EFL learners are ratified by McVeigh (2002) in his consideration of the relation between attitude and motivation. Because of the discrepancies between students' attitudes, motivation, effort and how anxiety might affect results in the FL classroom, the present study examines the correlations between affective variables (attitude, motivation, anxiety) in relation to students' effort and level of achievement.

In this regard, Brown et al. (1996) conducted a study to examine the relationships between five factors of language learning (personality, motivation, anxiety, learning strategies, language proficiency) for 320 Japanese university students who were studying at an American university in Japan. The authors used six instruments: Yatabe-Guilford Personality Inventory, Attitude/ Motivation Test Battery, Foreign Language Classroom Anxiety Scale, Strategy Inventory for Language Learning, Michigan Placement Test and a Cloze test. The findings revealed correlative relationships between motivation and some personality aspects. In short, learners who were socially active were more motivated and had a greater desire to learn English, while classroom anxiety correlated positively with extraversion, ascendance, and general activity, but negatively with feelings of inferiority, nervousness and depression. With regard to learners' proficiency, high level students were more anxious than middle- or low-

level students. This indicates that facilitating anxiety can lead to better performance. As this result contradicts what would be expected theoretically and what has been revealed in the anxiety literature, Brown et al. (1996) suggest that this result might be limited to the population of their study, and it seems to be an indicator facilitating anxiety for those Japanese learners (see Section 2.2.2). Moving on, organising and evaluating strategies correlate positively with motivation and attitudes towards English. Brown et al. (1996) note that a simple linear explanation to interpret the relationships between different language variables might be inadequate. As noted above, the use of SEM in the present study will help to palliate this problem via an appropriate interpretation of the data.

Using SEM with a sample of 102 university students learning French as an L2, Gardner et al. (1997) examined the relationships between language aptitude, anxiety, motivation, self-confidence, language attitude, field independence (field-independent individuals are depicted as self-sufficient and analytical individuals, according to Witkin et al. 1979) and L2 achievement. Their findings show that there are indeed significant correlations between these variables with the exception of language learning strategies, which do not correlate significantly with language learning. That is to say, language attitudes underpin motivation, which, in turn, boosts self-confidence and supports language learning strategies. In short, motivation, language aptitude and language learning strategies are seen to lead to language achievement. In addition, field-independence correlates with language aptitude. However, the results revealed that using language learning strategies correlates with low-level achievement. As suggested by Gardner et al. (1997), this is probably because low-level students may try to use strategies to reach a higher level of achievement, while high-level students may feel that there is no need to use such strategies. The findings from Chamot's (1990) study are consistent with those of Gardener et al. (1997), in the sense that he also identified relationships between language achievement and the frequent use of learning strategies (i.e. the use of learning strategies correlates with low-level achievement). Therefore, as the findings of this study revealed, it seems that using a SEM technique leads to a better understanding of the relationships between different variables. Unfortunately, although Gardner's et al. (1997) study was relatively comprehensive in terms of the language learning variables examined, it does not provide details about the correlations between variables. The present study shows that using structural equation modelling with a more appropriate model for foreign language contexts (self-determination theory), plus semi-structured interviews, leads to better results that make a noteworthy contribution to the existing EFL literature.

Yamashiro and McLaughlin (2001) investigated the influence of attitudes, motivation and anxiety on Japanese college students who showed low levels of proficiency while studying EFL. Their findings revealed that attitudes strongly correlated with motivation and motivation had a direct influence on the students' proficiency, while anxiety influenced their level of proficiency only indirectly. The relation between motivation and anxiety found here indicates a debilitating anxiety (see Section 2.2.2). The authors found that increased motivation caused high levels of anxiety, and this led to low levels of performance. However, they point out that further work is needed in order to explain the influence of anxiety on language performance because, as they indicate, their model does not explain all the differences. Although the Japanese context is an EFL context similar to that of the present study, Yamashiro and McLaughlin (2001) focused on Gardner's theory of L2 motivation, which has been quite broadly criticised (see Section 2.2.1.2). Therefore, it was considered important to conduct the present study using a model that is more appropriate for a foreign language setting.

Over the last few decades, many studies have examined the interaction between motivation and attitudes include those by Chalak and Kassaian (2010), Aldosari (2014) and Chen (2014). They all investigated the interaction between attitude and motivation to learn EFL and a positive relationship was found between motivation and attitude, which shows they are closely interlinked. That is to say, students who are highly motivated to learn EFL hold a positive attitude towards English. Elsewhere, Alzubaidi et al. (2016) examined university students in Jordan's perceptions of the learning environment and whether they had any influence on the learners' motivation and self-regulation in EFL. Their results showed that there was a significant correlation between the examined variables. That is, if the students had the chance to make friends in class and support each other, they were likely to be highly motivated and self-regulated.

For his part, Wan (2012) mainly focused on language anxiety in and outside the classroom, and its relationships with motivation, attitude, self-confidence, language preference, language proficiency and several demographic factors. The participants in his study were 177 Chinese learners of English at Newcastle University in the UK. The data revealed that there were negative relationships between language anxiety, language proficiency, intrinsic motivation and self-confidence, but a positive relationship between language anxiety and the 'ought to' self (attributes that an individual believes that a person ought to possess). No correlation was found between language anxiety and demographic factors, integrative and instrumental motivation or the ideal self. While this study seems to fairly closely resemble the

present one, it is important to bear in mind that Wan mainly focused on language anxiety, while its relation to other variables was given less prominence. In addition, he did not portray a clear understanding of motivation because he mixed different motivation models without providing enough information about how and why they were related to one another.

More recently, researchers have investigated the interaction between affective factors such as Zayed and Al-Ghamdi (2019). They examined the relationships between motivation, attitudes, self-confidence, and anxiety in learning English as a foreign language for 73 college students. They applied a mixed-methods approach, using questionnaires that were analysed quantitatively and qualitatively. The findings confirmed the significant relationships among affective factors with the exception of self-confidence, which was found not to have a significant relationship with anxiety. They concluded that anxiety has no influence on students with positive attitudes, who are highly motivated, and those who are self-confident.

Similarly, in 2021, Alamer and Almulhim used a mixed-methods approach to examine the relationship between motivation and anxiety for 134 university students in Saudi Arabia. They found that autonomous motivation has a negative relationship with anxiety, whereas controlled motivation positively related with language anxiety. As can be seen, these studies highlighted the importance of affective factors in language learning. Thus, the current study aims to explore the relationships among affective factors, students' effort, and achievement when learning EFL.

2.3.2 Affective factors and effort

As noted in Section 2.3, this study focuses on the correlations between affective factors in relation to language achievement, as well as students' behaviour through measuring their intended effort. According to Csizer and Dörnyei (2005), intended effort refers to the amount of effort exerted to learn the language. Motivation is indirectly related to language achievement since by its very nature it precedes behaviour rather than achievement. However, studies that focus on the influence of motivation on language proficiency or achievement generally ignore behaviour, which is the mediating link; and by ignoring behaviour, they "suggest a false linear relationship between motivation and learning outcomes" (Csizer and Dörnyei 2005, p.20). In this respect, using structural equation modelling, Papi (2010) carried out a study to investigate the motivation, anxiety and intended effort of high school students on the basis of Dörnyei's (2009) L2 motivational self-system. He found that the students were motivated to put in a lot

of effort to learn the language. However, he found that types of motivation influenced anxiety differently. The ideal L2 self and the L2 learning experience had a negative causal relationship with anxiety, whereas students with ought-to L2 self motivation had ore anxiety.

Furthermore, closely linked to students' effort are language learning strategies. That is, since students use different learning strategies when they make an effort to learn the language, the present study sheds light on language learning strategies. In particular, when analysing qualitative data, students' efforts are classified in accordance with language learning strategies. Thus, the following Section 2.3.2.1 gives a brief overview of language learning strategies. In that regard, Lan and Lucas (2015) examined the role of motivation, attitude and language learning strategies of Vietnamese college students when learning English as a foreign language. The results showed that students with a more positive attitude and more motivation used more effective learning strategies in their learning than students with a negative attitude and less motivation. In general, research on language learning strategies stresses the importance of the effective use of learning strategies (Macaro 2006).

2.3.2.1 Overview of language learning strategies

There is considerable research indicating that learning strategies make a significant contribution to L2 acquisition (e.g. Wenden and Rubin 1987; Dreyer and Oxford 1996; Park 1997). Several attempts have been made to define learning strategies. The earliest definition of learning strategies was given by Rubin (1975, p.43) referring to "the techniques or devices which a learner may use to acquire knowledge". A more comprehensive definition of language learning strategies was given by Oxford (1990, p.8), describing them as "operations employed by the learner to aid the acquisition, storage, retrieval, and use of information". She expanded this definition by demonstrating the purpose of applying these strategies, thus also to include "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations" (Oxford 1990, p.8). I follow Oxford's definition in this study because it is more comprehensive.

The initial phase of research on language learning strategies was characterised by focusing mainly on good language learners and the implication that their good strategies should be imitated by other language learners (e.g. Rubin 1975; Stern 1975; Naiman et al. 1978). These studies identified the characteristics that applied to 'good' or successful language learners, such as their guessing accuracy, their willingness to communicate and their lack of inhibition.

However, over the years, researchers became more attracted to examining the appropriateness and management of strategies. In that regard, Macaro (2006, p.332) states that "successful learning is no longer linked to the individual learner's frequency of strategy use, but to his or her orchestration of strategies available to him or her". So, in order to have a successful learning outcome, it does not matter how frequently strategies are used. What matters is that strategies fit the learning task and that learners use them effectively. In that respect, Oxford (2003) states that a learning strategy cannot be considered good or bad until it is in a given context. Thus, there are some conditions that a strategy needs to meet to be useful:

1. The strategy should be linked to the learning task.
2. It should be appropriate to some extent to the learner's preferred learning style.
3. The learner should use the strategy effectively and relate it to other pertinent strategies.

Different attempts have been made to classify language learning strategies (e.g. Naiman et al. 1978; Rubin 1981; O'Malley and Chamot 1990; Oxford 1990; Cohen 1998). Oxford's classification is more detailed and comprehensive than other classifications (see for example Ellis 1994). She divides learning strategies into direct and indirect learning strategies; they are further subdivided into six categories. Direct strategies require direct use of the target language. They include cognitive strategies, compensation strategies and memory strategies. Indirect strategies do not require direct use of the language, but they do support learning the language. They include metacognitive strategies, social strategies and affective strategies. More details, quoted from Oxford (1990), are given in Table 2.1, below.

Table 2.1: Oxford's (1990) Direct and indirect learning strategies classification

DIRECT STRATEGIES
I. Memory strategies
Creating mental linkages ***1.*** **Grouping:** Classifying language items into meaningful groups, e.g. nouns, adjectives, opposites, words about specific topics and so on. ***2.*** **Associating/elaborating:** Linking new information to information already in one's memory or linking one item to another, e.g. "bread and butter". ***3.*** **Placing new words in a context:** Put new words in a sentence, dialogue or story to remember them. **Applying images and sounds** 1. **Using imagery**: Linking new information to ideas in memory by using a visual symbol or a picture of an object. 2. **Semantic mapping**: Presenting language material in the form of a picture that has a key concept at the top centre linked with related concepts by arrows or lines. 3. **Using keywords**: Using aural and visual links to remember a new word (e.g. "to learn the new French word potage (soup), the English speaker associates it with a pot and then pictures a pot full of potage" (Oxford 1990, p.42). 4. **Representing sounds in memory**: Relating the new word to well-known words or sounds from the learner's own language or the target language (e.g. Antonio creates the nonsense rhyme: "I hit a parrot with my carrot. The parrot said I am dead!" (Oxford 1990, p.64). ***Reviewing well*****:** In order to remember new language information, it needs to be reviewed. 1. **Structured reviewing:** To review in intervals, begin with closely spaced and then more widely separated (e.g. review 15 minutes after learning, after 30 minutes, an hour, three hours, a day, a week later and so on). ***Employing actions*** 1. **Using a physical response or sensation:** Associate the heard expression with a physical response by acting it out (e.g. going to the door) or with a physical sensation (e.g. warmth) (Oxford 1990, p.43). 2. **Using mechanical techniques:** Using techniques that help the learner remember new language information, *such as flashcards.*
II. Cognitive strategies

Practising

1. **Repeating**: Say or do something again and again.
2. **Formally practising with sounds and writing systems**: Focusing on pronunciation, intonation etc., and on the writing system of the target language.
    1. **Recognising and using formulas and patterns:** Routine formulas and patterns enhance the learner's comprehension and fluency, e.g. "Hello, how are you?" (Oxford 1990, p.45), "I would like to…. " (Oxford 1990, p.73).
    2. **Recombining:** Putting together known language items in new ways to form a meaningful sentence, e.g. "Rosine knows the three expressions the weather's fine, I think I'd like to... and take a walk. In practising her spoken English, she creates the following new sentence from these three with some additional words: The weather's fine today, so I think I'd like to take a walk" (Oxford 1990, p.74).
    3. **Practising naturalistically:** Practise the target language in natural, realistic contexts, as in a dialogue, reading a book or newspaper, listening to broadcasts or interviews with native speakers, watching movies or TV, or writing a letter or an article in the target language.

Receiving and sending messages

1. **Getting the idea quickly:** Focusing on the main ideas through skimming,g or on specific details through scanning.
2. **Using resources for receiving and sending messages:** Learners use printed and non-printed resources to understand the target language or to produce something in it. Printed resources include dictionaries, word lists, grammar books, phrase books, encyclopaedias, travel guides, magazines and general books. Non-printed resources include tapes, TV, videocassettes, radio, museums and exhibitions.

Analysing and reasoning

1. **Reasoning deductively:** Applying already known rules to new language situations, e.g. "Julio, who is learning English, hears his friend say, would you like to go to the library with me at five o'clock? Julio correctly understands he is being asked a question to which he must respond, because he recognises that part of the verb comes before the subject (a general rule he has learned)" (Oxford 1990, p.82).
2. **Analysing expressions:** Breaking down a new language item into its component parts. For example, "Martina is learning English. She does not immediately

understand the phrase premeditated crime, which she hears in a TV news broadcast. She breaks down this phrase into parts that she does understand: crime (bad act), meditate (think about), and pre- (before). Thus, she figures out the meaning of the whole phrase: an evil act that is planned in advance" (Oxford 1990, p.83).

3. **Analysing contrastively (across languages):** Analysing new language elements (sounds, words, grammatical rules) and comparing them with those in the learner's own language to spot similarities and differences.
4. **Translating:** Converting the new language item into the learner's own language.
5. **Transferring:** Applying knowledge from the learner's own language to the target language in order to understand or produce an item in the target language. For instance, "When Dwight hears the expression weekend in French, he correctly knows through transfer that it means the same as in English, and that bon week-end means Have a good weekend" (Oxford 1990, p.85).

Creating structure for input and output

1. **Taking notes**: Jotting down the main or specific points.
2. **Summarising:** Make a condensed short paragraph from a long passage (précis).
3. **Highlighting:** Focus on important information in a passage by using techniques such as underlining, bold writing, colours and so on.

III. Compensation strategies

Guessing intelligently

1. **Using linguistic clues:** Previous knowledge of the target language can help the learner guess the meaning of what is heard or read. Linguistic clues include suffixes, prefixes and word order.
2. **Using other clues:** Using non-linguistic clues such as knowledge of the context, topic and social relationships can also help the learner to guess the meaning of what is heard and read.

Overcoming limitations in speaking and writing

1. **Switching to the mother tongue:** Using the learner's own language instead of the target language for an expression.
2. **Getting help:** Seeking help from someone by hesitating or by directly asking for missing information.

3. **Using mime or gesture:** Using bodily movements instead of an expression to show the meaning. For instance, "Not able to say "I am afraid", Jaime instead mimes the emotion of fear by crouching with his arms crossed over his head" (Oxford 1990, p.95).
4. **Avoiding communication partially or totally:** When the learner anticipates or encounters difficulties, they try to avoid communication in specific situations or avoid specific topics.
5. **Selecting the topic**: In this strategy, the learner selects the topic of the conversation. They select topics that are of interest to them and for which they know the required vocabulary and grammar.
6. **Adjusting or approximating the message:** Modifying the message by saying the same thing in a different way, e.g. "saying pencil for pen" (Oxford 1990, p.50).
7. **Coining words:** When the learner does not know the right word, they make up new words to deliver the desired message, e.g. saying "tooth doctor instead of dentist" (Oxford 1990, p.97).
8. **Using a circumlocution or synonym:** Using the description of a concept or using an equivalent word to deliver the intended meaning, e.g. saying "a thing you dry your hands on for towel" (Oxford 1990, p.97).

INDIRECT STRATEGIES

I. Metacognitive strategies

Centring your learning

1. **Overviewing and linking with already known material:** Previewing the material for a language activity and linking it with material already known to the learner.
2. **Paying attention:** Directing attention to the language learning task and avoiding distractors.
3. **Delaying speech production to focus on listening:** The learner decides to develop listening comprehension skills first. Then, they move to speech production in the target language.

Arranging and planning your learning

1. **Finding out about language learning:** Putting in a lot of effort to know about how language learning works by reading books and contacting other people to improve the learning process.
2. **Organising:** This strategy includes various tools that are linked to optimal learning, such as creating the right physical environment for learning the new language, e.g. a quiet room without distractors for listening and reading.
3. **Setting goals and objectives:** This includes long-term goals, such being able to speak by the end of the year, or short-term goals such as finishing reading a book by Friday
4. **Identifying the purpose of a language task (purposeful listening/ reading/ speaking/ writing):** Determining the purpose of a language learning task, e.g. "listening to the radio to get the latest news on the stock exchange or reading a play for enjoyment" (Oxford 1990, p.139).
5. **Planning for a language task:** This strategy involves four steps: describing the nature of the learning task, identifying its requirements, checking the linguistic resources that the learner has and determining if any further aids are needed.
6. **Seeking practice opportunities:** Creating opportunities to practise the target language in naturalistic settings, e.g. talking to native speakers of the language.

Evaluating your learning

1. **Self-monitoring:** This strategy focuses on monitoring learners' errors in the new language, identifying the more important ones, tracking their sources and trying to eradicate them.
2. Self-evaluating**:** Checking the learner's progress in the new language, e.g. checking whether reading or understanding is better than a few months ago.

II. Affective strategies

Lowering your anxiety

1. **Using progressive relaxation, deep breathing or meditation:** Using these techniques relaxes the muscles and calms the learner to perform their learning tasks in a more peaceful and efficient way.
2. **Using music:** Listening to music for a few minutes before any stressful learning task calms the learners and has a positive influence on them.

3. **Using laughter:** This strategy helps to reduce the learner's anxiety. It can be used in different classroom activities such as "role-plays and games" (Oxford 1990, p.165).

Encouraging yourself

1. **Making positive statements:** To say or write positive statements to encourage oneself to learn the new language.
2. **Taking risks:** Using the language despite the fear of making mistakes and facing difficulties.
3. **Rewarding yourself:** The learner needs to reward themself for good performance in the new language.

Taking your emotional temperature

1. **Listening to your body:** The learner needs to pay attention to signals from their body. They can be negative signals indicating stress and worry, or positive ones reflecting calmness and satisfaction.
2. **Using a checklist:** The learner uses checklists to assess their feelings and attitude towards learning the new language in general, or towards a particular learning task.
3. **Writing a language learning diary:** The learner needs to keep a record or diary to track their feelings, thoughts and learning strategies as regards the new language.
4. **Discussing your feelings with someone else:** Talk to other people (e.g. teacher or friends) to express your feelings about learning the new language as this helps to reduce your anxiety.

III. Social strategies

Asking questions

1. **Asking for clarification or verification:** Ask the speaker to explain, repeat or check whether the answer given is correct.
2. **Asking for correction:** This strategy can be used more in speaking and writing, via which the learner asks others for correction.

Cooperating with others

1. **Cooperating with peers:** Working with other learners of the language to improve your own language.

2. **Cooperating with proficient users of the new language:** Communicate with native speakers or proficient users of the target language.

Empathising with others

1. **Developing cultural understanding:** Show empathy with others through learning about their culture to understand them better.
2. **Becoming aware of others' thoughts and feelings:** Noticing others' behaviour as possible manifestations of their feelings and thoughts.

To conclude, language learning strategies contribute to better language achievement when they are used effectively (Oxford 1990). For example, Vann and Abraham (1990) conducted a study on two unsuccessful language learners to identify the reasons for their failure in an academic programme. The results revealed that the two students used similar strategies to those used by the successful learners. However, they found that the unsuccessful students did not apply the strategies appropriately to learning tasks. In L2 and EFL contexts, research shows that cognitive strategies have the most significant influence on language proficiency (Ehrman and Oxford 1995) (see Section 5.2). Furthermore, cognitive and metacognitive strategies are commonly used together, to support one another (Oxford 1993). In addition to Oxford's learning strategies, qualitive analysis in the present study revealed that the students also used social media to learn the language. Social media play a significant role in improving students' language skills and lowering their affective filter (Sharma 2019). For instance, social media have been found to increase their users' motivation and self-confidence (Lin et al. 2016) and reduce their anxiety (Young 2003) (see Section 5.2).

As pointed out at the beginning of Section 2.4.2, language learning strategies and social media are introduced in this chapter because they are used in the qualitative analysis to help categorise students' efforts to learn the language. This means that a specific measure, such as Oxford's (1990) Strategy Inventory for Language Learning, is not used in the present study. Therefore, I review relevant literature briefly.

2.4 Summary

This chapter has conducted a review of relevant literature on affective factors – attitude, motivation and anxiety – and has highlighted the limitations of relevant research in the foreign language context in general, and the Saudi context in particular. It has offered an overview of

each affective factor, and the definitions put forward by different theories in the field. Finally, the relationships between affective factors and their influence on students' effort and achievement, along with relevant studies, have been presented.

The next chapter presents the methodology applied in conducting this research. In addition, it describes the research design based on pilot studies, and the procedure for collecting and analysing data.

3. Methodology

3.1 Introduction

This chapter presents the research methodology employed in the present study. Section 3.2 explains the research design adopted for this study and the rationale for using it to answer the research questions. Then, a description of the data collection methods and the processes of developing the research tools are presented in Sections 3.3, 3.4 and 3.5. Following this, a detailed account of the participants and the recruitment strategy is given in Section 3.6. An explanation of the pilot study and the procedures used for conducting the main study are presented in Sections 3.7, 3.8 and 3.9. The chapter then describes the techniques used for data analysis in addition to reliability and validity issues in Section 3.10. Finally, a discussion of ethical considerations is conducted in Section 3.11.

As discussed earlier, the main focus of the present study is on investigating the relationships between three affective factors (namely, attitude, motivation, and anxiety) in relation to secondary students' efforts and achievement in learning EFL in Saudi Arabia. Thus, the following research questions (RQs) are addressed in this study:

1- What are Saudi secondary school students' attitudes towards learning English and the learning situation?

2- What types of motivation do Saudi secondary students have for learning English?

3- Which component(s) of foreign language anxiety is/are evident in the experiences of students when learning EFL?

4- To what extent do learning affective factors (attitude, motivation, anxiety) influence students' reporting of behaviour and achievement in EFL?

3.2 Research design

Given the aim of the present study, which explores the complex relationships between affective factors (namely, attitude, motivation and anxiety), effort and achievement, a convergent mixed-methods approach was applied to answer the research questions. As shown in Chapter 2, the nature of research on affective factors seems to put weight on a quantitative approach, owing

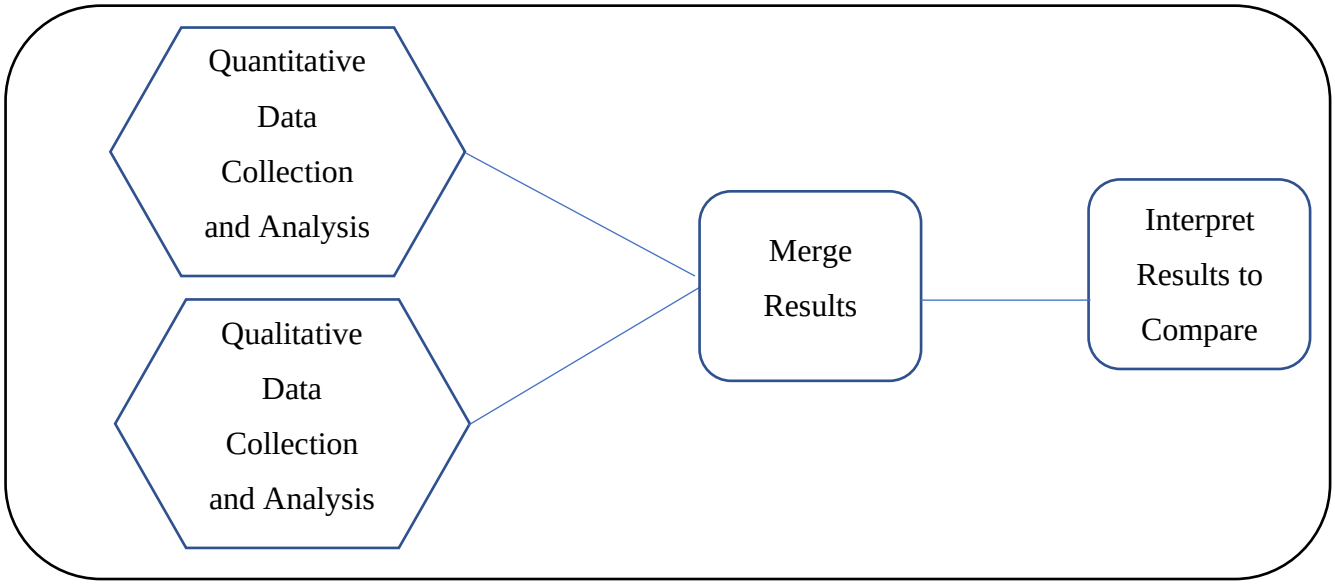
to the widespread usage of measuring scales for these factors. Questionnaires are widely applied in research on affective factors. They help to get a general overview of trends among the participants of studies (e.g. descriptive statistics). In addition, they allow for different statistical tests to be conducted to examine the relationships between study variables (e.g. structural equation modelling). Since the research questions in the present study ask about secondary school students' attitudes, motivation and anxiety when learning English, and explore the relationships between these factors, students' effort and achievement, it was thus considered important to use questionnaires to collect the required data for the study. However, due to the fact that questionnaires leave little room for exploratory and detailed analysis of complex relationships (Dörnyei and Taguchi 2010), it was also important to use other data collection methods, along with a questionnaire, to arrive at a deeper understanding of the complex relations between the study variables. Therefore, semi-structured interviews were also conducted to obtain a different kind of data that enriches the analysis and offers a more detailed description of the complex relations in order to answer the research questions. Thus, a mixed-methods approach was adopted in this study. This is defined as "research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches in a single study or programme of inquiry" (Tashakkori and Creswell 2007, p.4).

According to Dörnyei (2007), combining quantitative and qualitative methods of research originated in the 1970s when the notion of "triangulation" was introduced into the social sciences. Triangulation refers to "combining data sources to study the same social phenomenon" (Dörnyei 2007, p.43). The importance of mixed-methods research lies in the fact that it can reduce the potential weaknesses of single methods, thus increasing the validity of the research both internally and externally (Dornyei 2007; Johnson et al. 2007). In addition, as described above, combining different types of data facilitates the research arriving at a deeper understanding than a single approach.

There are three main research designs: convergent mixed-methods, explanatory sequential mixed-methods and exploratory sequential mixed-methods. My study adopts the convergent (a.k.a. concurrent) mixed-methods approach (shown in Figure 1, below), in which the researcher integrates quantitative and qualitative data in order to conduct a thorough analysis of the research problem. The quantitative approach here includes administering a questionnaire and carrying out a thorough statistical analysis of the answers provided, whilst the qualitative method entails conducting semi-structured interviews and analysing the data obtained qualitatively In a single-phase mixed-methods design, the researcher typically collects

quantitative and qualitative data at approximately the same time, but analyses them separately and then merges and compares the data obtained when interpreting the results to see whether the data collected confirm or contradict each other (Creswell and Creswell 2018).

Figure 3.1: Convergent Mixed-Methods Design (One-Phase Design adapted from Creswell and Creswell 2018, p. 218)



3.3 Data-collection methods

The quantitative and qualitative methods used in the present study consisted of a questionnaire and semi-structured interviews with secondary school students, and these were in the participants' first language, which is Arabic (see Appendices C.2 and D.2, respectively). The discussion in the following sections will first address the questionnaire, then semi-structured interviews.

3.3.1 Questionnaires

In general, survey studies aim to describe the features of a group of people through examining a sample of that group. The main method to collect data in surveys is using a questionnaire, which is one of the most common research tools in applied linguistics (Dörnyei 2007). Questionnaires are popular in research, given that they are relatively straightforward to create, highly versatile and facilitate collecting large amounts of data within a short period of time (Dörnyei 2007). This study uses a Likert-type online questionnaire. A Likert-type scale

"requires an individual to respond to a series of statements by indicating whether he or she strongly agrees (SA), agrees (A), is undecided (U), disagrees (D), or strongly disagrees (SD). Each response is assigned a point value, and an individual's score is determined by adding the point values of all of the statements" (Gay et al. 2009, pp.150–151). The participants were asked to determine their degree of agreement with the measured statements. Their responses were measured on a five-point scale ranging from strongly disagree to strongly agree, where strongly disagree = 1, disagree = 2, neutral = 3, agree = 4 and strongly agree = 5. The questionnaire was based on a five-point Likert scale to compare the reliability coefficient with previous research that also used a five-point scale type (Saleh and Ryan 1991). In addition, Marton-Williams (1986) states that a five-point scale is comprehensible and helps participants to express their views. The questions were closed-ended, and a space was provided at the end of the questionnaire to allow the participants to add their views or comments. The questionnaire was created with input from well-known questionnaires, in addition to a questionnaire that was used previously in a similar context. To avoid making the questionnaire items ambiguous and to make them more focused on the English language, I replaced such phrases as *the language*, *the second language* and *the foreign language* with the word *English*. For example, the item *I worry about the consequences of failing my foreign language class* was changed to *I worry about the consequences of failing the English class.* The questionnaires referred to in this study are:

- Gardner's (2004) Attitude Motivation Test Battery (AMTB) and Dörnyei and Taguchi's (2010) questionnaire, used to measure students' attitudes.
- Noels' (2003) Language Learning Orientations: Scale-Intrinsic Motivation, Extrinsic Motivation and Amotivation Subscales (LLOS-IEA), and Aljasir's (2016) Affective Factors in Language Learning Questionnaire (AFLLQ), used to measure L2 motivation.
- Horwitz et al.'s (1986) Foreign Language Classroom Anxiety Scale (FLCAS), used to measure anxiety.
- Some items were adapted from Gardner et al.'s (1997) and Dörnyei and Taguchi's (2010) questionnaires to measure the behaviour (effort) of the students while learning the language.

3.3.2 Interviews

In addition to the questionnaire, semi-structured interviews were conducted with 18 students in the present study. A semi-structured interview is one where the researcher has certain

questions or specific topics to be covered, which are used as an interview guide. The questions may not follow the same order in all interviews and the interviewer can ask questions that are not included in the guide depending on the answers of the interviewee. However, all interviews have to cover all questions with similar wording. The flexibility of semi-structured interviews allows enough room for the interviewees to provide in-depth responses relevant to the topics investigated (Bryman 2012).

As described in Section 3.2, since a questionnaire offers a general and superficial description of students' affective factors, interviews were also used to give students an opportunity to express their own feelings and thoughts about language learning. Thus, interviews help to clarify and interpret the data gained from the questionnaire. As Holloway notes: "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" (2005, p.52). Although the topics to be investigated in the interviews are predetermined in the interview guide, the use of probes or follow-up questions helps to deepen the responses of the interviewees and explore further points of interest (Patton 2015). Therefore, semi-structured interviews were conducted to elicit the qualitative data needed to answer the research questions listed at the beginning of this chapter (Section 3.1). Thus, four main topics were explored in the interviews: L2 attitude, L2 motivation, foreign language anxiety and students' effort to learn the language.

These topics were covered in three main sections. In all sections, all interviewees were asked the same core questions, but follow-up questions were only asked when further clarification was needed.

The first section includes questions about L2 attitudes and students' efforts to learn the language. Students' responses to this section were used to enrich and clarify the responses to the questionnaire items that addressed the first and fourth research questions. In this section, the interviewees were asked about their attitude towards the learning situation and whether this influences their language learning. They were also asked if their attitude had changed since they started to learn English. Finally, this section concluded with questions about the efforts that students made to learn the language.

In the second section, the interviewees were asked about their motives to learn English and how these influence their language learning. They were also asked about the stability of their motivation. The responses to this section were used to interpret and clarify the responses to the questionnaire items that addressed the second and fourth research questions.

Finally, the last section covers questions about foreign language anxiety. The interviewees were asked whether they had experienced anxiety in the language classroom and what were the reasons for or sources of their anxiety. In addition, they were asked whether the sources or levels of their anxiety had changed since they started learning the language. Moreover, the participants were also asked about the influence of anxiety on language learning. The responses to this section were used to clarify the responses to the questionnaire that addressed the third and fourth research questions.

Furthermore, other points covered in the interviews included asking about the factors that influence affective factors, either positively or negatively. In addition, at the end of each section, each interviewee was asked to make suggestions to enhance positive attitudes and motivation and reduce their anxiety when learning the language. The interviewees made some useful suggestions for reforming classroom practices (discussed in Section 7.4).

3.4 Transcription process

Transcription is a major component of qualitative research where audio or spoken data is turned into written text. It is generally agreed that transcription is a difficult and time-consuming part of the qualitative analysis (Lapadat 2000; Davidson 2009; McMullin 2023). It can take long hours to transcribe an hour or half an hour of an audio recording. Researchers need to repeat the recording several times to ensure accuracy in the transcription. In addition, spoken language differs from written language in structure. That is, oral speech includes pauses, silences, incomplete sentences…. etc, which makes it impossible to produce an accurate verbatim transcription. Furthermore, when transcribing audio, one would miss out non-verbal forms of communication such as gestures and facial expression, which might change the meaning of what is said. Moreover, the issues of accuracy between spoken and written language are aggravated when transcribing a different language. That is, in my study the interviews were transcribed in Arabic, then translated to English. Then, in order to maintain accuracy in meaning, some words in the English version were changed to verify that they were idiomatic expressions in English. I also did not include pauses, silences, overlaps, laughter…etc because I am interested primarily in the content of what is said in the interview. However, including such non-verbal forms of communication might be helpful and gives an indication of the meaning of what is said as it is the case in verbatim/denaturalised transcription in conversational analysis (McMullin 2023).

3.5 Translation process

As stated earlier, the participants' mother tongue is Arabic. Therefore, the questionnaire and interview questions developed were translated into Arabic in order to avoid any misunderstandings due to language proficiency level. Then, two Arabic-English bilingual doctoral students reviewed the questions in the translated questionnaire and interviews (for the pilots and the main study) to ensure accuracy and clarity in the translation, and that no change in meaning had ensued. Finally, the reviewed versions of the questionnaire and interview questions were prepared for use in the study. Furthermore, in the analysis phase, English translations of the interviews were checked by a native English lecturer at Cardiff University's School of English Communication and Philosophy to verify that they were idiomatic and read naturally with no language transfer errors.

3.6 Participants

The present study was conducted in a secondary school in Saudi Arabia. Typically, secondary schools in Saudi Arabia have three grades: Grade 10, 11 and 12. The participants of this study who responded to the questionnaire were 137 Saudi female secondary students (Years 10–12, aged 16–18 years). The numbers of respondents from each year group were similar: 45 (34%) were year 10 students, 47 (35%) were from year 11 and 45 (34%) from year 12. However, four participants were excluded from the year 10 data because they did not provide correct academic numbers, which made it impossible to compare their completed questionnaires with students' achievement scores, leaving 41 (31%) respondents. This is because academic numbers are used for identifying the questionnaires and interviews, instead of students' names. Thus, the participants numbered 133 in total. This study focused only on female students because of the complete segregation in the education sector in the school and university stages in Saudi Arabia. Thus, the researcher could only have direct access to the female schools sector. These students had already studied English for six years: three in the primary stage and three in the intermediate stage. In the secondary stage, they also study English for three years. The total number of female secondary students in Saudi Arabia is approximately 64,650 (Saudi Ministry

of Education 2018). Using Cochran's sample size formula to calculate the sample size of this study, assuming a confidence level of 95% with a margin of error of 10%, this resulted in 97 subjects being the minimum sample size required. Therefore, it can be said that the sample size is appropriate as 133 students participated in the study.

After completing the questionnaires, students across the three secondary years (years 10–12) were invited to volunteer for an interview. From these volunteers, 18 students were purposefully chosen by their teacher to represent different levels of achievement (low, medium and high) (see Section 5.2). This resulted in six students per year group. The key goal of sampling in a qualitative enquiry is "to find individuals who can provide rich and varied insights into the phenomenon under investigation so as to maximise what we can learn" (Dörnyei 2007, p.126).

It should be noted that for the pilot study for the questionnaire and the interviews, the target population was limited to 18-year-old students because I was interested in checking the length of the questionnaire (see further Section 3.7). Therefore, it made things easier from an ethical perspective. However, the main study sample comprised 16-, 17- and 18-year-old students.

3.6.1 Recruitment strategy

After obtaining consent from the Saudi Ministry of Education, I looked for a school on the basis of the number of students because a large number was needed, also cooperation from the head teacher and English language teachers, and the availability of a private room for the researcher to conduct the interviews. After that, I contacted the head teacher at the selected school and provided her with basic information about my project. Since, in Saudi Arabia, email communication with parents is not common, the headmistress distributed this information on a printed leaflet to all pupils in grades 10–12 who were asked to give it to their parents. Their parents were informed that, if they were not happy for their children to take part in the study, they could refuse consent; otherwise, consent would be considered as given. On this information form, all students were asked to complete a questionnaire and then some volunteers were requested to take part in an interview. In accordance with the guidelines of the Research Ethics Committee at Cardiff's School of English, Communication and Philosophy, I asked the students' teachers to select 18 participants from among the volunteers according to their level of achievement (low, medium or high) to be interviewed in order to represent a range of abilities, taking into consideration the need to have two students from each level of achievement in each year group, which resulted in six participants from each year group.

3.7 Pilot study

Before conducting the main study, the research instruments (questionnaire and interview) were piloted. The developed questionnaire was sent to two experts in language learning and questionnaire development at Cardiff University to review it and give their feedback. Based on their comments, the questionnaire was modified, as explained in Section 3.7.1. One of the experts recommended two pilots for the questionnaire. The first pilot study was intended to check the clarity and length of the questionnaire (see Section 3.7.1), the second was developed on the basis of the initial pilot study's responses and feedback to check whether students understood the instructions given and questionnaire items (see Section 3.7.2). The importance of a two-stage pilot is suggested by Dörnyei and Taguchi (2010) in their guidelines for constructing a questionnaire.

3.7.1 Initial pilot

Based on the above, the first version of the questionnaire was created. As previously mentioned, this pilot study aimed to check the length of the questionnaire and the clarity of the instructions given. For that purpose, at the end of the questionnaire, respondents were asked to give their feedback regarding its format and the clarity of the content. They were also encouraged to make any relevant general comments about it. This questionnaire consisted of 59 items measuring students' attitudes, motivation and anxiety, as well as their behaviour (effort) as regards learning EFL. After obtaining ethical approval at the end of April 2018, I conducted a first pilot study by administering an Arabic online version of the questionnaire to 13 female secondary school students, aged 18 years, via email. The questionnaire targeted 20 participants, but only 13 responded. The students who voluntarily participated in the pilot study were similar to the target population (i.e. female secondary students in Saudi Arabia); however, the main study sample was more comprehensive than the pilot sample because the latter included 16-, 17- and 18-year-old students. The reason for selecting only 18-year-old students for the pilot study was time restrictions, as ethical clearance for students under 18 years of age takes longer.

The results of the initial pilot showed that most of the participants (ten students) agreed that it was a long questionnaire and six agreed that they stopped paying attention when

answering. Regarding the clarity of the statements, they agreed that they were clear. All respondents seemed to have understood the statements given because no one had any queries regarding this. They all completed the questionnaire without seeking any assistance. Therefore, in the next pilot, I modified the questionnaire on the basis of the participants' comments.

3.7.2 Final piloting

While the first pilot aimed to check the length and clarity of the questionnaire, the second pilot sought to establish whether students understood the instructions given and responded to the questionnaire items in the manner expected, and to determine the length of time needed to complete the questionnaire. As my study examines three affective variables and students' behaviour, the developed questionnaire was too long. Thus, on the basis of the initial pilot, I tried to make the questionnaire more concise and focused. I modified it as follows:

1. L2 attitudes: I focused only on attitude towards the learning situation (language, teacher, course) (items 2, 5, 8, 17, 20, 29, 33, 36, 42, 44, 49, 51). I did not include any items that measured the students' attitude towards English native speakers and their culture, because it is a foreign language setting. This is linked to the criticism of integrative motivation theory (1959) in foreign language settings that Gardner received (see Section 2.2.1.2).
2. Anxiety: the FLCAS questionnaire devised by Horwitz et al. (1986) includes 33 items measuring three components of anxiety: communication apprehension, fear of negative evaluation and test anxiety. I selected only 12 items (items 3, 7, 10, 16, 18, 23, 27, 28, 32, 38, 41, 52) focusing on three components and avoided repetition of similar items. Three more items (13, 30, 40) were adapted from Gardner et al.'s (1997) questionnaire for measuring anxiety, as well to balance positive and negative items.
3. Students' behaviour: eight items were created with input from Gardner et al.'s (1997) questionnaire (items 21, 24, 26, 35, 37) and Dörnyei and Taguchi's (2010) questionnaire (items 12, 45, 53) to measure students' behaviour through their intended effort to learn EFL.
4. With regard to motivation, because different subtypes of extrinsic and intrinsic motivation are measured (items 1, 4, 6, 9, 11, 14, 15, 19, 22, 25, 31, 34, 39, 43, 46, 47, 48, 50), I did not delete items from the adapted questionnaire because only three items were assigned to measure each subtype of motivation types, as explained below.

With regard to the students' achievement scores, these were not collected in the first pilot because, as mentioned before, this only served to check the length and clarity of the questionnaire. In contrast, in the final pilot, the participants' achievement scores in English were collected in order to calculate the appropriate sample size for the study on the basis of all the variables examined.

Thus, after deleting the aforementioned items for measuring anxiety, the final pilot resulted in 54 items measuring three affective variables, as well as the students' behaviour. The questionnaire was administered via email during the summer holiday in Saudi Arabia to 86 Saudi female students, who were recruited via snowball sampling. The participants were divided into three groups according to their achievement scores: low level of achievement (50.0–66.6), medium level of achievement (66.7–83.3) and high level of achievement (83.4–100.0).

One sample t test was carried out to check the mean of each item and to assess whether it differed from 3 on the measuring scale or not (3= neutral, which indicates either that respondents did not understand the item, or it was not possible to determine their response). This resulted in the deletion of two items: one from items measuring test anxiety, *"I feel overwhelmed by the number of rules that need to be learned to speak English"*; and one from items measuring intended effort, *"I can't be bothered to try to understand the more complex aspects of English"*, because they showed non-significant differences. Consequently, the questionnaire included 52 items in the main study (see Appendix C.1 for the English version and Appendix C.2 for the Arabic one). Whereas ten out of the 13 students that responded to the first pilot commented on the length of the questionnaire, none of the participants in the second pilot did so. Therefore, one can only assume that the students did not find it too long or too onerous to complete.

Thus, the final version, the main study questionnaire, consisted of 52 items. It included four main sections: attitude, motivation, anxiety and behaviour. These included subtypes:

- L2 motivation included *external regulation* (items 1, 6, 11), *introjected regulation* (items 4, 14, 48), *identified regulation* (items 25, 39, 47), *intrinsic motivation to know* (items 22, 46, 50), *intrinsic motivation to accomplish* (items 9, 34, 43) and *intrinsic motivation to experience stimulation* (items 15, 19, 31).
- L2 attitude was measured in relation to three aspects: *language learning* (items 8, 17, 29, 36), *the teacher* (items 20, 33, 42, 49) and *the course* (items 2, 5, 44, 51).

- Anxiety included three subtypes: *communication apprehension* (items 3, 10, 13, 16, 23, 27, 30, 32), *fear of negative evaluation* (items 18, 28, 40, 41, 25) and *test anxiety* (items 7, 38).
- The last section measured behaviour through students' intended effort (items 12, 21, 24, 26, 35, 37, 45) (see Appendix C.1 for the English version and Appendix C.2 for the Arabic one).

3.7.3 Piloting the interviews

In August, I pilot-tested the interview with three 18-year-old students in Saudi Arabia who were recruited through my acquaintances. I asked them to pay attention to the questions posed in terms of clarity and level of overlap to avoid being repetitive and indistinctive. They were also asked to raise any important issues that they considered important but might have been overlooked in conversation. As the factors examined are closely related, the students felt that the interview questions were similar and, accordingly, gave similar responses to various questions. Therefore, on the basis of their comments, I modified the questions in the main interview and tried to make them more distinct and clearer, so that participants would not feel they were repetitive or similar (see Appendix D.1 for the English version of the interview guide, and Appendix D.2 for the Arabic one). For instance, when asking about students' attitude towards learning English, I changed the question from *Do you like learning English?* to *What is your attitude towards learning English?/ What do you think of learning English?* That is because in the motivation section I asked them *Do you enjoy learning English?*

As pointed out in Section 3.5, the interviews and questionnaire were conducted in Arabic to ensure that the participants understood the questions and items well and to help them express their thoughts easily. The participants reported no difficulties in understanding the questions and answering them. However, some interviewees gave very brief answers. Therefore, I had to expand the conversation and ask more questions. This resulted in the necessity of including probes in the final version of the interview to be used in such cases. *Probes* are used to remind the researcher to ask for an explanation or for more information such as explain more, how … and so on (Creswell and Creswell 2018).

3.8 Procedure for administering the questionnaire

The most common form for administering a questionnaire in applied linguistics research is group administration because the target participants are typically studying in a context where they can be assembled together and have the instrument administered to them. Thus, large amounts of data can be collected within a very short time (Dörnyei 2007). In my study, the developed questionnaire was administered to participants during the school day. Their teacher was only present for the first few minutes to assist students with their student numbers, but then left the room. Then only the participants and I were in the classroom, so the students were given a chance to complete questionnaire accurately and honestly without being influenced by the presence of their teacher. This is important because the validity of questionnaire findings can be affected by what is termed 'social desirability (or prestige) bias'. Social desirability (or prestige) bias refers to the propensity of research participants to give socially favourable responses instead of expressing their true feelings (Grimm 2010).

I started by introducing myself to the participants and explaining the aim of the study. After logging into their computers, I made sure that they all received the questionnaire link and could open it. I read and explained the participants' information and consent form in Arabic (the English version can be seen in Appendix B1). I advised them that their participation in the research was entirely voluntary and, if they were happy to proceed, they should tick the appropriate box on the consent form (to consent to participate). After that, I explained Likert-scale questions to them and that their choices would represent their opinions or attitudes towards the items examined. I made it clear that there were neither right nor wrong answers. I informed them that they should work individually and be honest in their responses. They took about 20–30 minutes to complete the questionnaire, although no time limit was set.

3.9 Procedure for conducting interviews

After finishing the quantitative phase, the interviews took place. Having obtained the consent of the participants and their parents, the interviews were carried out with volunteers who were chosen according to their level of achievement (see Sections 3.6 and 3.6.1). The interviews were conducted during the school day and scheduled at times that suited the participants, which resulted in conducting two interviews per day. Before starting each interview, the interviewee was asked to sign a consent form and write their student number on it, which they checked using lists provided by the head teacher. All interviews were conducted face-to-face on the

school campus in a private quiet room, where only the participants and I were present, to ensure confidentiality. However, the fact that the participants were talking to a person whom they had never met before, and were asked to express their thoughts and feelings, may have caused them some anxiety or apprehension. Therefore, it was important for me to make them feel comfortable and try to reduce this tension. Instead of commencing the interview immediately, after giving the interviewee a participant's information sheet, I started by thanking them for taking part in the study, and then reading and explaining the aim of the study and explaining ethical issues. This included the right to skip questions or stop the interview at any time without giving any reason.

In addition, I started each interview with a very general question to establish a rapport with the interviewee. As the study examined three main affective factors, before asking about these, I explained the meaning of each variable to make sure that the interviewee understood what would be discussed. Sometimes follow-up question and probes were used if the interviewee gave vague or short responses or when I wanted to gain deeper insights into a certain point. Furthermore, whenever an interviewee started to deviate from the topic and talk about irrelevant points, I redirected their attention to the point discussed by asking some more questions.

I also explained to the interviewees that they would not be asked for their name and their data would be anonymous so that they would feel more at ease to express their thoughts and feelings freely. Their academic numbers were only used to identify them and compare their achievement scores for research purposes. At this stage, I was not provided with students' levels of achievement because it might have had an effect on coding and analysing the data. The participants were also informed that the interviews would be audio-recorded, and these recordings were saved with their academic numbers. They were saved securely as audio files on a password-protected computer so that only I have access to them. Recording the interviews was helpful for transcribing and analysing data later on. I also took some field notes in case the audio recorder failed (Creswell and Creswell 2018). The main drawback of transcribing recordings is that it was very time-consuming because some parts were played several times for accuracy.

3.10 Data analysis

Since this study employed a convergent mixed-methods design, quantitative and qualitative analyses were conducted separately, and the findings were merged at the interpretation phase

in the discussion chapter. The analysis of data gained from the questionnaire and interviews is described in the following sections.

3.10.1 Quantitative data analysis

This section discusses the tools that were used to analyse the data collected via the questionnaire. The present study aims to examine the relationships between independent (attitudes, motivation, anxiety) and dependent variables (effort, achievement). As this suggests analyses of multiple variables, the study uses a multivariate analysis technique, structural equation modelling (SEM), to answer the overall research question of this dissertation (RQ 4, see Section 3.1). According to Zhang (2022, pp.364–365), SEM is a second-generation statistical technique which "is used to detect and verify the hypothetical relationships between the manifest variable and the latent variable, and between the latent variables in the theoretical model". There are two types of SEM that are described in the literature: covariance-based SEM (CB-SEM; it uses LISREL, AMOS, Mplus etc.) and Partial Least Squares SEM (PLS-SEM; also known as PLS path modelling; it uses PLS Graph, Warp PLS, SmartPLS etc.). CB-SEM is mainly applied "to confirm (or reject) theories (i.e. a set of systematic relationships between multiple variables that can be tested empirically)" (Hair et al. 2017, p.4). This is done by focusing on how much a proposed model can estimate the covariance matrix for a data set. In contrast, PLS-SEM is mainly applied for developing theories in exploratory research. This is done by focusing on how much variance is explained by the dependent variables in the proposed model (Hair et al. 2017). The present study uses PLS-SEMm as opposed to CB-SEM, for three reasons:

1. PLS-SEM can be applied to a small sample, which is the case in my study. CB-SEM requires a larger sample size in comparison to PLS-SEM, which works successfully with both large and small samples (Astrachan et al. 2014). In the present study, the sample size of 133 is relatively small for a covariance-based analysis. Hence, PLS-SEM is used.
2. PLS-SEM is a non-parametric method (i.e. it makes no distributional assumptions), and the findings of my study show that the normality assumption does not hold for most of the study variables. As noted by Reinartz et al. (2009) and Ringle et al. (2009), "PLS-SEM's statistical properties provide very robust model estimations with data that have normal as well as extremely non-normal distributional properties" (as cited in Hair et al. 2017, p.27).

3- Unlike CB-SEM, the complexity of the model (i.e. many latent variables with many indicators) is not an issue for PLS-SEM. Finally, PLS-SEM can be used for single-item measures, which is the case when measuring effort and achievement variables in my study. For these reasons, PLS-SEM is more appropriate to analyse the data of the study at hand in comparison to CB-SEM.

In addition to PLS-SEM analysis, this study uses descriptive analysis to answer the first three questions of this dissertation presented in Section 3.1. Thus, data collected via the questionnaire were analysed using the Statistical Package for the Social Sciences (SPSS) for descriptive analysis, and SmartPLS 3 software for PLS-SEM analysis.

3.10.1.1 Procedure for applying PLS-SEM

When applying PLS-SEM, a diagram needs to be prepared to demonstrate the research hypotheses and present the relationships between variables that will be investigated. This diagram is called a path model (Hair et al. 2011, 2017). For PLS-SEM analysis, there are four steps that need to be followed:

1- Specifying the structural model (also called the inner model), which depicts the relationships between the constructs being examined (Hair et al. 2017).
2- Specifying the measurement models (also known as the outer models), which describe the relationships between the indicators and their associated constructs (Hair et al. 2017). The measurement models can be either reflective or formative, following the criteria demonstrated below in the measurement model specification
3- Evaluating the measurement (outer) model involves assessing the reliability and validity of the measures according to the criteria illustrated below in the measurement model assessment. Once the data are deemed reliable and valid, we move to the next step (4).
4- Evaluating the structural (inner) model includes assessing the hypothesised paths between the constructs or variables, the effect size, the coefficient of determination and predictive relevance, as explained in the structural model assessment below.

Structural (inner) model specification

When applying a structural model, there are two main issues that need to be taken into consideration: the sequence of the tested variables and the relations between them. On the basis

of theory and logic, the constructs in a structural model are arranged from left to right: the independent variables (predictors) are placed on the left-hand side and the dependent variables (outcome) on the right. The right-hand constructs are predicted by the left-hand ones. This is displayed by drawing arrows pointing to the right (Hair et al. 2017). Thus, in this study, the predictors, 'motivation', 'attitude', 'anxiety' and 'effort', are placed on the left-hand side, and the dependent variable, 'achievement', is placed on the right.

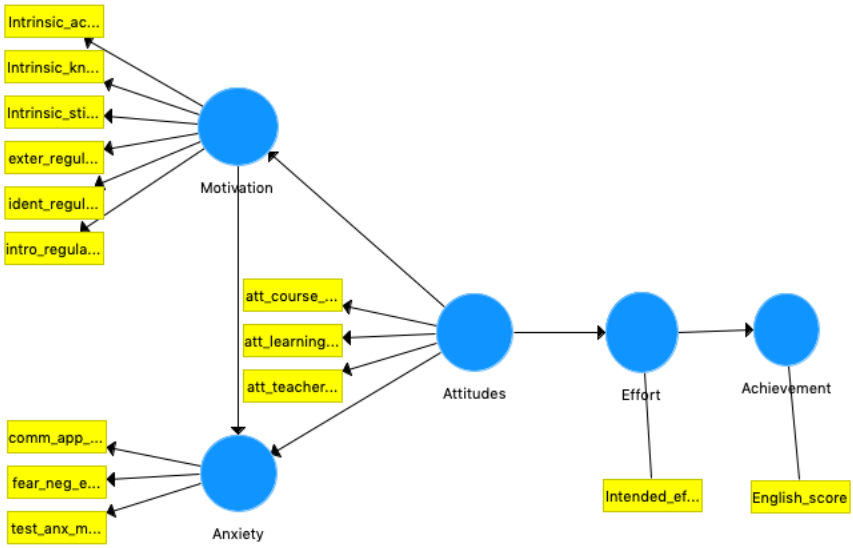
The independent variables are called 'exogenous latent constructs' and have arrows pointing away from them, whereas when an arrow points towards a construct (i.e. a dependent variable), it is called an 'endogenous latent variable'. In this respect, exogenous constructs explain other constructs in the model, while endogenous constructs are being explained. Constructs that act as both dependent and independent variables in the structural model are deemed endogenous and are placed in the middle of the path model. Most researchers examine linear relationships between the tested constructs. However, there are some models that examine more complicated relationships, which include mediation or moderation (Hair et al. 2017). That is the case in this study, which tests a model that includes an endogenous variable that mediates between two other related variables: the mediator 'effort' mediates between 'motivation and achievement', 'attitudes and achievement' and 'anxiety and achievement'. In summary, the proposed model in this study has an exogenous variable (attitude), and three endogenous variables: motivation, anxiety and achievement. Effort is also an endogenous variable, but it mediates the relationships between affective factors and achievement. Thus, it is hypothesised as a mediator in the model (see Fig. 4.5) These variables or constructs are measured through indicators that represent the questionnaire items as follows:

- The indicators for measuring motivation are external regulation, introjected regulation and identified regulation, as manifestations of extrinsic motivation; intrinsic motivation to know, to experience stimulation and towards accomplishment are manifestations of intrinsic motivation (see Section 3.7.2).
- The indicators for measuring attitude are language learning attitude, attitude towards the teacher and attitude towards the course (see Section 3.7.2).
- The indicators for measuring foreign language anxiety are fear of negative evaluation, communication apprehension and test anxiety (see Section 3.7.2).
- As regards the dependent variables, 'effort' and 'achievement', they are single-item measures. Effort measures the amount of effort that students are willing to put into

learning English through various items in the questionnaire, while students' English scores are used for measuring their achievement.

In the present study, the proposed model (presented in Fig. 4.5) was constructed in light of theoretical and empirical observations in the literature about the relationships between affective factors, effort and achievement in learning EFL. For instance, three paths were drawn for attitude: a path was drawn from attitude to motivation because, as established in the literature, attitude is the antecedents of motivation (e.g. Gardner and Lambert 1972; MacIntyre and Charos 1996; Kormos and Csizér 2008). Gardner (1985) points out that attitude is obviously related to motivation because he regards attitude as a component of motivation (see Section 2.2.1). The second path is drawn from attitude to effort, in line with previous studies in which motivation and attitude are antecedents of effort (e.g. Dörnyei 2005; Kormos and Csizér 2008; Csizér and Kormos 2009; Taguchi et al. 2009). It is also expected that effort will be a mediator between these variables and achievement. The third path is drawn from attitude to anxiety, highlighting the negative relationship between positive attitude and anxiety, as established by previous studies (e.g. Young 1991; Yamashiro and McLaughlin 2001) Finally, a path is drawn from motivation to anxiety based on the widely acknowledged negative relationship between motivation and anxiety in earlier studies (e.g. Noels et al. 2003; Khodadady and Khajavy 2013; Liu and Chen 2015).

Figure 4.5: Proposed model of the study



Measurement (outer) model specification

After specifying the inner model, the researcher needs to specify the outer model (measurement model). There are two types of measurement specification that need to be considered when developing the outer model. They are the reflective measurement model (also known as 'Mode A measurement' in PLS-SEM) and the formative measurement model (also known as 'Mode B measurement' in PLS-SEM). In the reflective model, "all indicator items are caused by the same construct (i.e. they stem from the same domain)" (Hair et al. 2017, p.47), the indicators correlate with each other, and they are interchangeable. In addition, the deletion of any item doesn't change the meaning of the measured construct (Hair et al. 2017, p.47). It should be noted that, unlike in the formative model, in the reflective model the relationships go from the latent variable to its indicators. On the other hand, in the formative model, the measures form the latent construct. That is, each indicator represents a certain aspect of the latent variable. Thus, the indicators in the formative model are not interchangeable, which implies that omitting any of the indicators might change the meaning of the construct. As the indicators in the present study stem from the same construct or variable, the measurement models are reflective.

Having specified the structural and measurement models of this study, the following sections present the procedure for analysing the data collected using a two-step approach: assessing the measurement model and assessing the structural model.

Measurement model assessment

For assessing the reflective measurement model, the reliability and validity of the measurement items need to be considered. Reliability analysis helps in testing the information provided by questionnaire items in terms of whether they vary as a result of the characteristics of the research tool or not (i.e. whether the responses provided are consistent or not). Therefore, using SPSS software, Cronbach's alpha coefficients are used to assess the internal consistency of the questionnaire items. Creswell and Creswell define internal consistency as "the degree to which sets of items on an instrument behave in the same way" (2018, p.154). Cronbach's alpha values ranges between 0 and 1, and the best values range between 0.7 and 0.9 (Creswell and Creswell 2018). As stated in Section 3.3.1, the questionnaire used in this study was adapted from well-established measures in the existing literature. The questionnaire has an overall Cronbach's value of 0.814, which means that the reliability of this measure is established, because the value lies between 0.7 and 0.9 (Creswell and Creswell 2018). Cronbach's alpha assumes that all indicators of a construct are equally reliable, whereas PLS-SEM emphasises the reliability of each individual indicator. Therefore, although Cronbach's alpha is the typical criterion for internal consistency reliability, in PLS-SEM another measure known as 'composite reliability' is also applied to assess the reliability of reflective measurement models. Its values vary between 0 and 1. The value should be above 0.70 to be acceptable (Hair et al. 2017).

As regards the assessment of the validity of reflective measurement models, it checks convergent validity and discriminant validity (Hair et al. 2017). Convergent validity refers to how well an indicator correlates positively with other indicators of the same construct. In order to assess convergent validity, the outer loadings of indicators (indicator reliability) and average variance extracted (AVE) are considered. The outer loading size is also referred to as 'indicator reliability'. Outer loading measures how well an indicator correlates with the construct or variable. Acceptable outer loadings should be 0.70 or more. Outer loadings between 0.40 and 0.70 should be considered for deletion from the scale if their deletion leads to increasing the composite reliability (CR) or average variance extracted (AVE) above the threshold value.

Average variance extracted (AVE) is defined as "the grand mean value of the squared loadings of the indicators associated with the construct" (Hair et al. 2017, p.114). A latent

variable should explain at least 50% of each indicator's variance (Hair et al. 2017). That is, an acceptable value for AVE is 0.50 or higher. In the present study, the models have adequate internal consistency reliability. Tables 4.7, 4.17 and 4.26 present the assessment of convergent validity for the study constructs (attitude, motivation, anxiety, effort, achievement), the values of outer loadings (≥.70) and AVE ((≥.50) are higher than the threshold values, except for a few indicators. Those indicators were deleted to increase the composite reliability (CR) or average variance extracted (AVE) of the model. Removing these indicators does not affect content validity because the study focus is on the predictive power of the variables, not individual indicators of variables.

After assessing convergent validity is the assessment of discriminant validity, which is "the extent to which a construct is truly distinct from other constructs by empirical standards" (Hair et al. 2017, p.115). There are three measures that need to be considered to evaluate discriminant validity: cross-loadings, the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT). Hair and his colleagues define cross-loadings as "an indicator's correlation with other constructs in the model" (2017, p.315). When analysing cross-loadings, a measure's outer loading on the corresponding construct should be higher than any of its correlations with other constructs. However, cross-loadings that are greater than that of the indicator indicate a problem with discriminant validity. The second criterion to evaluate discriminant validity is Fornell-Larcker. In this measure, squared AVE values are compared with construct correlations. That is, "the square root of each construct's AVE should be greater than its highest correlation with any other construct" (Hair et al. 2017, p. 116). The Heterotrait-Monotrait Ratio (HTMT) is "an estimate of the correlation between two constructs" (Henseler et al. 2015, p.121). According to the HTMT criterion, all values should be lower than a threshold value of 0.90 (Hair et al. 2017). In the present study, the criteria used to assess the measurement models are met and they support the reliability and validity measures (see Sections 4.2.5.3, 4.2.5.8 and 4.2.5.11). The data for each year group are presented separately in the next chapter (Chapter 4).

Now, after the reliability and validity of the measurement models are confirmed, the next stage is assessment of the structural model. It involves investigating the model's predictive power and the relationships between the study constructs or variables (Hair et al. 2017).

Structural model assessment

Assessment of the structural model is based on its capability to predict results (Hair and Alamer 2022). The structural model of the present study includes five constructs: attitude, motivation, anxiety, effort and achievement. A total of five hypothesised relationships are developed in the proposed model (see Fig. 4.5). In this stage, the significance of the hypothesised relationships among the model constructs (i.e. path coefficients) is assessed using a bootstrap procedure (with 5,000 samples). In existing studies, bootstrap samples vary (500 to 5000), 5,000 samples is typically recommended when running a bootstrap procedure to achieve solidity in the results (Hair and Alamer 2022). For all structural path coefficients, *p* values and *t* values are calculated. A *p* value is "the probability of erroneously rejecting a true null hypothesis (i.e. assuming a significant path coefficient when in fact it is not significant)" (Hair et al. 2017, p.196). At a significance level of 5%, the *p* value of the considered relationship must be smaller than 0.05 to be significant. Usually, standard values range between -1 and +1. Path coefficients which are close to +1 indicate strong positive relationships, and those which are close to -1 show strong negative relationships. If the value is close to 0, the relationship is considered weak (Hair et al. 2017).

As regards a *t* value, "it measures the size of the difference relative to the variation in the data" (Runkel 2016). When the *t* value for a coefficient is greater than a critical value of 1.65, it can be concluded that it is statistically significant at the 0.05 level. If the *t* value is close to 0, it is more likely that there is no significant difference. Only significant relationships are considered, and the models are modified accordingly, deleting insignificant relationships (see Tables 4.11, 4.21 and 4.30 for significant path coefficients and Figures 4.7, 4.10 and 4.12 for better-fit models).

In addition to the significance of the path, assessing the coefficient of determination (R^2) is a major part of structural model evaluation. R^2 values are "the amount of explained variance of endogenous latent variables in the structural model" (Hair et al. 2017, p.326). In other words, how much of the total change in the endogenous (dependent) variable can be explained by the exogenous (independent) variable. Evaluating R^2 values as strong, moderate or weak varies according to the research discipline. In L2 research, if the R^2 value is 0 to .10, it is described as weak; .11 to .30 is modest; .30 to .50 is moderate; and if it is > .50, it has strong explanatory power (Hair and Alamer 2022). In the present study, Tables 4.12, 4.22 and 4.31 present the R^2 values of endogenous variables, which range from modest to strong explanatory power.

Besides measuring the R^2 values of endogenous variables, assessing the resulting change in the R^2 value once a specific exogenous variable is deleted from the structural model can be applied to check whether the omitted variable has a substantial impact on the endogenous variable. This measure is known as "the f^2 effect size" (Hair et al. 2017, p. 201). According to Cohen (1988), when assessing f^2, a value of 0.02 is considered a small effect, a value of 0.15 represents a medium effect and 0.35 represents a large effect size. Values that are less than 0.02 indicate that there is no significant effect. In the present study, in general, the results for effect size f^2 assessment show that 'attitude' is important in explaining other variables in the structural models, and its deletion from the model results in a drastic change in the amount of variance explained (R^2) in 'motivation', 'anxiety', 'effort' and 'achievement' (see Tables 4.13, 4.23 and 4.32).

Additional assessment of the structural model includes measuring the predictive power or predictive relevance of the model (Hair et al. 2017). The main measure for predictive relevance is Stone-Geisser's Q^2 value (Geisser 1974; Stone 1974), which is calculated using a blindfold procedure. It checks whether an exogenous construct has predictive power over endogenous constructs in the model. The blindfolding procedure "is a sample reuse technique that omits part of the data matrix and uses the model estimates to predict the omitted part" (Hair et al. 2017, p. 312). If the Q^2 value is larger than zero, this indicates predictive relevance for a particular endogenous construct. To calculate Q^2, there are two different approaches that can be used: the cross-validated redundancy approach and the cross-validated communality approach. The cross-validated redundancy approach fits PLS-SEM perfectly because it uses construct scores estimated for both the structural model and the measurement model, whereas the alternative approach only builds on the scores estimated for the measurement model (i.e. the target dependent variables; Hair et al. 2017). That is, the cross-validated redundancy approach is recommended because it includes the structural model, which is the basic element of the path model, to predict deleted parts of the data set (Hair et al. 2017). In the present study, the assessment of predictive relevance (Q^2) shows that all endogenous variables have Q^2 values that are larger than zero, which indicates that the models have good predictive relevance for all endogenous constructs (see Tables 4.14, 4.24 and 4.33).

3.10.2 Qualitative data analysis

Interview data were categorised in accordance with the variables under investigation (i.e. learning English attitude, students' motivation to learn English, foreign language anxiety,

students' effort) in an attempt to facilitate a thorough analysis that will help to understand the relationships between those variables (see Chapter 5). After data collection, the interviews were transcribed and translated into English. I played the recordings back several times to ensure accuracy in the translation, and the translated data have been read repeatedly. Then, I started the process of coding and analysing the data. When analysing the data, I considered the guidelines from Dörnyei (2007) and Creswell (2009). Initial coding began by looking for all points or ideas that are relevant to my research questions. I read the transcripts several times carefully to have a general overview of the data. Then, I used different colours to highlight and label relevant data for each of the variables investigated. Thus, I had chunks of data highlighted and labelled with broad codes. Each chunk of data was reviewed, and all similar codes were grouped into subcategories. Irrelevant codes were grouped into a miscellaneous category because they might come in useful later in the analysis. After that, identified codes were put in a table with relevant quotes to start the analysis. This list of codes with quotes was then revised. These codes can be presented in tree-diagrams because such a structure is an effective step in the analysis. It clarifies how codes and sub-codes are categorized and relate to each other (Dörnyei 2007). Finally, to draw final conclusions about students' attitudes, motivation, anxiety,and effort, the codes identified were reviewed, and salient points or ideas selected to elaborate on. The description of these factors, including similar and different views among the students, is presented and supported by quotes.

Creswell and Creswell (2018) recommend the use of validity strategies to allow the researcher to appraise the accuracy of research findings and persuade readers of that. Validity in qualitative research can be achieved by using one or more of the following strategies: "triangulation, member checking, rich and thick description to convey findings, clarifying the bias the researcher brings to the study, presenting negative or discrepant information that runs counter to the themes, spending prolonged time in the field, using peer debriefing, and using an external auditor to review the entire project" (Creswell and Creswell 2018, p.200). The validity strategies used in this research are triangulation and peer debriefing.

Triangulation refers to "a process whereby two or more methods of data collection or sources of data are used to examine the same phenomenon, with the aim of getting as close to the 'truth' of the object of study as possible" (Creswell and Creswell 2018, p. 285). This approach is used here by combining quantitative data obtained from a questionnaire and qualitative data obtained from semi-structured interviews to ensure the robustness of my research. Peer debriefing involves locating a person (a peer debriefer) who reviews and asks questions about the qualitative study so that the account will resonate with people other than

the researcher. An experienced qualitative researcher was asked to review and examine each interview throughout the different phases of analysis.

3.11 Ethical considerations

Ethical considerations constitute a key element of the research literature. As such, this study was conducted in compliance with the guidelines of the Research Ethics Committee at Cardiff University. After obtaining ethical approval from Cardiff University, I piloted the questionnaire and interviews. As described in Sections 3.7, piloting the questionnaire was in two stages: the initial pilot was conducted by the end of April, while the second one was in June. With regard to interviews, they were piloted in August (see Section 3.7.3).

In the first pilot, I contacted another school's head teacher (not the main study school) to request some students' email addresses, she sent them a link to the Arabic version of the questionnaire. Since it is an online questionnaire, a consent form and information were included at the beginning of the questionnaire. Similarly, in the final pilot, I sent a link to the participants who were recruited through family and friends, because this coincided with the summer holiday in Saudi Arabia, therefore I was not able to pilot the study at school at that time.

After receiving ethical approval for the main study from the Research Ethics Committee at Cardiff's School of English, Communication and Philosophy, I got permission from the secondary school where the study was to be conducted, and then obtained the students' and their parents' consent. The parents of the under-18 students received Arabic versions (participants' mother tongue) of the consent and information forms (see Appendix A 2) to ensure that they fully understood their children's rights and to seek parental approval for their children's participation in the study, as described in Section 3.6.1. With regard to the 18-year-old students, since it is an online questionnaire, the participants' information and consent forms were placed at the start of the questionnaire. After the participants received the questionnaire link by email and opened it, I read and explained the participants' information and consent forms, which explained the aim of the study and their rights as participants, such as withdrawal from the study without giving a reason and being free to participate or not (see Appendix B). In addition, it outlined the task involved, i.e. to complete the questionnaire, and the length of time that would take. The importance of explaining this information to participants has been attested by Oliver (2010).The participants were also informed that the questionnaire and

interview data would be anonymous, and their academic numbers would only be used for identification and comparing their responses with their achievement scores. The participants and their parents were asked for permission to access the students' achievement scores via their teachers, who sent the students' numbers and their achievement scores to one of my supervisors. The latter released them to me after I had analysed and coded the data to avoid any bias.

By the same token, before conducting the interviews, the aim of the study and the participants' rights were explained to the subjects. They were asked to sign a consent form, which, in addition to the ethical procedures discussed above in the questionnaire section, also included permission to audio-record the interviews (see Appendices E and F).

Finally, with regard to storing the data obtained from the participants, electronic data (such as online questionnaires) were stored on the university's H-drive and paper documents (such as the interviewees' consent forms and parental consent forms) were stored securely in a locked cabinet at my home.

3.12 Summary

This chapter has presented a detailed description of the methodology applied in this study. It has described the processes for designing the questionnaire and interviews. In addition, it has also provided a detailed account of the participants and the recruitment strategy that was applied in the study. The procedure involved in conducting the study has been thoroughly explained. Also, the techniques employed to analyse quantitative and qualitative data have also been shown in detail. Finally, ethical issues considered when conducting the study have been discussed. In the next two chapters, the study findings are presented in relation to the research questions.

4. Quantitative Data Analysis

4.1 Introduction

In this study, data are analysed utilising a mixed-methods approach. Data collected from the questionnaires have been analysed quantitatively, and interview data qualitatively. This chapter presents statistical information about the quantitative analysis, including descriptive statistics (calculations of the mean and mode of the data) and partial least squares structural equation modelling (PLS-SEM) findings. The total number of respondents is 133 female students from a secondary school in Saudi Arabia: 41 students from year 10, 47 from year 11, and 45 from year 12.

4.2 Statistical description of responses

This section reports the descriptive analysis of the constructs examined in the present study. It aims to explore and obtain a general overview of the collected data to answer the first three questions of this study, listed in Section 3.1. The quantitative findings presented in this chapter fall into five sections in accordance with the research questions. The first section presents the findings on students' attitudes towards the learning situation (language, teacher, course). Then, the results for students' motivation (intrinsic and/or extrinsic) for learning English and foreign language anxiety are provided in the second and third sections, respectively. That is followed by a section that reports the findings for students' intended effort in relation to the fourth research question. Finally, the fifth section presents the findings for the relation between affective factors, students' effort and achievement. As pointed out in Section 3.6, the total number of questionnaires collected in this study was 137. Four of these questionnaires were excluded because the participants did not provide their correct academic number, making it impossible to make comparisons with students' achievement scores. Therefore, 133 questionnaires were considered in the analysis. First, data obtained from the questionnaire were analysed using quantitative methods. They were inserted into the Statistical Package for the Social Sciences (SPSS, v. 27), and the results presented in a descriptive manner (calculation of the mean and range of the data collected in tables according to the year group: year 10, 11 and 12). Students' responses about attitudes are classified as positive, negative or neutral according

to mean scores, whereas their responses for motivation and anxiety are classified as high, moderate and low. The classification is established on the basis of a range from a minimum value of '1', which indicates strongly disagreement, to a maximum value of '5', which indicates strong agreement. When we divide 4 (the range) by 3 (the number of classes needed), we obtain 1.33 as the length for each class. Hence, if the mean score of an item falls between 1.00–2.33, it indicates a negative or low value; if it falls between 2.34–3.67, it indicates a neutral or moderate value; and if it falls between 3.68–5.00, it indicates a positive or high value. Note that some items (marked as 'negative' in Table 4.1) are phrased in the questionnaire in a negative manner; in these cases, those values are inversely quantified.

4.2.1 Students' attitudes towards the learning situation

Table 4.1 presents the mean scores of responses to the items about students' attitudes towards the learning situation according to the student's year group. In general, students in all year groups hold a positive attitude towards learning English. In particular, they hold a positive attitude towards the items *I really like learning English* and *English is a very important part of the school programme* (see Table 4.1). In addition, they responded negatively to the item *I find studying English very boring*, with mean scores of 1.73, 2.17 and 2.18, respectively (see Table 4.1).

Regarding students' attitudes towards their English teacher, year 10 and year 12 students responded positively to the item *My English teacher has an interesting teaching style*, with mean scores of 4.10 and 4.60, respectively. They also responded negatively to the item *I would prefer to have a different English teacher*, with mean scores of 2.10 and 1.51, respectively. These responses indicate that they hold a positive attitude towards their teacher. As regards year 11 students, they show a neutral attitude towards the same items, with mean scores of 2.89 and 3.51, respectively. Thus, the overall mean score for the teacher variable is neutral for year 11 and positive for years 10 and 12 (see Table 4.1).

Finally, regarding the students' attitudes towards their English courses in general, students in all year groups show a neutral attitude with mean scores of 3.62, 3.33 and 3.48, respectively (see Table 4.1). Years 10 and 12 students responded positively to the item *My English course is enjoyable*, with mean scores of 3.90 and 3.69, respectively, while year 11 students have a neutral attitude towards the same item, with a mean score of 3.64. On the other hand, year 10 students in general responded negatively to the item *My English course is boring*,

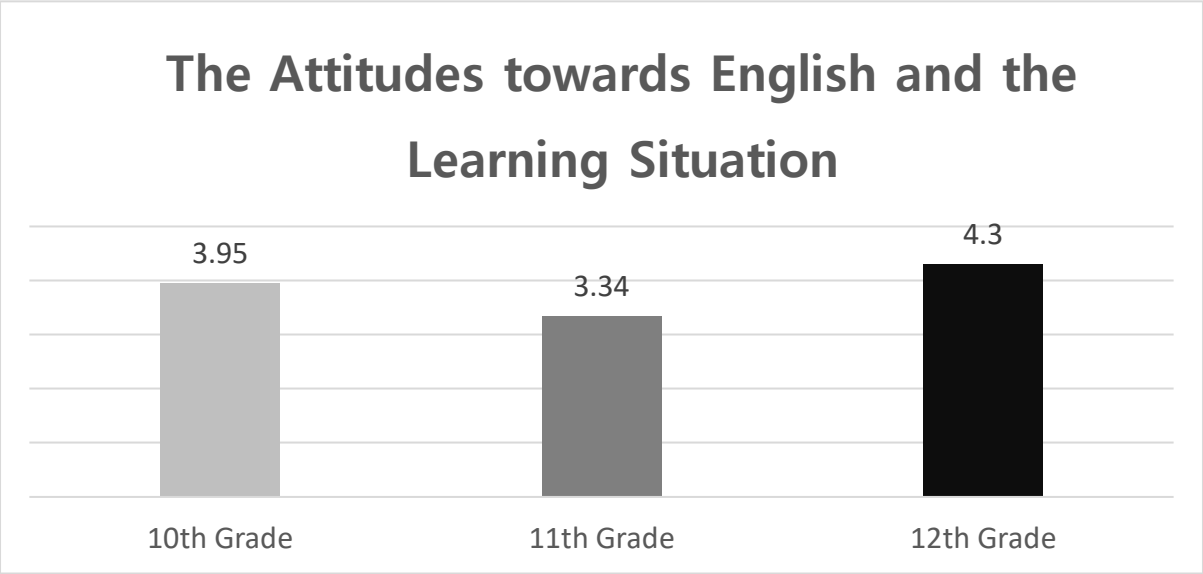
with a mean score of 2.20, while years 11 and 12 students hold a neutral attitude towards the same item, with mean scores of 2.55 and 2.42.

Table 4.1: Descriptive statistics of the responses on students' attitudes towards the learning situation

The Learning Situation	Item	Mean Score		
		10th	**11th**	**12th**
The Language	(8) English is a burden for me **(negative)**	1.88	2.26	2.16
	(17) I really like learning English	4.15	4.13	4.29
	(29) I find studying English very boring **(negative)**	1.73	2.17	2.18
	(36) English is a very important part of the school programme	3.98	4.28	4.02
	Overall	**4.12**	**3.99**	**3.99**
The Teacher	(20) My English teacher is a great source of inspiration to me	4.10	2.89	4.60
	(33) I would prefer to have a different English teacher **(negative)**	2.10	3.51	1.51
	(42) My English teacher is inconsiderate **(negative)**	1.78	3.32	1.16
	(49) My English teacher has an interesting teaching style	4.27	2.77	4.49
	Overall	**4.12**	**2.71**	**4.61**
The Course	(2) English is one of my favourite courses	3.22	3.09	3.11
	(5) My English course is boring **(negative)**	2.20	2.55	2.42
	(44) My English course is difficult **(negative)**	2.41	2.85	2.44
	(51) My English course is enjoyable	3.90	3.64	3.69
	Overall	**3.62**	**3.33**	**3.48**
The attitudes towards the learning situation overall mean		**3.95**	**3.34**	**4.03**

Figure 4.1, below, displays a bar chart showing the mean scores of students' attitudes towards the learning situation (language, teacher, course). In general, year 11 students showed a neutral attitude towards the learning situation, whereas students in years 10 and 12 showed a positive attitude.

Figure 4.1: Mean scores for students' attitude towards the learning situation



4.2.2 Students' motivation for learning English

Table 4.2 presents the mean scores for responses to the items on extrinsic motivation (external, introjected, identified regulation, see Table 4.2) according to the students' year group. Regarding external regulation, the students in all year groups (10, 11 and 12) showed high levels of external regulation for all items, with mean scores of 4.11, 4.31 and 4.16, respectively (see Table 4.2).

With regard to introjected regulation, the students in years 10, 11, and 12 generally have moderate introjected regulation, with mean scores of 3.23, 3.17 and 3.01, respectively. They showed high levels of introjected regulation when responding to the item *Learning English helps me develop a more positive self-image* (see Table 4.2). For the other items: *I learn English because I would feel ashamed if I could not speak a second language* and *I learn English to impress the people around me,* students in all year groups showed a moderate level of introjected regulation (see Table 4.2).

Finally, regarding students' responses to identified regulation, students in all year groups (10, 11 and 12) showed high levels of identified regulation when responding to the items *I learn English because I want to be the kind of person who can speak more than one language* and *I learn English because I think it is good for my personal development* (see Table 4.2). In contrast, students in years 10, 11 and 12 showed low levels of identified regulation for the item *Learning English is important to me because I would like to spend a longer period*

living abroad, with mean scores of 1.73, 2.17 and 2.18, respectively. However, generally speaking, the students in all three years have high identified regulation (see Table 4.2).

Table 4.2: Descriptive statistics for the responses concerning extrinsic motivation

Extrinsic Motivation	Item	Mean Score		
		10th	11th	12th
External Regulation	(1) I learn English because of its importance in getting a better job in the future	4.24	4.53	4.36
	(6) Learning English is important to me because I want to get high marks in English proficiency tests (as IELTS and TOEFL	4.17	4.15	4.07
	(11) Learning English is important to have a better salary in the future	3.93	4.26	4.04
	Overall	**4.11**	**4.31**	**4.16**
Introjected Regulation	(4) I learn English because I would feel ashamed if I could not speak a second language	2.34	2.47	2.27
	(14) Learning English helps me develop a more positive self-image	4.49	4.47	4.44
	(48) I learn English to impress the people around me	2.85	2.57	2.33
	Overall	**3.23**	**3.17**	**3.01**
Identified Regulation	(25) I learn English because I think it is good for my personal development	4.02	4.49	4.47
	(39) Learning English is important to me because I would like to spend a longer period living abroad (e.g. studying and working)	1.73	2.17	2.18
	(47) I learn English because I want to be the kind of person who can speak more than one language	4.22	4.57	4.33
	Overall	**4.10**	**4.44**	**4.30**
Extrinsic motivation overall mean score		**3.81**	**3.97**	**3.82**

Figure 4.2, below, presents a bar chart of the mean scores for extrinsic motivation (external regulation, introjected regulation, identified regulation) for the three year groups. We see that the students in all groups have high extrinsic motivation.

Figure 4.2: Mean scores for students' extrinsic motivation

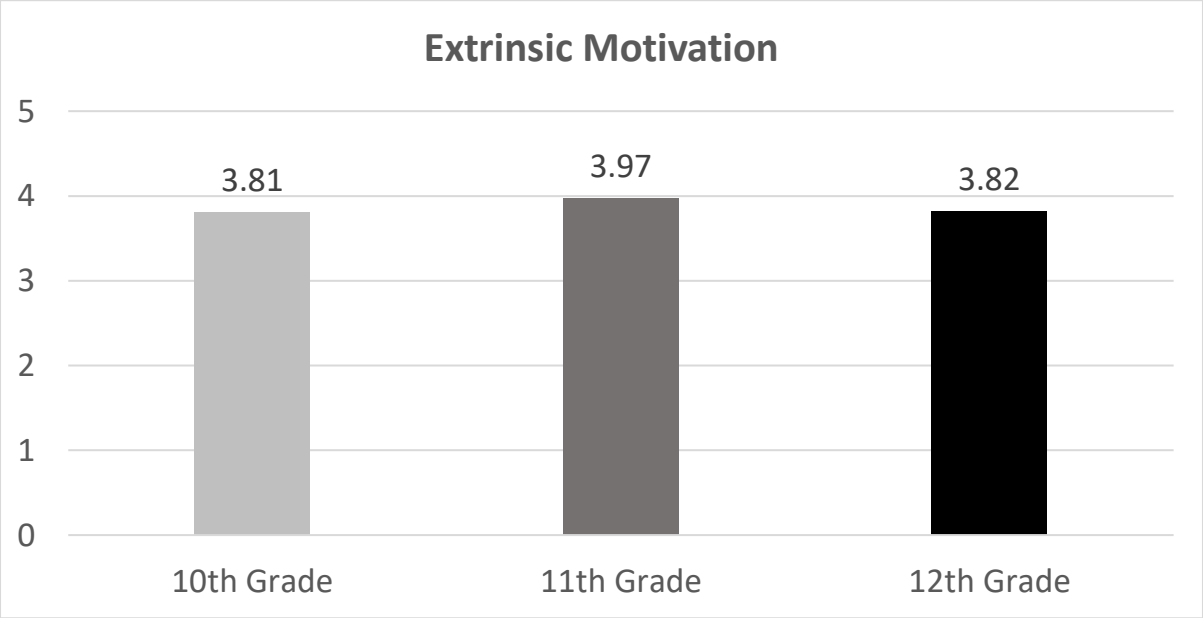


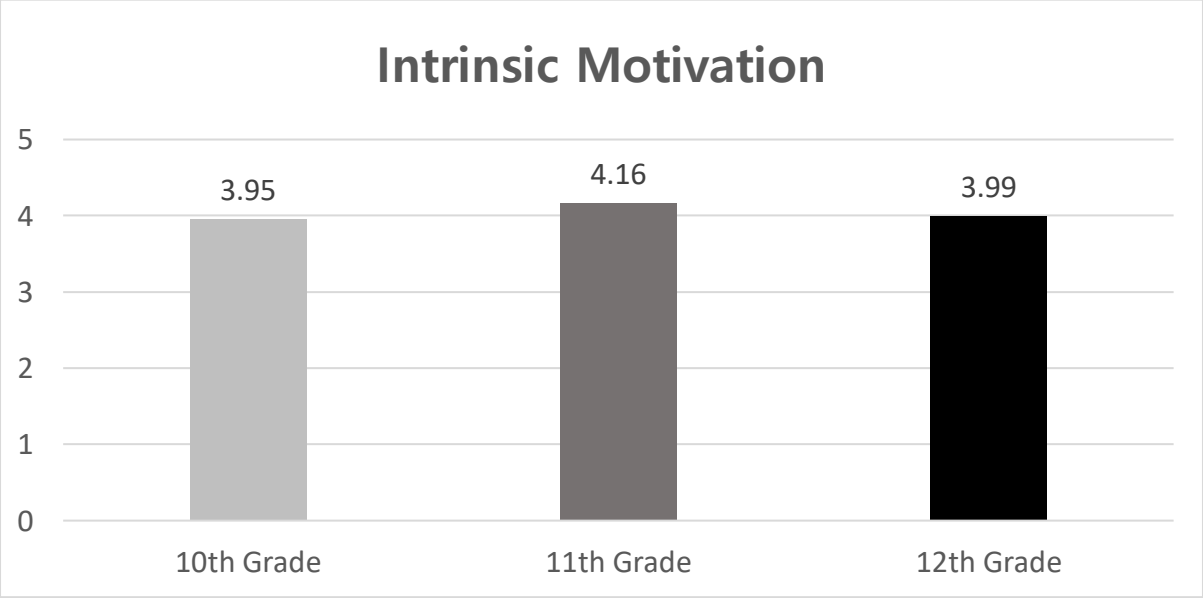
Table 4.3 and Figure 4.3, below, present the mean scores for responses to the items on intrinsic motivation (intrinsic motivation towards accomplishment, to know, and to experience stimulation) according to the students' year groups. The students in all year groups (10, 11 and 12) have high intrinsic motivation for all items, with overall mean scores of 3.95, 4.16 and 3.99, respectively.

Table 4.3: Descriptive statistics for the responses on intrinsic motivation

Intrinsic Motivation	**Item**	**Mean Score**		
		10th	**11th**	**12th**
Accomplishment	(9) I learn English for the pleasure I experience when I do well in my English class	4.02	4.00	3.82
	(34) I learn English for the enjoyment I experience when I grasp a difficult construct in the second language	3.68	4.09	3.82
	(43) I learn English for the satisfaction I feel when I am in the process of accomplishing difficult exercises in the second language	3.90	4.28	3.91
	Overall	**3.87**	**4.12**	**3.85**

Knowledge	(22) Learning English can broaden my outlook in life	4.10	4.28	4.31
	(46) Learning English is important to me, so that I can read English books, newspapers, or magazines	4.12	4.21	3.93
	(50) I learn English because an educated person is supposed to be able to speak English	3.73	4.02	3.91
	Overall	**3.98**	**4.17**	**4.05**
Stimulation	(15) I learn English because I feel happy when hearing English languages spoken	3.88	4.13	3.93
	(19) I learn English for the happiness experience while I speak in English	4.10	4.15	3.96
	(31) I learn English for the pleasure I get from hearing English spoken by native English speakers	4.05	4.30	4.33
	Overall	**4.01**	**4.19**	**4.07**
Intrinsic motivation overall mean score		**3.95**	**4.16**	**3.99**

Figure 4.3: Mean scores for students' intrinsic motivation



4.2.3 Students' foreign language anxiety

Regarding the anxiety variable, classification labels based on mean scores are defined as follows: if the mean score of an item falls between 1.00–2.33, this indicates a low level of

anxiety. If the mean score falls between 2.34–3.67, this indicates a moderate anxiety level. Finally, mean scores that fall between 3.68–5.00 indicate a high level of anxiety. Table 4.4 presents the mean scores of students' responses concerning foreign language anxiety (communication apprehension, fear of negative evaluation, test anxiety) according to their year group. As regards communication apprehension, the students in years 10 and 12 showed a low level of anxiety when responding to the items *I tremble when I know that I am going to be called on in the English class* and *In the English class, I can get so nervous I forget things I know*, whereas year 11 students showed a moderate level of anxiety when responding to the same items (see Table 4.4). As regards the remaining items of communication apprehension, students in all groups showed a moderate level of anxiety (see Table 4.4). Overall, when the figures are combined, we can see that students in all groups showed a moderate level of communication apprehension, with mean scores of 2.78, 2.96 and 2.73, respectively (see Table 4.4).

Regarding fear of negative evaluation, generally, students in years 10, 11 and 12 showed a moderate level of fear of negative evaluation with mean scores of 2.44, 2.63 and 2.41, respectively (see Table 4.4). Students in years 10 and 12 showed a low level of anxiety when responding to the item *I feel confident when asked to participate in my English class*, with mean scores of 3.88 and 3.84, respectively. On the other hand, students in year 11 showed a moderate level of anxiety when responding to the same item, with a mean score of 3.55. In contrast, students in years 10, 11 and 12 responded negatively to the item *I am afraid that the other students will laugh at me when I speak English*, with mean scores of 2.12, 1.98 and 2.00, respectively, indicating a low level of anxiety. As for the remaining items in fear of negative evaluation, students in all groups showed a moderate level of anxiety (see Table 4.4).

Table 4.4 Descriptive statistics for the responses on foreign language anxiety

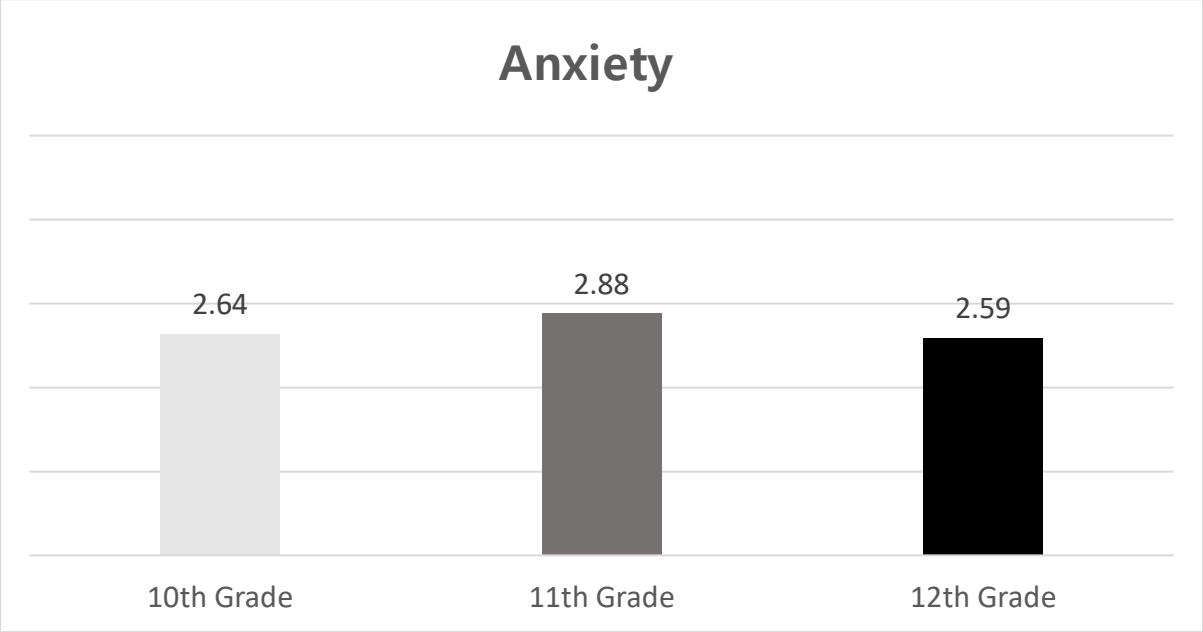
Anxiety type	Item	Mean Score		
		10th	**11th**	**12th**
Communication Apprehension	(3) I tremble when I know that I am going to be called on in the English class	2.29	2.38	2.07
	(10) In the English class, I feel relaxed **(negative)**	3.32	3.00	3.31
	(16) I feel confident when I speak in the English classes **(negative)**	3.80	3.53	3.58
	(23) In the English class, I can get so nervous I forget things I know.	2.32	2.87	2.31
	(27) I don't understand why some students get so upset over the English classes **(negative)**	2.98	3.04	2.76
	(32) It frightens me when I do not understand what the teacher is saying in English	2.54	3.00	2.49
	Overall	**2.78**	**2.96**	**2.73**
Fear of Negative Evaluation	(13) I don't usually get anxious when I have to respond to a question in my English classes **(negative)**	3.49	3.11	3.49
	(18) I don't worry about making mistakes in the English class **(negative)**	3.34	3.09	3.27
	(28) I am afraid that the other students will laugh at me when I speak English	2.12	1.98	2.00
	(30) I feel confident when asked to participate in my English class **(negative)**	3.88	3.55	3.84
	(41) I always feel that the other students speak English better than I do	2.93	3.34	2.89
	(52) I feel very self-conscious about speaking English in front of other students	2.29	2.23	2.20
	Overall	**2.44**	**2.63**	**2.41**
Test Anxiety	(7) I am usually at ease during tests in the English course **(negative)**	3.46	3.15	3.51
	(38) I worry about the consequences of failing the English class	3.39	4.02	3.36
	(40) I don't get anxious when I am asked for information in my English class **(negative)**	3.63	3.21	3.87
	Overall	**2.76**	**3.21**	**2.66**
Anxiety overall mean score		**2.66**	**2.93**	**2.60**

Finally, regarding test anxiety, students in year 12 showed a low level of test anxiety when responding to the item *I don't get anxious when I am asked for information in my English class*, with a mean score of 3.87. On the other hand, students in years 10 and 11 showed a moderate level of test anxiety in their response to the same item, with mean scores of 3.63 and 3.21. While students in year 11 showed a high level of anxiety when responding to the item *I worry about the consequences of failing the English class*, with a mean score of 4.02, the students in years 10 and 12 showed a moderate level of anxiety when responding to the same

item, with mean scores of 3.39 and 3.36. In general, all students have a moderate level of test anxiety, with mean scores of 2.76, 3.12 and 2.66, respectively (see Table 4.4).

Figure 4.4 shows a comparison between the mean scores for attitudes towards anxiety (communication apprehension, fear of negative evaluation, tests). It shows that the students in year 11 have higher mean scores for all anxiety components compared to the other two groups. In general, students in the three grades have a moderate level of anxiety.

Figure 4.4: Mean scores of students' foreign language anxiety



4.2.4 Students' learning behaviour (intended effort)

The last variable to be explored with descriptive statistics is intended effort. The latter is used in this study to measure students' behaviour when learning the language. Its classification labels are based on the following mean scores: if the mean score of an item falls between 1.00–2.33, it indicates a low level of intended effort. Mean scores between 2.34–3.67 indicate a moderate level of intended effort. Finally, if the mean score falls between 3.68–5.00, it indicates a high level of intended effort.

Table 4.4, below, presents the mean scores for students' responses on intended effort according to their year group. In general, students in years 10, 11 and 12 are ready to put in a lot of effort to learn the language (see Table 4.5). For instance, they got mean scores of 4.39, 4.40 and 4.09, respectively, for the item *I make a point of trying to understand all the English*

I see and hear. Similarly, the students in all three groups responded positively to the item *I am working hard at learning English*, with mean scores of 4.37, 4.19 and 4.22, respectively. These responses indicate a high level of intended effort among the participants. In addition, students in all groups responded negatively to the item *I tend to approach my English homework in a random and unorganised manner*, with mean scores of 1.90, 2.09 and 1.87, respectively. Overall, these results indicate that the level of students' intended effort can be described as high, with mean scores of 3.89, 3.79 and 3.88, respectively.

Table 4.5: Descriptive statistics for the responses on students' effort

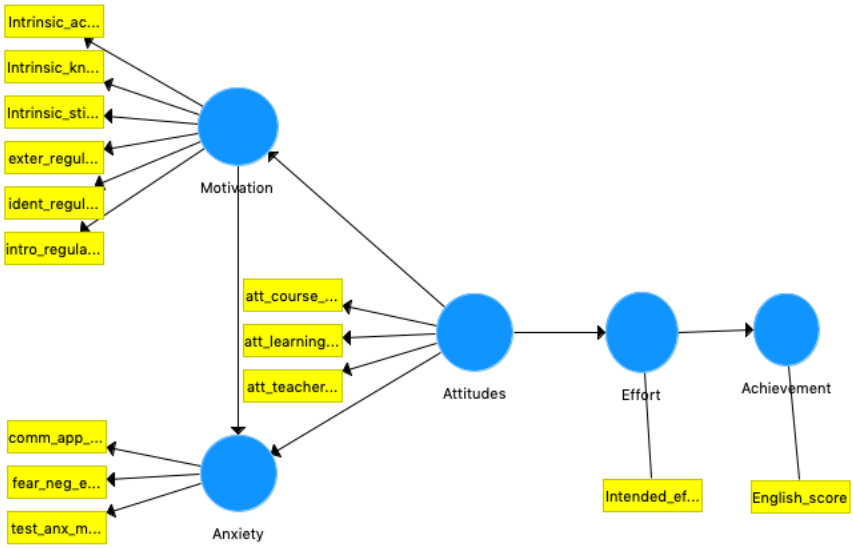
Item	Mean Score		
	10th	**11th**	**12th**
(12) I would like to study English even if I were not required	3.95	4.21	3.73
(21) When I am studying English, I ignore distractions and stick to the job at hand	3.39	3.55	3.80
(24) I tend to approach my English homework in a random and unorganised manner **(negative)**	1.90	2.09	1.87
(26) I prefer to see an English film dubbed in Arabic to the film in its original language with Arabic subtitles	2.90	2.13	2.96
(35) I don't pay too much attention to the feedback I receive in my English class **(negative)**	1.88	1.85	1.78
(37) I make a point of trying to understand all the English I see and hear	4.39	4.40	4.09
(45) I am working hard at learning English	4.37	4.19	4.22
Overall	**3.89**	**3.79**	**3.88**

4.2.5 Relationship between affective factors, effort and achievement (PLS-SEM analysis)

The sections above have presented basic descriptive statistics shown in the data to answer the first three questions. However, to answer the fourth research question, Partial Least Squares Structural Equation Modelling (PLS-SEM) is applied to examine the relationships between affective factors – attitude, motivation and anxiety – in relation to students' effort and achievement in EFL. To this end, I use SmartPLS 3 software. As illustrated in Section 3.10.1.1, in accordance with the common practice of research that uses PLS-SEM, I provide an assessment of the measurement model before presenting the analysis of the structural model. The findings are presented below according to the year group (years 10, 11 and 12).

As discussed in Section 3.10.1.1, I hypothesised a model to represent these relationships, which includes attitude as an exogenous (independent) variable, three endogenous (dependent) variables (motivation, anxiety, achievement) and effort as an endogenous variable, but it is also a mediator between affective variables and achievement (see Fig. 4.5). For the sake of convenience, the constructs (variables) with their indicators are repeated here. First, the construct attitude has three indicators to be measured: language learning attitude, attitude toward the teacher and attitude towards the course. The construct motivation has six indicators: three for measuring extrinsic motivation (external regulation, introjected regulation, identified regulation), and three for measuring intrinsic motivation (intrinsic motivation to know, to experience stimulation, towards accomplishment). The construct of foreign language anxiety has three indicators: fear of negative evaluation, communication apprehension and test anxiety. Finally, effort and achievement are single-item constructs; they do not have indicators (see Section 3.10.1.1).

Figure 4.5: Proposed model of the study



4.2.5.1 Measurement model assessment of the year 10 initial model

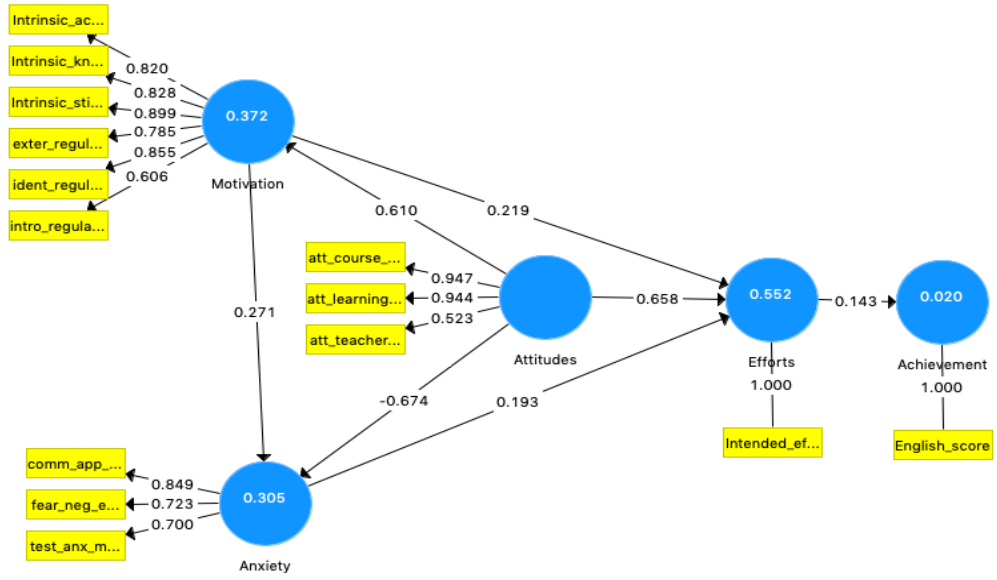
As stated in Section 3.10.1.1, the assessment of reflective measurement models relies on their internal consistency reliability and validity using PLS algorithm calculations. Composite reliability is used to evaluate internal consistency reliability. Indicator reliability and average

variance extracted (AVE) are used to assess convergent validity. In addition, discriminant validity is also evaluated in the reflective model by using the Fornell-Larcker criterion and cross-loadings. More details of these evaluation criteria are explained in the Methodology Chapter (see Section 3.10.1.1).

Starting with **composite reliability**, the values of the variables are all greater than 0.70, which indicates a high level of internal consistency among latent constructs (variables) in the proposed model (see Appendix G). As regards **convergent validity**, there are two indicators with weak outer loadings, i.e. below 0.70 (introjected regulation and attitude towards the teacher). However, as pointed out in Section 3.10.1.1, outer loadings below 0.70 should be considered for deletion from the model only when their removal results in an increase in composite reliability or AVE above the cut-off value. In the case of the present model, composite reliability and AVE were already above the threshold value, thus it was decided to retain these two indicators in the scale. On the other hand, other indicators have higher outer loadings, above 0.70. These values are acceptable and signify that convergent validity is established (see Appendix G). Concerning average variance extracted (AVE), all latent constructs have values higher than 0.50, which indicates that latent variables explain more than half of the variance of their measures: motivation (0.647), attitude (0.687) and anxiety (0.578). Thus, it can be said that the model shows adequate convergent validity (see Appendix G)).

With regard to **discriminant validity**, the findings for the year 10 initial model show that the cross-loading values of all indicators are higher in their associated construct than with other latent constructs (see Appendix G). In addition, the Fornell-Larcker criterion shows that the square root of AVE for each latent construct is greater than other correlations in the model (see Appendix G). Finally, the Heterotrait-Monotrait Ratio (HTMT) values for all constructs are below 0.90. Thus, discriminant validity for the model is achieved (see Appendix G). Thus, the research model can be considered satisfactory, as internal consistency reliability and validity are confirmed.

Figure 4.6: Initial model for year 10 data with PLS algorithm calculations



4.2.5.2 Structural model assessment of the year 10 initial model

The second step after evaluating the measurement model is assessment of the structural model. The significance of the relations (path coefficients) in the model was examined using a bootstrap procedure by calculating *p* values and *t* values (see Section 3.10.1.1).

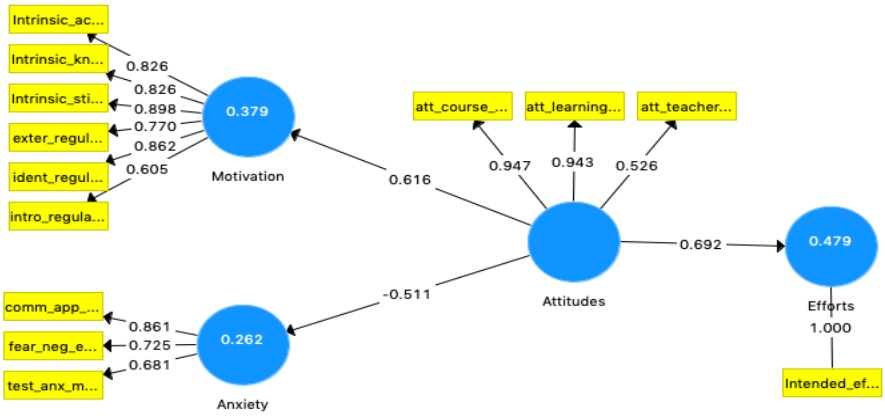
The results for the path coefficients of the initial model showed that there are only three significant path coefficients (attitudes → anxiety, attitudes → motivation, attitudes → effort). On the other hand, four paths turned out to be insignificant (motivation → anxiety, motivation → effort, anxiety → effort, effort → achievement, see Table 4.6). Thus, these insignificant paths were removed from the initial model and some modifications were made to have a better-fit model describing the year 10 data (see Fig. 4.7).

Table 4.6: Path coefficients of the initial model for year 10 data

	Original sample	***T* statistics**	***P* values**
Anxiety → Effort	0.193	1.264	0.206
Attitudes → Anxiety	-0.674	3.732	0.001
Attitudes → Effort	0.658	3.611	0.001
Attitudes → Motivation	0.610	5.281	0.001
Effort →Achievement	0.143	0.720	0.471

Motivation → Anxiety	0.271	1.000	0.317
Motivation → Effort	0.219	1.318	0.188

Figure 4.7: Modified model for year 10 data (a better fit)



4.2.5.3 Measurement model assessment of the year 10 better-fit model

As can be seen in Figure 4.7, the modifications that were made to the initial hypothesised model include the deletion of the endogenous construct 'achievement'. It is deleted because it has non-significant relationships to other constructs in the model. Therefore, because the relationship between effort and achievement is insignificant, effort is not a mediator as hypothesised in the initial model. It does not have an effect on achievement, and it has been found that attitude greatly influences effort (see Fig. 4.7). After modifying the model, the reliability and validity of the modified model need to be assessed (measurement model assessment) using the PLS algorithm. The resulting calculations showed a high level of internal consistency because the composite reliability values are all greater than 0.70. With regard to convergent validity, all the outer loading values are greater than 0.70, except for three indicators (introjected regulation, attitude towards the teacher, test anxiety). However, they are not deleted because the values for composite reliability and AVE are already higher than the threshold value (see Section 3.10.1.1). In addition, the AVE values are all greater than 0.50, which confirms the convergent validity of the model (see Table 4.7).

The results for cross-loadings, Fornell-Larcker and the HTMT criteria show that the discriminant validity of this model is established (see Tables 4.7, 4.8 and 4.9, respectively). The cross-loading values are all higher in their corresponding variable than with other variables (see Table 4.7). Regarding the Fornell-Larcker criterion, the square roots of AVE for attitude, motivation and anxiety are much larger than the latent variable correlations with other constructs (see Table 4.8). In addition, the results for the HTMT measure, presented in Table 4.9, show that discriminant validity for this modified model is established. The values for 'attitude', 'anxiety', 'motivation' and 'effort' are below the threshold value of 0.90, which suggests satisfactory discriminant validity for all constructs in the modified (better-fit) model.

Table 4.7: Results for the measurement model for the year 10 better-fit model

Variables	Outer loadings	Cross-Loadings			Composite Reliability (CR)	Average of Variance Extracted (AVE)
		Motivation	Attitudes	Anxiety		
Intrinsic (stimulation)	0.898	0.898	0.625	-0.189	0.915	0.645
Intrinsic (accomplishment)	0.826	0.826	0.510	-0.141		
Intrinsic (knowledge)	0.826	0.826	0.518	-0.026		
External regulation	0.770	0.770	0.275	0.036		
Introjected regulation	0.605	0.605	0.044	0.336		
Identified regulation	0.862	0.862	0.565	-0.240		
Attitudes towards the teacher	0.523	0.107	0.526	-0.507	0.861	0.687
Attitudes towards language learning	0.944	0.641	0.943	-0.388		
Attitudes towards the course	0.947	0.616	0.947	-0.476		
Fear of negative evaluation	0.725	-0.064	-0.239	0.725	0.802	0.577
Communication apprehension	0.861	-0.145	-0.510	0.861		

Test Anxiety	0.681	-0.103	-0.337	0.681		

Table 4.8: Fornell-Larcker criterion for the year 10 better-fit model

	Motivation	Attitudes	Anxiety
Motivation	**0.803**		
Attitudes	0.616	**0.829**	
Anxiety	-0.147	-0.511	**0.759**

Table 4.9: HTMT criterion for the year 10 better-fit model

	Anxiety	Attitudes	Effort	Motivation
Anxiety				
Attitudes	0.733			
Effort	0.210	0.736		
Motivation	0.262	0.636	0.563	

In addition, these HTMT values should be examined to check whether they are significantly different from 1. This indicates how stable a coefficient estimate is. It can be done using confidence intervals for HTMT by running a bootstrap procedure and selecting complete bootstrapping (Hair et al. 2017). Once none of the confidence intervals include a value of 1, HTMT values confirm the discriminant validity of the constructs (see Table 4.10). In this table, the last two columns present the lower and upper bounds of the HTMT confidence interval for the relationships among the constructs. For instance, the bounds for the relationship between motivation and attitude are 0.418, and 0.883 for other relationships (see Table 4.10). As can be seen, all the criteria used to evaluate the modified model have been met and they support the measures' reliability and validity. It can be concluded that all constructs in the modified (better-fit) model show high internal consistency reliability and validity based on the values for composite reliability, outer loadings, AVE. Fornell-Larcker and HTMT.

Table 4.10: HTMT confidence intervals, bias-corrected, for the year 10 better-fit model

Constructs	Original Sample	Sample Mean	Bias	2.5%	97.5%
Attitudes → Anxiety	0.733	0.776	0.043	0.445	0.989
Effort → Anxiety	0.210	0.283	0.073	0.035	0.457
Effort → Attitudes	0.736	0.733	-0.004	0.516	0.915
Motivation → Anxiety	0.262	0.401	0.139	0.169	0.296
Motivation→Attitudes	0.636	0.680	0.043	0.418	0.883
Motivation → Effort	0.563	0.561	-0.002	0.272	0.799

4.2.5.4 Structural model assessment of the year 10 modified model

Having established the reliability and validity of the modified model, the second step in the analysis is to evaluate the structural or inner model. This step includes measuring the significance of the path coefficients, the coefficients of determination (R^2), the effect size (f^2) and predictive relevance (Q^2). First, using the bootstrap procedure, the significance of the paths or relations in the modified model needs to be assessed by calculating *p* values and *t* values (see Section 3.10.1.1). The findings for the path coefficients of the modified model show that all relationships in the model are significant because they fall between the values of -1 and +1. And all *p* values are significant because they are less than 0.05. Similarly, all *t* values are larger than the critical value of 1.65, so they are all significant. Significant relations found in the model are attitude → anxiety, attitude → effort and attitude → motivation. This inner model suggests that 'attitude' has the strongest effect on effort (0.692), followed by the effects of attitude on motivation (0.616) and on anxiety (-0.511) (see Table 4.11).

Table 4.11: Path coefficients of the year 10 better fit model

	Original sample	T statistics	P values
Attitudes →Anxiety	-0.511	5.124	0.001
Attitudes →Effort	0.692	8.364	0.001
Attitudes → Motivation	0.616	6.456	0.001

The next step is to measure coefficient determination (R^2) using the PLS algorithm. As explained in Section 3.10.1.1, this measure shows how much change in the endogenous

variables is caused by the exogenous variables. An R^2 value is considered weak if it is 0 to .10 and modest if it is .11 to .30, while .30 to .50 is moderate and > .50 suggests strong explanatory power. As seen in Figure 4.7, the outcome variable effort is moderately explained by predictor construct attitudes (R^2 = .479). In addition, attitudes explain approximately 38% of the variance in motivation (R^2 = .379), and 26% of the variance in anxiety (R^2 = .262) (see Table 4.12). These results means that this structural model has a moderate predictive power. It explains approximately 48% of the variance in effort, thus achieves moderate explanatory power. Moreover, the results further confirm the influence of attitude linked to motivation and anxiety in learning effort.

Table 4.12: Coefficient determination (R^2) of endogenous latent variables in the better-fit model for year 10 data

Construct	R^2	R^2 Adjusted	R^2 description
Anxiety	0.262	0.243	modest
Effort	0.479	0.466	moderate
Motivation	0.379	0.363	moderate

Table 4.13, below, presents the results for effect size (f^2) assessment using the PLS algorithm. Effect size (f^2) refers to the change in coefficient determination (R^2) resulting from deletion of the exogenous variable (see Section 3.10.1.1). If the f^2 value is .20 it is a small effect, .15 is a medium effect and .35 is a large effect. The model, presented in Figure 4.7, shows that attitude has a large effect size on motivation (f^2 = 0.611), a large effect size on effort (f^2 = 0.920) and a large effect size on anxiety (f^2 = 0.354), because all values are > 0.35 (see Table 4.13). This means that attitude is important in explaining effort, motivation and anxiety. In addition, exclusion of the construct attitude in the structural model results in a dramatic change in the amount of variance explained in the endogenous variables effort, motivation and anxiety.

Table 4.13: Effect size (f^2) results for 10th grade

Construct	Anxiety	Attitudes	Effort	Motivation
Anxiety				
Attitudes	0.354		0.920	0.611
Effort				
Motivation				

The final step in assessing the structural model is measuring predictive relevance (Q^2) using a blindfolding procedure (see Section 3.10.1.1). In Figure 4.7, anxiety, effort and motivation are endogenous constructs; therefore, they are selected to run the blindfolding algorithm (see Table 4.14). Predictive relevance is achieved when the value of Q^2 is greater than zero (Hair et al. 2017). Using the cross-validated redundancy approach, the Q^2 values for the endogenous variables (anxiety, effort, motivation) are greater than zero, which means that the exogenous construct attitude has predictive relevance for the endogenous constructs considered (motivation, anxiety, effort).

Table 4.14: Predictive relevance (Q^2) of the year 10 better-fit model

Constructs	Sum of the squared observations (SSO)	Sum of the squared prediction errors (SSE)	Q^2(=1-SSE/SSO)
Anxiety	123.000	110.727	0.100
Attitudes	123.000	123.000	
Effort	41.000	23.583	0.425
Motivation	246.000	199.902	0.187

4.2.5.5 Measurement model assessment of the year 11 initial model

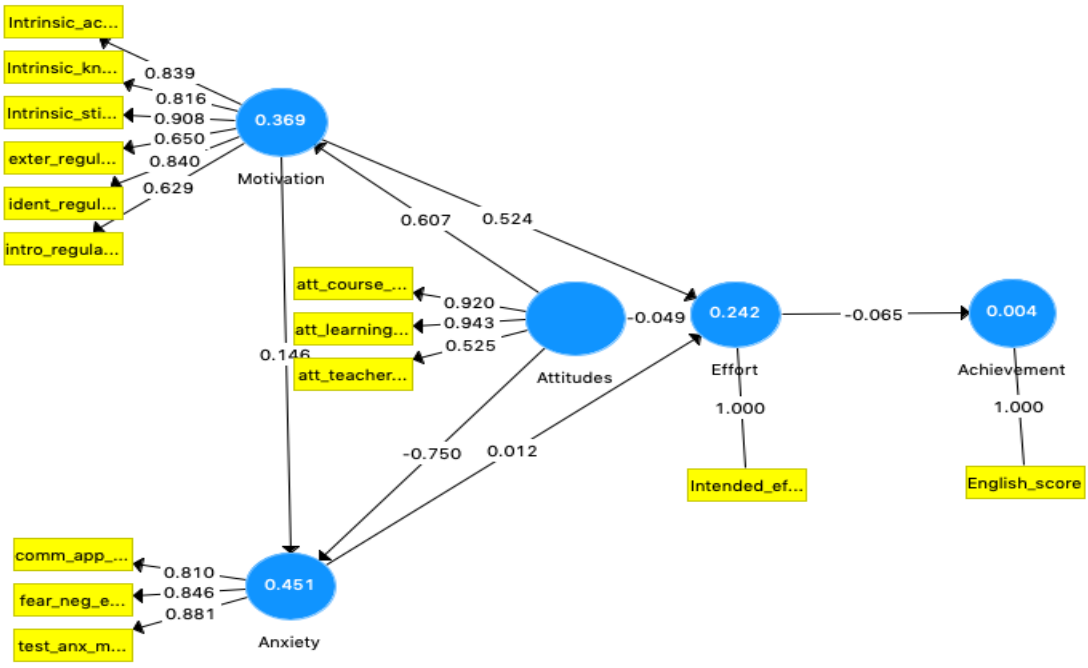
As stated in Section 4.2.5.1, in this study, the hypothesised model includes an exogenous variable (attitude) and four endogenous variables (motivation, anxiety, effort, achievement); additionally, effort also mediates the relationship between affective factors and achievement (see Fig. 4.8).

The same procedures applied to the year 10 data are applied to the year 11 data (see Section 4.3.1.1). Starting with an assessment of the measurement model using PLS algorithm calculations, **composite reliability** is calculated to assess internal consistency reliability. The values of the constructs in this model indicate a high level of internal consistency reliability

because they are all higher than 0.70 (see Appendix H). With regard to **convergent validity**, only two outer loadings are less than 0.70, but they are not deleted, because as is the case with the year 10 model, the values for composite reliability and AVE are already higher than the cut-off value (see Section 3.10.1.1). On the other hand, outer loadings of the other indicators are all greater than 0.70, which is the acceptable threshold for indicator reliability (see Appendix H). The second criterion for assessing convergent validity is calculating average variance extracted (AVE), the results show that all AVE values are above the accepted value of 0.50. This means that all latent constructs explain more than half of the variance of their indicators: motivation (0.619), attitude (0.670) and anxiety (0.716) (see Appendix H). Thus, the results for these measures indicate that convergent validity is established for this model.

Concerning **discriminant validity**, the results for the year 11 initial model show that the cross-loading values of all indicators are higher for the associated variable than with other variables (see Appendix H). The results for the second criterion, Fornell-Larcker, show that the square root of AVE of each latent construct is greater than its correlation with other constructs: motivation (0.619), attitude (0.670) and anxiety (0.716) (see Appendix H). Finally, the findings for the last criterion of discriminant validity, which is HTMT, show that discriminant validity is achieved in this model because all values are below 0.90. Thus, these results indicate that that the reliability and validity of this model are confirmed.

Figure 4.8: Initial model for year 11 data with PLS algorithm calculations



4.2.5.6 Structural model assessment of the year 11 initial model

With the reliability and validity of the measurement model confirmed, the next step is to evaluate the structural (inner) model. Using bootstrap procedures, the significance of the paths was assessed by measuring *p* values and *t* values (see Section 3.10.1.1). The path coefficient results indicate that the only two significant paths are attitude → anxiety, and attitude → motivation, while there were five paths that proved insignificant: anxiety → effort, attitude → effort, effort → achievement, motivation → anxiety, motivation → effort (see Table 4.15). As a result, these insignificant relations have been removed from this initial model and some modifications made to have a better fit for year 11 data. First, the better-fit model for year 10 was used to see if it was a good fit for year 11 data (see Fig. 4.9).

Table 4.15: Path coefficients for the year 11 initial model

	Original sample	***T* statistics**	***P* values**
Anxiety →Effort	0.012	0.062	0.950
Attitudes →Anxiety	-0.750	7.317	0.001
Attitudes → Effort	0.049	0.159	0.874
Attitudes →Motivation	0.607	6.514	0.001
Effort → Achievement	-0.065	0.500	0.617
Motivation → Anxiety	0.146	1.052	0.293
Motivation → Effort	0.524	2.262	0.024

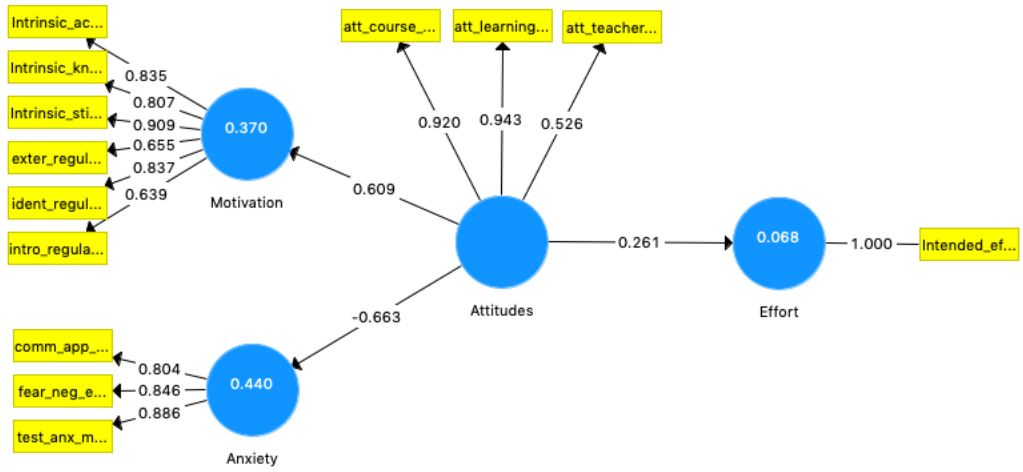
4.2.5.7 Measurement model assessment of the year 11 modified model based on the year 10 model

Figure 4.9 represents year 11 data using the better-fit model for year 10. First, using the PLS algorithm, the measurement model is assessed to check its reliability and validity. The results show that reliability and validity are achieved in the model (see Appendix I). However, it is important to measure the path coefficients of the structural model to check if the year 10 model fits the year 11 data (see Table 4.16). As shown in Table 4.16, two paths (attitude → anxiety, and attitude → motivation) are significant and one path (attitude → effort) is insignificant. This indicates that the model might have a better fit with some changes. As a result, the model is modified once again to have a better fit for year 11 data (see Fig. 4.10).

Table 4.16: Path coefficients of the modified model for year 11 data based on the modified model for year 10

	Original sample	*T* statistics	*P* values
Attitudes →Anxiety	-0.663	10.806	0.001
Attitudes →Effort	0.261	2.282	0.023
Attitudes →Motivation	0.609	7.090	0.001

Figure 4.9: Modified model for year 11 based on the year 10 model



4.2.5.8 Measurement model assessment of the year 11 modified model (better fit)

As shown in Figure 4.10, the change made to the model is that instead of attitude, motivation influences effort because the path between motivation and effort is insignificant. After modifying the model, its reliability and validity need to assessed using the PLS algorithm. Assessment shows that convergent validity and discriminant validity are established. As seen in Table 4.17, all composite reliability values are greater than 0.70, indicating that the model has a high level of internal consistency reliability. In addition, convergent validity is achieved because the outer loadings are all greater than 0.70, except for two indicators (introjected regulation and attitude towards the teacher), but these are not deleted because the composite reliability and AVE values are already above the cut-off value (see Section 3.10.1.1). Average variance extracted (AVE) values also confirm convergent validity because all values are greater

than the threshold (0.50): motivation (AVE = 619), attitude (AVE = 670) and anxiety (AVE = 715) (see Table 4.17).

Similarly, the discriminant validity criteria are met because the cross-loading values for all indicators are greater for their associated construct than with other constructs (see Table 4.17). Fornell-Larcker criterion assessment shows that the square root of AVE for all variables (attitudes, motivation, anxiety) is higher than their correlation with other variables in the model (see Table 4.18). The HTMT criterion values for anxiety, attitude, effort and motivation are all below 0.90, which confirms the discriminant validity of the model (see Table 4.19). Furthermore, the confidence intervals for HTMT values do not include the value of 1, which is further evidence of discriminant validity (see Table 4.20). Thus, it can be said that validity and reliability for the better-fit model for year 11 are established.

Figure 4.10: Better-fit model for year 11 data

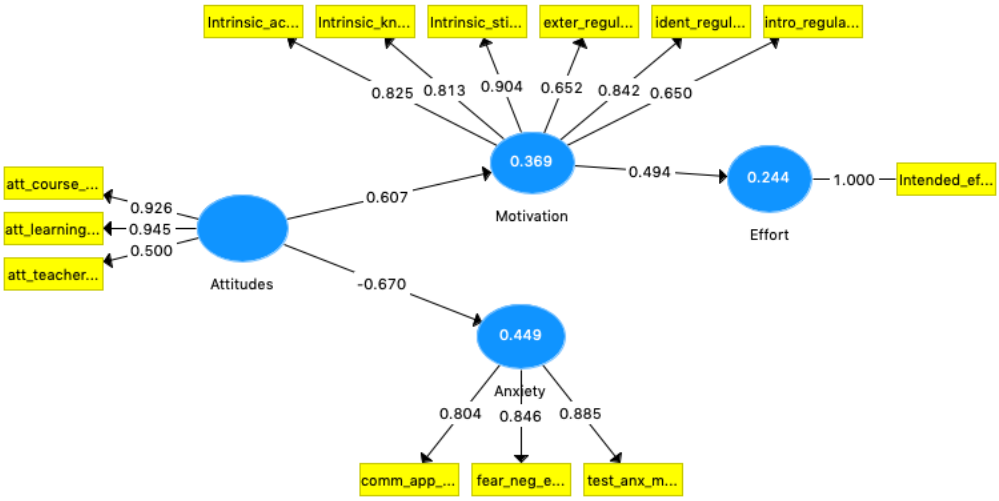


Table 4.17: Results for the measurement model for the year 11 better-fit model

Variables	Outer loadings	Cross-Loadings			Composite Reliability (CR)	Average of Variance Extracted (AVE)
		Motivation	Attitudes	Anxiety		
Intrinsic (stimulation)	0.909	0.906	0.604	-0.340	0.906	0.619
Intrinsic (accomplishment)	0.835	0.837	0.533	-0.413		
Intrinsic (knowledge)	0.807	0.815	0.459	-0.220		
External regulation	0.655	0.657	0.413	0.231		
Introjected regulation	0.639	0.629	0.391	0.012		
Identified regulation	0.837	0.837	0.416	-0.185		
Attitudes towards the teacher	0.526	0.220	0.520	-0.148	0.852	0.670
Attitudes towards language learning	0.943	0.688	0.941	-0.635		
Attitudes towards the course	0.920	0.461	0.923	-0.678		
Fear of negative evaluation	0.846	-0.178	-0.481	0.840	0.883	0.715
Communication apprehension	0.804	-0.174	-0.500	0.811		
Test Anxiety	0.886	-0.396	-0.673	0.884		

Table 4.18: Fornell-Larcker criterion for the year 11 better-fit model

	Anxiety	Attitudes	Effort	Motivation
Anxiety	**0.846**			
Attitudes	-0.670	**0.817**		
Effort	-0.118	0.255	**1.000**	
Motivation	-0.302	0.607	0.494	**0.787**

Table 4.19: HTMT criterion for the year 11 better-fit model

	Anxiety	**Attitudes**	**Effort**	**Motivation**
Anxiety				
Attitudes	0.753			
Effort	0.126	0.330		
Motivation	0.376	0.682	0.528	

Table 4.20: Confidence intervals for HTMT for the year 11 better-fit model

Constructs	Original Sample	Sample Mean	Bias	2.5%	97.5%
Attitudes → Anxiety	0.753	0.788	0.043	0. 554	0.873
Effort → Anxiety	0.126	0.183	0.057	0.017	0.236
Effort → Attitudes	0.330	0.355	0.025	0.127	0.565
Motivation → Anxiety	0.376	0.423	0.047	0.192	0.574
Motivation→ Attitudes	0.682	0.705	0.023	0.448	0.871
Motivation → Effort	0.528	0.524	-0.004	0.242	0.736

4.2.5.9 Structural model assessment of the year 11 better-fit model

Having assessed the measurement model, the discussion turns now to the evaluation of the structural model. Using a bootstrap procedure, the significance of path coefficients is measured by calculating *p* values and *t* values (see Section 3.10.1.1); these suggest that three paths in the model are significant (attitude → anxiety, attitude → motivation, motivation → effort) because their *p* values are lower than 0.05, and their *t* values are greater than 1.65. The inner model suggests that attitude has the strongest effect on anxiety (0.670), followed by attitude's effect on motivation (0.607) and then motivation's effect on 'effort' (0.494) (see Table 4.21).

Table 4.21: Path coefficients for the year 11 better-fit model

	Original sample	T statistics	P values
Attitudes →Anxiety	-0.670	11.179	0.001
Attitudes → Motivation	0.607	6.495	0.001
Motivation → Effort	0.494	4.074	0.001

After assessing the path coefficients, using the PLS- algorithm, coefficient determination (R^2) is evaluated. It explains how much variance in an endogenous construct is explained by an exogenous construct. As shown in Figure 4.10 and Table 4.22, the R^2 value for endogenous variable effort is modest (R^2 = 0. 244). Attitude also moderately explains about 37% (R^2 = 0.369) of the variance in motivation, and almost 45% (R^2 = 0.449) of the variance in anxiety (see Table 4.22). These results mean that the structural model has moderate predictive power. Additionally, similar to the year 10 model, the results further assert the influence of attitude linked to anxiety on students' effort through motivation.

Table 4.22. Coefficient determination (R^2) of endogenous latent variables in the better-fit model for year 11

Construct	R^2	R^2 Adjusted	R^2 description
Anxiety	0.449	0.437	moderate
Effort	0.244	0.227	modest
Motivation	0.369	0.355	moderate

As stated in Section 3.10.1.1, the next step is the evaluation of effect size (f^2) using the PLS- algorithm. Model assessment shows that attitude has a large effect size for anxiety (f^2 = 0.815) and motivation (f^2 = 0.584), and motivation shows a medium effect size for effort (f^2 = 0.322) (see Table 4.23). This means that attitude is important in explaining motivation and anxiety, and motivation is important in explaining students' effort. Thus, the exclusion of attitudes and motivation results in a dramatic change in the amount of variance explained (R^2) in other variables in the model.

Table 4.23: Effect size (f^2) results for the better-fit model for year 11

Construct	***Anxiety***	***Attitudes***	***Effort***	***Motivation***
Anxiety				
Attitudes	0.815			0.584
Effort				
Motivation			0.322	

The last step in the assessment of the structural model is evaluating predictive relevance (Q^2) using a blindfolding procedure (see Section 3.10.1.1). Table 4.24 shows that anxiety, effort and motivation are endogenous constructs in the model. Therefore, these are the variables that are used to run the blindfolding algorithm. When the Q^2 value is greater than zero, predictive relevance of the model is achieved (Hair et al. 2017). Using a cross-validated redundancy approach, the Q^2 values of anxiety, effort and motivation are greater than zero, indicating that attitude, an exogenous construct, has predictive relevance for the endogenous constructs (motivation, effort, anxiety).

Table 4.24: Predictive relevance (Q^2) for the better-fit model for year 11

Constructs	Sum of the squared observations (SSO)	Sum of the squared prediction errors (SSE)	Q^2 (=1-SSE/SSO)
Anxiety	141.000	100.615	0.286
Attitudes	141.000	141.000	
Effort	47.000	37.869	0.194
Motivation	282.000	224.678	0.203

4.2.5.10 Measurement and structural model assessment of the year 12 initial model

As done for years 10 and 11 data, the hypothesised model of the study, presented in Figure 4.11, is assessed to check whether it is a good fit for year 12 data. The assessment is done in two stages: measurement (outer) model assessment and structural (inner) model assessment (see Section 3.10.1.1). Evaluation of the measurement model involves, in the first instance, calculation of composite reliability. The latter suggests a high level of internal consistency reliability because the values for attitude, motivation and anxiety are greater than 0.70 (see Appendix J). As regards the model's convergent validity, calculating the indicators' outer loadings indicates that the values for three indicators in the latent construct 'motivation' (intrinsic motivation to know, external regulation, introjected regulation) are lower than 0.70 (see Appendix J). Hence, the lowest two indicators are deleted from the model because their removal takes average variance extracted (AVE) above the threshold value (see Section 3.10.1.1). In addition, AVE values include one value that is lower than 0.50, which means that convergent validity is not achieved for the year 12 initial model.

Concerning discriminant validity, the cross-loading values for this initial model include an indicator in the latent construct 'motivation'; it has a lower value on its associated construct than with other constructs (see Appendix J). Moreover, the results for the Fornell-Larcker criterion in Table 4.41 show that the value of 'motivation' is not greater than its highest correlation with other constructs. Finally, the findings for the HTMT criterion show that all values are lower than (0.90), yet discriminant validity is not established because the cross-loading and Fornell-Larcker criteria are not met (see Appendix J). Consequently, the model needs to be modified so that we have a better fit for year 12 data. Moreover, evaluation of the path coefficients of the structural model flags up three non-significant relationships: anxiety → effort, attitude → effort, motivation → anxiety, as can be seen in Table 4.25.

Figure 4.11: Initial model for year 12 data

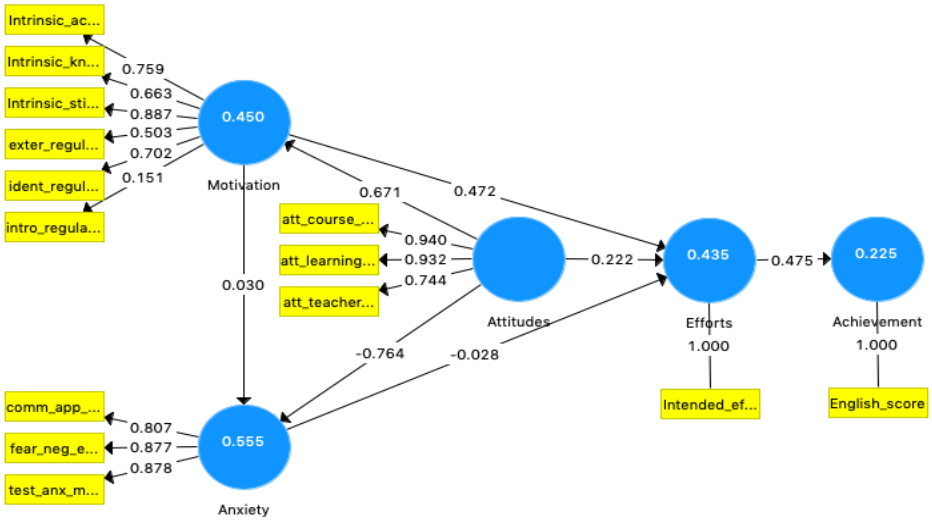


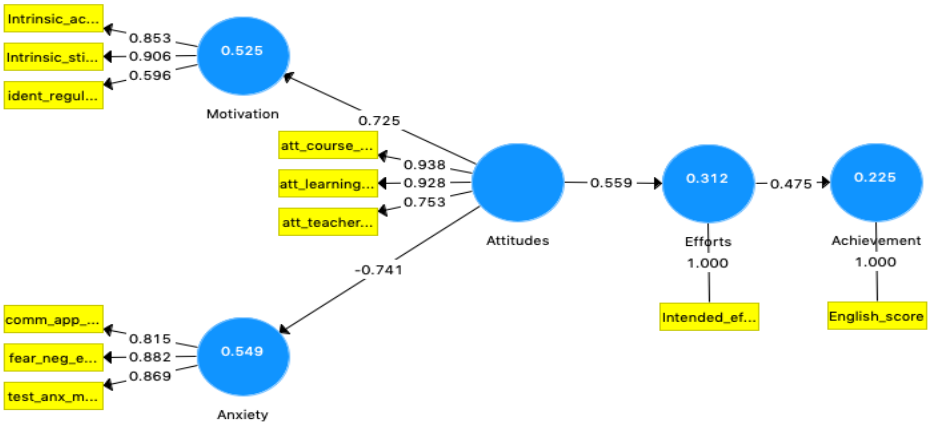
Table 4.25: Path coefficients for the year 12 initial model

	Standard deviation	T statistics	P values
Anxiety → Effort	0.208	0.134	0.893
Attitudes → Anxiety	0.101	7.605	0.001
Attitudes → Effort	0.201	1.102	0.271
Attitudes → Motivation	0.061	10.958	0.001
Effort →Achievement	0.129	3.673	0.001
Motivation → Anxiety	0.147	0.202	0.840
Motivation → Effort	0.182	2.601	0.010

4.2.5.11 Measurement model assessment of the year 12 better-fit model

Neither the year 10 model nor the year 11 model can be used for year 12 data because neither includes variable achievement. Achievement is deleted from those models because it has non-significant relationships with other variables. The modified model for year 12 data is shown in Figure 4.12, below.

Figure 4.12: Better-fit model for year 12 data



As can be seen, the modifications made to the initial model (presented in Fig. 4.11) include the deletion of insignificant paths (see Fig. 4.12). Then, the measurement model is evaluated using the PLS algorithm. The calculations, presented in Table 4.26, show that the model has high internal consistency reliability because all values for composite reliability are above the value of 0.70. In addition, convergent and discriminant validity are also achieved in this model. For convergent validity, the outer loading values are above 0.70, with the exception of one indicator of motivation (0.596), but it is not deleted because it does not fulfil the condition for deleting indicators (see Section 3.10.1.1). Moreover, the AVE values for attitude, motivation and anxiety are all greater than 0.50, which confirms the convergent validity of this model (see Table 4.26).

As regards discriminant validity, the cross-loading values for each construct are all greater than their correlations with other constructs (see Table 4.26). In addition, the Fornell-Larcker criterion shows that each construct has a larger value than its correlation with other constructs in the model (see Table 4.27). Furthermore, the HTMT criterion confirms discriminant validity, as all values are lower than 0.90 (see Table 4.28), and a value of 1 is not found in any confidence interval for all the relationships among the constructs, acting as further confirmation of discriminant validity (see Table 4.29).

Table 4.26: Results of the measurement model for the better-fit model for year 12

Variables	Outer loadings	Cross-Loadings			Composite Reliability (CR)	Average of Variance Extracted (AVE)
		Motivation	Attitudes	Anxiety		
Intrinsic (stimulation	0.906	0.906	0.689	-0.469	0.835	0.634
Intrinsic (accomplishment)	0.853	0.853	0.653	-0.613		
Identified regulation	0.596	0.596	0.252	-0.102		
Attitudes towards the teacher	0.753	0.526	0.753	-0.526	0.908	0.769
Attitudes towards language learning	0.928	0.715	0.928	-0.653		
Attitudes towards the course	0.938	0.651	0.938	-0.755		
Fear of negative evaluation	0.882	-0.491	-0.623	0.882	0.891	0.732
Communication apprehension	0.815	-0.386	-0.498	0.815		
Test Anxiety	0.869	-0.543	-0.740	0.869		

Table 4.27: Fornell-Larcker criterion for the year 12 better-fit model

	Achievement	Anxiety	Attitudes	Effort	Motivation
Achievement					
Anxiety	-0.531	**0.856**			
Attitudes	0.588	-0.741	**0.877**		
Effort	0.475	-0.416	0.588		
Motivation	0.534	-0.563	0.725	0.574	**0.797**

Table 4.28: HTMT criterion for the better fit-model for year 12 data

	Achievement	Anxiety	Attitudes	Effort	Motivation
Achievement					
Anxiety	0.566				
Attitudes	0.636	0.864			
Effort	0.475	0.439	0.603		
Motivation	0.590	0.625	0.840	0.679	

Table 4.29: Confidence intervals for HTMT for the year 12 better-fit model

Constructs	Original Sample	Sample Mean	Bias	2.5%	97.5%
Anxiety → Achievement	0.566	0.568	0.002	0.320	0.730
Attitudes →Achievement	0.636	0.636	-0.006	0.434	0.794
Attitudes → Anxiety	0.864	0.865	0.000	0.680	0.990
Effort → Achievement	0.475	0.468	-0.007	0.205	0.689
Effort → Anxiety	0.439	0.450	0.012	0.197	0.683
Effort → Attitudes	0.603	0.609	0.006	0.401	0.762
Motivation →Achievement	0.590	0.595	0.005	0.333	0.829
Motivation → Anxiety	0.626	0.660	0.035	0.359	0.795
Motivation → Attitudes	0.840	0.859	0.019	0.705	0.926
Motivation → Effort	0.679	0.677	-0.002	0.421	0.866

4.2.5.12 Structural model assessment of the year 12 modified model

After evaluating the reliability and validity of the measurement model, the second stage is assessment of the structural model. Using bootstrap procedures, the significance of the paths or relations among the constructs is measured by calculating *p* values and *t* values (see Section 3.10.1.1). The results show some significant relationships among the constructs (attitude → anxiety, attitude → effort, attitude → motivation, effort → achievement) (see Table 4.30). The inner model suggests that anxiety is strongly influenced by attitude (-0.741), followed by attitude's influence on motivation (0.725) and then motivation's effect on effort (0.558). Finally, achievement is affected by effort (0.475). As can be observed, the relationships are significant because they fall between -1 and +1, the *p* values are all less than 0.05, and the *t* values are greater than the critical value of 1.65 (see Table 4.30).

Table 4.30: Path coefficients of the better-fit model for year 12 data

	Original sample	T statistics	P values
Attitudes → Anxiety	-0.741	10.931	0.001
Attitudes → Effort	0.558	6.717	0.001
Attitudes →Motivation	0.725	16.311	0.001
Effort → Achievement	0.475	3.796	0.001

The second step is to assess the coefficient of determination (R^2) using the PLS algorithm (see Section 3.10.1.1). As we can see in Figure 4.12, effort has a modest explanatory power for variance in the outcome variable achievement (R^2 = 0.22.5). In addition, attitude moderately explains 31% of the change in effort (R^2 = 0.31.2). Furthermore, attitude as a variable substantially explains 52.5% of the variance in motivation, and 53.8% of the variance in anxiety (see Table 4.31). These findings mean that the structural model is meaningful. They further emphasise the importance of affect (attitude, motivation, anxiety) in influencing year 12 students' achievement through their effort (see Fig. 4.12).

Table 4.31: Coefficient determination (R^2) of the endogenous variables in the better-fit model for year 12

Construct	R^2	R^2 Adjusted	R^2 description
Achievement	0.225	0.207	modest
Anxiety	0.549	0.538	strong
Effort	0.312	0.296	moderate
Motivation	0.525	0.514	strong

The next criterion in the assessment of the structural model is effect size (f^2) using the PLS algorithm. The calculations show that attitude has a large effect size on anxiety (f^2 = 1.215), motivation (f^2 = 1.106) and effort (f^2 = 0.454). In addition, effort has a medium effect size on achievement (f^2 = 0.291). This means that attitude is important in explaining motivation, anxiety and effort. In addition, effort is important in explaining achievement. Thus, exclusion of the construct attitude from the structural model results in a dramatic change in the amount of variance (R^2) explained in other variables in the model.

Table 4.32: Effect size (f^2) results for the year 12 better-fit model

Construct	Achievement	Anxiety	Attitudes	Effort	Motivation
Achievement					
Anxiety					
Attitudes		1.215		0.454	1.106
Effort	0.291				
Motivation					

The last step in evaluating the structural model is measuring predictive relevance's Q^2 (see Section 3.10.1.1). For this assessment, the endogenous latent constructs in the model are those that are selected to run the blindfolding algorithm. Using a cross-validated redundancy approach, the results indicate that the exogenous construct in the model for attitude has predictive relevance for the endogenous constructs of achievement (Q^2 = 0.153), anxiety (Q^2 = 0.375), effort (Q^2 = 0.282) and motivation (Q^2 = 0.305), because the Q^2 values of the endogenous variables are greater than zero (see Table 4.33).

Table 4.33: Predictive relevance (Q^2) for the year 12 better-fit model

Constructs	Sum of the squared observations (SSO)	Sum of the squared prediction errors (SSE)	Q^2 (=1-SSE/SSO)
Achievement	45.000	38.133	0.153
Anxiety	135.000	84.338	0.375
Attitudes	135.000	135.000	
Effort	45.000	32.318	0.282
Motivation	135.000	93.769	0.305

4.3 Summary

As can be seen, the findings for the three year groups (10, 11, 12) show that the results for years 10 and 11 are similar. That is, in both year 10 and year 11models, the mediation path between effective factors and achievement through effort is found to be insignificant. Thus, in the modified models for years 10 and 11, effort is an endogenous variable, but not a mediator. In particular, the results for the year 10 model, displayed in Figure 4.7, show that the model explains about 48% of the variance in effort with a large effect size of f^2 = .92, $p > 0.05$. The model also shows that attitude is positively linked to motivation, with a large effect size (f^2 = .61, $p > 0.05$). In contrast, attitude is negatively and largely correlated with anxiety (f^2 = .35, $p > 0.05$).

Similarly, in Figure 4.10, the better-fit model for year 11 data shows that the model explains about 24 % of the variance in effort with a medium effect size of $f^2 = .32$, $p > 0.05$ (see Figure 4.12). In particular, attitude is negatively correlated with anxiety, with a large effect size of $f^2 = .81$, $p > 0.05$. In contrast, attitude is positively and largely correlated with motivation ($f^2 = .58$, $p > 0.05$). Finally, the model shows that motivation is positively and moderately correlated with effort ($f^2 = .32$, $p > 0.05$).

With regard to the year 12 model, the results show that the model explains 22% of the variance in achievement, with a large effect size ($f^2 = .29$, $p > 0.05$). In particular, attitude is negatively associated with anxiety, with a large effect size of $f^2 = 1.21$, $p > 0.05$. On the other hand, attitude is positively and largely associated with motivation ($f^2 = 1.10$, $p > 0.05$) and effort ($f^2 = .45$, $p > 0.05$). Finally, effort is positively and moderately related to achievement ($f^2 = .29$, $p > 0.05$). While the year 10 and year 11 modified models do not support the mediating role of effort in the relationship between affective factors and achievement, the year 12 model does support the role of effort as a mediator between affective factors and achievement, with the significant path attitude→ effort→ achievement ($p = 0.004$).

To conclude, this chapter has reported the descriptive analysis of the variables examined in the present study. The findings show that, in general, the participants have a positive attitude towards learning English. They are motivated to learn the language and exhibit a moderate level of foreign language anxiety. Additionally, the students report that they are ready to put in a lot of effort to learn the language. Furthermore, this chapter also includes the analysis of the structural model developed in the present study. The findings show that attitude, motivation and anxiety are closely related, and they have a significant relationship with effort. In particular, attitude and motivation have a positive relationship with effort, whereas anxiety has a negative relationship with other affective variables and effort. Unexpectedly, the structural model of this study shows that these variables (attitude, motivation, anxiety, intended effort) have a significant relationship with achievement for the year 12 group, whereas for years 10 and 11, it turns out to be an insignificant relationship. These findings are explored further in the next chapter, which presents the qualitative analysis of the interviews. Thus, we can get an in-depth understanding of the study findings, which are interpreted in Chapter 6.

5. Qualitative Data Analysis

5.1 Introduction

This chapter presents the qualitative analysis of the data obtained from the semi-structured interviews to further investigate the foci of the questionnaire and get a deeper understanding of students' attitudes, motivation, anxiety and intended effort to learn the language. Semi-structured interviews were conducted with 18 secondary students: six from each year. The interviewees in each year group sought to include two high achievers, two intermediate achievers and two low achievers selected by their teachers (see Section 3.6). The interview data provide further explanation of the quantitative findings to elucidate the factors that hinder successful language learning in Saudi Arabia.

This analysis is presented in five sections, in accordance with the variables measured to answer the research questions, which are listed in Section 3.1. However, because effort seems to be the mediator between attitude, motivation, anxiety and achievement, as found in the quantitative analysis of year 12 data (see Section 4.2.5.12), it is important to analyse students' effort before the other related variables. In addition, when analysing students' reporting of effort qualitatively, it was found that students use different language learning strategies. Therefore, language learning strategies are shown to be fundamental in analysing students' reporting of effort and interpreting the relationship between achievement and other constructs in the study.

Thus, Section 5.2 presents the analysis of students' reporting of effort in relation to their achievement in connection with each of the three year groups. Section 5.3 presents the analysis of students' attitudes towards the learning situation to answer the first research question in addition to the relationship between attitude, reporting of effort and achievement to answer the fourth one. Then, Section 5.4 outlines the findings for students' motivation in relation to their effort and achievement in response to the second and fourth research questions. Section 5.5 sheds light on foreign language anxiety in response to the third research question. It also presents the analysis of the relationship between anxiety, reporting of effort and achievement to answer the fourth research question. Finally, this chapter concludes with

Section 5.6 on the relationships between affective factors, reporting of effort and achievement to answer the fourth research question.

5.2 Data analysis of students' reporting of effort

The analysis presented here is based on Oxford's taxonomy of learning strategies (see Section 2.3.2) because it is the most common one and is more detailed and specific than other classifications (Rose 2012). Hence, this makes it easier to identify more clearly the different types of strategies used by participants. In addition, it is useful for the sake of comparability with other studies.

Before analysing the data, there is an issue concerning the distribution of participants that needs to be clarified. When I contacted the school where I conducted the study, I requested two participants from each achievement level for each of the three year groups (see Section 3.6). As agreed with the headteacher, I got the students' marks a few months later (by the end of term), so I could not ensure that the distribution of students was as expected at the time of the interviews. Unfortunately, when I looked at the marks of the students I had interviewed, I realised that the distribution was not even, and I did not have equal representation of participants across the different levels. In year 10, there are two low achievers and four high achievers. In year 11, there are three low achievers, one intermediate achiever and two high achievers. In year 12, there is one low achiever and five high achievers. Because it was not possible to gather new data due to the pandemic and the fact that all students had then graduated, I analysed the data I had. Even though the distribution of participants is uneven, and the analysis has to be read with this in mind, the content below shows that there is much to be gained by exploring their answers.

The data collected from the interviews show that participants in different year groups (10, 11, 12) use similar strategies. The data for all year groups are presented in tables, in turn. Only the language learning strategies that are reported by the participants are presented in the tables, and henceforth the focus is only on them.

Table 5.1: Details of language learning strategies used by year 10 participants

Interviewee	Quotes	Strategies
Participant 1/ Low achiever	*If I see a difficult English word, I try to translate it using for example Google Translate.*	**Cognitive**>>Analysing and reasoning >>Translation
Participant 2/ High achiever	*I like to watch animated movies, English programmes.* *I would like to be a translator. I started to translate celebrity news. I look for the English version to translate it into Arabic.* *I Follow social media accounts to learn the language.*	**Cognitive**>>Practising>>Practising naturalistically **Cognitive**>>Analysing and reasoning >> Translation Using social media.
Participant 3/ Low achiever	*I download learning English programmes and watch YouTube video about learning English.* *I follow some social media accounts to learn the language.*	**Cognitive**>>Practising>> Practising naturalistically Using social media.
Participant 4/ High achiever	*I try to read some stories in English and browse some English websites.* *Sometimes I attempt to learn something new, such as new words from some accounts in social media.*	**Cognitive** >>Practising >> Practising naturalistically Using social media.
Participant 5/ High achiever	*I watch on YouTube.* *I watch English drama movies and all of them are without Arabic subtitles.* She says [In natural settings such as hospitals, airports, restaurants, or shops], *I try to speak in English, but if I don't know something, I use Google Translate everywhere.* *I follow some accounts on Twitter for learning English.*	**Cognitive** >>Practising >>Practising naturalistically Using social media.
Participant 6/ High achiever	*I follow some accounts on Twitter, Instagram, and on Snapchat.* *In social media if I found a difficult word, I have a vocabulary book to read but my problem is that I can't memorise very quickly.* She says [In natural settings such as hospitals, airports, restaurants, or shops], *sometimes I can understand, and I can reply using simple sentences, but I can't ask for something that needs more or a difficult vocabulary.*	Using social media. **Cognitive** >>Receiving and sending messages >> Using resources for receiving and sending messages **Memory** >> Creating mental linkages >> Grouping **Cognitive**>> Practising >>Practising naturalistically

5.2.1 Analysis of year 10 students' effort (language learning strategies)

The data show that year 10 students with different levels of achievement use cognitive strategies and they sometimes use social media to learn the language. As noted in Section 2.3.2.1, what distinguishes high achievers from others is that they use language learning strategies in a way that helps them succeed. For instance, two interviewees in year 10 use cognitive strategies but they have contrasting levels of achievement. A closer look at the data shows that the low achiever (Participant 1) reports that she uses Google Translate as a learning strategy whenever she finds a difficult word, whereas the high achiever (Participant 2) also reports that she uses translation as a learning strategy but shows a deeper level of engagement with the language: she watches English movies and programmes, and she translates celebrity news as she would like to become a translator. The point here is that, in order to translate appropriately, a person needs to have a good knowledge of, for instance, different idioms and expressions, the semantic range of a term, the registers a term is associated with etc. It is not just a matter of establishing a simplistic one-to-one correlation, as the Google Translate tool might do. In addition, Google Translate is not as accurate as human translation because it relies only on the translations that are stored on its servers. Furthermore, it subsequently needs editing by humans to be accurate and appropriate to the context (Van Rensburg et al. 2012; Ducar and Schocket 2018; Tongpoon-Patanasorn and Griffith 2020). Similarly, Participant 5 practises the language naturalistically, which is considered to be one of the most effective cognitive strategies (Oxford 1990). She reports that she practises the language wherever possible in hospitals, airports, restaurants etc., and if she finds anything difficult, she uses Google Translate.

The remaining participants in year 10 use cognitive strategies and use social media to learn the language. In foreign language contexts, the use of online learning can help students practise the target language. As Benson notes, online learning affords "rich linguistic and non-linguistic input, by presenting new language through a variety of media and by offering branching options" (2001, p.138). Thus, learners have control over selecting the material and the strategies they use to learn, which helps them to become more autonomous learners. However, the interviewees here also show contrasting levels of achievement. As pointed out in Section 2.3.2.1, frequent use of different strategies does not contribute to successful learning if they are not used effectively. For instance, Participant 3 is a low achiever. Despite being prompted, unlike her peers in year 10, she did not elaborate on her use of learning strategies. She did not give any detailed information about how she engages with the learning strategies

she uses. This inability to elaborate further might be linked to her low level of achievement. She might not understand how to use the strategies in a good way, like her peers, who are high achievers. Basically, the main difference between them is that the high achievers (Participants 4 and 6) report that they, when using social media, do something with the language and they structure their learning. They try to learn new words from social media accounts. For instance, Participant 6 uses a vocabulary book whenever she finds a difficult word in social media. Specifically, she uses a vocabulary book for beginners learning the language in which the learner finds vocabulary about specific topics such as travelling, shopping, cooking etc. This grouping strategy is one of the memory strategies through which the learner creates mental connections. It helps learners to retrieve stored language materials when they need them for communication. Thus, it helps the learner overcome the problem of remembering the large number of vocabulary items needed to achieve fluency (Oxford 1990). In addition, she practises the language naturalistically in hospitals, airports, restaurants etc. Thus, she improves her communication skills. Moreover, Participant 4 shows a deeper level of engagement with the language through browsing English websites and reading. Reading is considered a very helpful language learning strategy because, according to Griffiths (2002), it is typical that knowledge acquired from reading is transmitted to other language learning skills. Thus, through reading in the target language, the learner's writing, listening and speaking skills are developed as well.

Overall, the year 10 group uses social media and different cognitive strategies to learn English, including translating and practising the language naturalistically by watching English programmes and movies and reading English stories. However, the ways in which they use these strategies impact on their learning differently.

Table 5.2: Details of language learning strategies used by year 11 participants

Participant	Quotes	Strategies
Participant 12/ Intermediate achiever	*I watch movies without subtitles, use and download mobile applications.* She says [In natural settings such as hospitals, airports, restaurants, or shops], *If I read the menu and find it easy and I can read it,* I might speak up and order. *I ask my sister about some vocabulary.* *I follow Instagram and Twitter accounts about the field I would like to be in the future. For example, I follow accounts of foreign artists to learn the English words they use and their explanations. I translate them to memorise them later.*	**Cognitive** >> Practising >>Practising naturalistically **Social** >> Asking questions >>Asking for clarification or verification Using social media
Participant 13/ High achiever	*I watch English programmes; I download some applications on my phone.* She says [In natural settings such as hospitals, airports, restaurants, or shops], *I try to talk in English even if they reply in Arabic.*	**Cognitive**>>Practising >>Practising naturalistically
Participant 14/ Low achiever	I watch movies. She says [In natural settings such as hospitals, airports, restaurants, or shops], sometimes *I speak in English, but if I don't understand I speak in Arabic.* *In restaurants, I try as much as I can to speak in English. Even if I find a difficult word, I try to understand it .* *I try to translate whatever I see.*	**Cognitive**>>Practising>> Practising naturalistically **Cognitive** >> Analysing and reasoning >> Translating
Participant 15/ High achiever	*I watch educational videos.* *but the most important part is practice. I practise most of the time by myself.* She says [In natural settings such as hospitals, airports, restaurants, or shops], *I try to speak English according to the situation I am in. If I can, I try. I give at least one clear simple sentence clarifying the message I want to deliver.*	**Cognitive** >>Practising >> Practising naturalistically **Metacognitive** >> Arranging and planning your learning >> Seeking practice opportunities **Cognitive** >> Practising >>Practising naturalistically
Participant 16/ Low achiever	*I look at some English books and try to learn some words and form sentences.* *I often watch videos on YouTube or listen to audio lessons.* She says [In natural settings such as hospitals, airports, restaurants, or shops], *first, I try to deliver my message in English. If I cannot, I try using gestures or the like.*	**Cognitive** >>Practising >>Practising naturalistically **Compensation**>>Using mime or gesture

Participant 17/ Low achiever	*I practise English with my elder sister using simple English words and sentences* *I watch English programmes, YouTube videos, movies and so on.* *I follow some accounts on Instagram about learning English.*	**Cognitive**>> Practising >>Practising naturalistically Using social media

5.2.2 Analysis of year 11 students' effort (Language learning strategies)

Similar to year 10, the participants in the year 11 group use cognitive strategies, social strategies, metacognitive strategies and social media for language learning. Closer inspection of the data shows that Participants 13, 14 and 16 only use cognitive strategies, but they have different levels of achievement. They use similar strategies, but they differ in the degree to which they practise the language in natural settings such as hospitals, airports, restaurants etc. That is, the low achiever (Participant 14) reports that she speaks in English when she finds things easy, but if she does not understand, she speaks in Arabic. By the same token, Participant 16 reports that she uses gestures if she cannot deliver her message in English in natural settings. In contrast to Participants 14 and 16, Participants 13 reports that she speaks only in English in natural settings even if the interlocutors reply in Arabic. She is conscious of the importance of practising naturalistically as one of the most important learning strategies.

Combining cognitive with metacognitive strategies, Participant 15, who is a high achiever, is more specific than her peers in explaining how she engages with the language. She reports that she watches educational videos, but she mainly focuses on practising the language in natural settings. She comments that she uses simple sentences to deliver her message, which suggests that there might be some awareness that there are much more complex sentence structures that she cannot cope with yet. A good language learner is aware of the language as a system, with different structures. She might have mastered some simple structures, but not more complex ones. In addition, she uses self-talk to practise the language. Although self-talk is categorised as an affective strategy in the taxonomy of language learning strategies by Oxford (1990), and as socio-affective in the taxonomy by O'Malley and Chamot (1990), here it is categorised as a metacognitive strategy. This is because this participant does not use only positive statements for self-encouragement, but rather seeks out practising opportunities. She makes statements about daily life situations. This metacognitive strategy is particularly important because the learner is responsible for creating opportunities to practise the language, via which language is developed (Oxford 1990).

Similarly, Participant 12, an intermediate achiever, combines cognitive and social strategies and uses social media to learn. She reports that she practises the language naturalistically in addition to watching movies and using mobile applications. She makes use of social media to improve her vocabulary and knowledge in order to prepare for her future career. In natural settings (e.g. hospitals and restaurants), she speaks in English if she finds things easy. Also, she reports that she uses the social strategy of asking questions for clarification or verification. Asking questions helps the language learner to have a better understanding of a language task (Oxford 1990). In contrast, Participant 17 uses similar cognitive strategies and social media to learn. However, she is a low achiever, which indicates that she might not use learning strategies effectively. The learning strategies she uses are not useful because they do not fulfil the conditions suggested by Oxford (2003) (see Section 2.3.2.1).

To sum up, year 11 participants use cognitive strategies by practising the language in natural settings such as airports, restaurants and so on. Some participants combine cognitive strategies with metacognitive ones, such as seeking out practice opportunities through self-talk. In addition, some participants combine cognitive strategies with social strategies, such as asking questions for clarification or verification, while others use social media.

Table 5.3: Details of language learning strategies used by year 12 participants

Participant	**Quotes**	**Strategies**
Participant 7/ High achiever	*I watch videos about learning English in YouTube. Also, I follow native English YouTubers.* *Also, I follow some learning English accounts on Instagram that are very helpful. I follow some helpful accounts on Instagram to learn English.*	**Cognitive** >> Practising >>Practising naturalistically Using social media.
Participant 8/ Low achiever	*No, I don't do any activity to learn English.*	No strategies

Participant 9/ High achiever	*I use YouTube. Also, before I can start speaking, I should learn the grammar.* *Then to learn vocabulary, I try to memorise words in sentences, so they stick in mind.* she says [In natural settings such as hospitals, airports, restaurants, or shops], *If I have no choice, I try to deliver my message in English using simple words.*	**Metacognitive** >> Arranging and planning your learning >>Setting goals and objectives **Memory** >> Creating mental linkages >> Placing new words into a context **Cognitive**>>Practising>>Practising naturalistically
Participant 10/ High achiever	*I like to watch movies without Arabic subtitles.* *I first try to understand difficult words from context, then I translate them.* she says [in natural settings such as hospitals, airports, restaurants, or shops], *I can speak well and order whatever I want.*	**Cognitive** >>Practising >> Practising naturalistically **Metacognitive** >>Arranging and planning your learning >>Setting goals and objectives, **Compensation**>>Guessing intelligently in listening and reading >>Using other clues **Cognitive** >>Practising >>Practicing naturalistically
Participant 11/ High achiever	*Reading books*. *I read simple stories first and then move to more difficult ones.* *I follow some accounts for learning English on Instagram.* She says [in natural settings such as hospitals, airports, restaurants, or shops], *it depends: if I am with a person who can speak English, they talk, but if I am alone or with people with less knowledge of English than me, I try to speak.*	**Cognitive** >>Practising >>Practising naturalistically Using social media **Compensation**>>Using mime or gesture **Cognitive**>>Practising>> Practising naturalistically
Participant 18/ High achiever	*I watch movies without subtitles to improve my language.* *I have a book called "300 words every day", I use it to improve my English.* *I try to speak with nurses in hospitals because most of them don't know Arabic.* *If I don't understand something, I ask the teacher for clarification* (P18). *I follow some accounts on Twitter and Instagram.*	**Cognitive**>> Practising >>Practising naturalistically **Social** >>Asking questions >> Asking for clarification or verification Using social media.

5.2.3 Analysis of year 12 students' effort (language learning strategies)

As noted above, most of the year 12 participants (i.e. 7, 9, 10, 11, 18) have a high level of achievement and only Participant 8 is a low achiever. A closer look at the data shows that year 12 participants combine strategies differently: cognitive and social strategies; cognitive, social and metacognitive strategies; cognitive, metacognitive and compensation strategies; or cognitive, metacognitive and memory strategies. There is an exception in Participant 8, who does not use any strategies, which might contribute to her low level of achievement.

Using cognitive strategies and social media for language learning, Participant 7, who is a high achiever, reports that she watches videos about learning English and from native English Youtubers because she recognises that the language used in YouTube videos is easier than that in movies. This awareness of the different structures of the language indicates her keen interest to learn the language. Also, she reports that she uses Instagram to learn English. Hence, she makes use of what works best for her. Similarly, Participant 18, also a high achiever, uses similar learning strategies to Participant 7 in addition to social strategies. She reports that sometimes she asks her teacher for clarification or verification. Such a strategy helps the learner to better understand the required language task. In addition, she practises the language naturalistically. She speaks English with nurses and that helps her to improve her communication skills. Furthermore, using social media platforms for learning can help students learn the language.

Showing a deeper level of engagement with the language, Participants 9, 10 and 11 use metacognitive strategies in addition to cognitive, memory, compensation and social strategies. They plan, monitor and evaluate their learning. Research shows that there is a positive relationship between using metacognitive strategies and achievement in English (e.g. Kummin and Rahman 2010). The findings in the present study show that, unlike other strategies, metacognitive strategies are only used by high achievers; these strategies enhance autonomous learning and language proficiency (e.g. Oxford 1990; Wenden 1991). For instance, Participant 9 said: *I use YouTube. Also, before I can start speaking, I should learn the grammar. Then to learn vocabulary, I try to memorise words in sentences, so they stick in my mind.* This high achiever plans her learning because she first learns some grammar to be able to speak well later on. She sets her goal (to speak English) and how to accomplish it effectively through learning grammatical rules and vocabulary. Also, she reports that she uses an effective memory strategy to learn vocabulary by learning words in sentences, so they are not easily forgotten. In addition, she practises the language in natural settings using simple sentences to deliver her message. In

a similar way, Participant 10 plans her learning through a compensation strategy first, and then a cognitive strategy. That is, she reports that she first guesses the meaning of new words from the context and only then translates them. Furthermore, she uses the most important cognitive strategy, which is practising the language in natural contexts (e.g. restaurants and airports). She reports that she finds it easy to ask for and order whatever she wants. Finally, Participant 11 uses cognitive strategies. She reports that she practises the language if she has no other choice, but she feels more confident to speak in English when the interlocutor is less proficient than her. Also, she uses reading to learn the language. Research shows that a reading strategy helps to improve other language skills as well (Griffiths 2002) (see Section 5.2.1). Additionally, she utilises a deeper level of learning with metacognitive strategies; she reports that she plans and arranges her reading, starting with beginner level stories and then moving on to more advanced ones. This staged learning is important because, when language learners understand what they read, they gain in confidence and become more motivated. Moreover, she uses social media to learn the language. For instance, on Instagram, she reports that she follows an account where the learner is given some words and is asked to put them in sentences. Then, they get a score for that. Such a strategy of placing new words into context helps learners to retrieve information whenever it is needed.

5.2.4 Summary of the three groups' effort in accordance with their levels of achievement

In this section a brief description of the strategies used by low, intermediate and high achievers is given to shed light on what might contribute to successful and less successful language learning.

Low achievers

The data show that the strategies used by low achievers are cognitive strategies and compensation strategies, and they also use social media for language learning. A closer look at the data shows that these strategies include translating, watching YouTube videos and movies, using audio lessons, learning words from books or forming sentences, using gestures and using social media. Their responses show that they don't structure or plan their learning like their intermediate or high achieving peers. For example, they report that they use literal translation, which, as research shows, can be a helpful strategy in the early stages of language learning if

used carefully. However, verbatim or literal translation, although frequently used by beginners, can either help them to learn or give the wrong interpretation of target language material. In addition, translating can sometimes hinder the learning process as learners are forced to go back and forth between languages (Oxford 1990). This indicates the importance of using language learning strategies effectively and that some learners need to be guided by their teachers for optimal learning. In addition, low achievers use other cognitive strategies such as watching TV or videos, but they do not structure or plan their learning to get the desired benefits. Research shows that language learners need to structure the input they receive from different language resources (e.g. TV, movies, conversations) into controllable chunks by using language learning strategies such as taking notes, summarising and highlighting. Such strategies help to prepare learners to speak and write in the target language (Oxford 1990). Thus, it is important that language learning strategies are structured and planned to meet language learners' needs.

Intermediate and high achievers

Closer inspection of the data shows that intermediate and high-level achievers use different strategies, but they mostly structure and plan their learning. They use metacognitive strategies because they plan their learning by setting goals and objectives. For instance, they report that they learn grammar to start speaking, or read easy stories and then move on to more difficult ones. They also seek out practice opportunities such as the participant who uses self-talk to practise the language. In addition, they use the cognitive strategy of watching movies and YouTube videos. They also practise the language wherever possible in restaurants, airports, hospitals etc.

Even when they watch movies, they engage with the language. For instance, they report that they try to understand difficult words from the context and then translate them. Moreover, some participants go further and translate a whole text. Furthermore, when they use social media, they use resources such as dictionaries, grammar books or word lists that help them to understand whatever they read or hear on social media platforms. In addition, they use social strategies, e.g. asking others such as teachers or family members questions for clarification or verification. Such a social strategy ensures that learners have the correct understanding of the language task. Finally, they use memory strategies, as they create mental links when learning vocabulary by placing new words in sentences, so they are not easily forgotten. As can be seen,

unlike low achievers, they structure their learning and use the learning strategies effectively. They try to make use of available resources and seek the help of others to learn the language.

5.3 Students' attitudes towards the learning situation

This section presents the findings obtained to answer the first research question, concerning students' attitudes towards the learning situation (see Section 3.1). Language learning attitudes have a significant influence on the effectiveness of the learning process (Gardner 1985). These attitudes are influenced by different experiences in the classroom, mostly in the early stages of school, as the data show. The qualitative data show that there are no significant differences between the participants in years 10, 11 and 12 in their attitudes towards the learning situation. Thus, rather than presenting the analysis in relation to each year group, it is presented according to the variables investigated in relation to attitudes: attitudes towards learning English (Section 5.3.1), towards the teacher (Section 5.3.2) and towards the course (Section 5.3.3). Section 5.3.4 addresses whether students' attitudes are stable or not, and Section 5.3.5 presents the factors that influence students' attitudes. The relationship between students' attitudes and the language learning strategies they use is then presented in Section 5.3.6. Finally, Section. 5.3.7 analyses how students' achievement can be influenced by their attitude towards the learning situation.

5.3.1 Students' Attitudes towards Learning English

The qualitative analysis shows that, in general, most of the participants express a positive attitude towards learning English, with the exception of Participants 1 and 8. They have a negative attitude towards learning English. Their views are presented in the following quotes:

(1) I don't like English. I don't have any ambition to learn it (P1).

(2) In the primary stage, English was very simple and clear. In the intermediate stage, it became a bit harder, so I didn't like it anymore (P8).

Their answers reveal that it is mainly the difficulty of the language that causes this negative feeling, as explored in Section 5.3.5.4.

Another participant (P9) shows a neutral attitude towards learning English, but her responses to the follow-up questions show that her attitude is positive. The following quote presents her view:

(3) I don't just like English in particular, I like learning any language (P9).

At first, as can be seen in the quote, her answer shows that she does not have any feeling towards English in particular. Then, when answering follow-up questions, she emphasises the importance of English, which indicates her positive attitude, as presented in the quote below.

(4) I think it's important and, also, it's enjoyable. I like learning languages, but I want to learn English first, and then I can learn other languages afterwards (P9).

Her view on the importance of English is shared by other participants, who also have a positive attitude. They believe in the importance of English as a language of communication. For instance,

(5) It's good and important for learning. Maybe you can benefit from it if you go to restaurants or shopping centres. If you want to order something, maybe the waiter doesn't know Arabic, so you can talk to them in English. Therefore, you should learn English (P17).

Similarly, Participant 15 views English as a language of communication, but she is further encouraged by the fact that learning English will help her to have a good job in the future. Her positive attitude is presented in the quote below.

(6) English is very important in the current era in terms of future jobs and social life. It became the world language of communication. It is considered the easiest language (P15).

This view on the importance of English for the learner's future is echoed by many participants who consider utilitarian reasons for learning English. In addition, some participants further indicate its importance to have better job prospects or to study abroad. Examples of such views are presented in the quotes below.

(7) It's very important to learn English because it helps to get jobs in the future and basically it helps in our personal life (P10).

(8) It's important because if we want to study abroad, we need to have a good understanding of English (P5).

(9) It is important because in the future English will be needed. It has become a necessity that all people should learn it (P3).

(10) I am in favour of learning English because it is beneficial either to have a job in the future or to communicate with the rest of the world; even most TV programmes are in English (P4).

Participant 4 also shares the view that English is the language of most TV programmes with other participants. For instance, Participant 2 holds a positive attitude as she views English as an information carrier, because many TV programmes and sources of information are in English. The quote below exemplifies her view.

(11) Learning English is a lifestyle. It is something you can complete your life with naturally. You will have access to information in any situation; you can make use of it in any life situation. English is an important secondary language besides Arabic. It can be considered additional information enrichment. What is impressive about English is that it is spoken or used as a second language in many countries. So, wherever you are, English can help. Also, English documentary programmes are very helpful as one can benefit from the information offered. So, it can be considered an information carrier (P2).

As can be seen in quote 11, Participant 2 expresses her positive attitude towards learning English through highlighting its significance as an abundant source of knowledge which enhances one's personal development. This view is shared by other participants as well, who believe in the importance of English for personal development. Examples of such a view are presented in the quotes below.

(12) English language is good for personal development. Also, when you see people speak English, you can understand what they are saying, rather than being ignorant. The English language will be more beneficial in the future than any other language (P13).

(13) I think that learning English is important. It increases people's knowledge, and they get to know other cultures. Also, it helps people get a job later on (P7).

On a more personal level, a few participants express their positive attitude through highlighting the importance of learning English for university admission. This view comes from the fact that some university departments require a good command of English, such as

the School of Medicine and the School of Science and Technology. The quotes below present these views.

(14) It [English] is important to enter university, also for travelling, either for tourism or studying (P8).

(15) I think it's good because it's important in terms of future jobs and university admission. If it was not important, we wouldn't have been learning it since primary stage (P16).

In a similar vein, participant 6 has a positive attitude because she is aware of the importance of English as the language of technology. Her view is presented in the quote below.

(16) I think that people have to learn English because, nowadays, most people master it after Arabic. It has become the language of technology. Most people speak English. I mean a person should learn it to benefit from it in the future (P6).

She emphasises the importance of learning English nowadays in the Internet age. English has clearly become the language of technology, science and virtual communication (Alrashidi and Phan 2015).

Other responses about the participants' attitudes towards learning English include learning about other cultures and its usefulness for tourism. These ideas are illustrated in the quote below.

(17) I think that learning English is important. It increases people's knowledge, and they get to know other cultures. Also, it helps people get a job later on (P7).

Participant 7 (quote 17) views English as the window through which a person can learn more about others, because English is the most commonly spoken language in the world.

5.3.2 Students' attitudes towards their L2 teachers

The data provide a number of insights that are related to their teacher and their teaching strategy playing a crucial role in the learning process. When the participants were asked about their attitudes towards the teacher, they focused on the teacher's character and their teaching strategy, as they have an influence on the learner's attitude and performance. For instance, most

of the participants think that a language teacher should be calm and patient, because they believe that these features have a positive impact on the learning process. Such views are presented in the quotes below.

(18) I would like her [the teacher] to be calm and considerate (P1).

(19) I always hope that the English teacher will be patient and kind, not tough, and make us like the subject (P14).

(20) The teacher plays a big role. They should be calm and considerate, not grumpy, and if we don't understand, they should repeat again and again (P3).

Furthermore, some participants focus on the influence of a positive and supportive teacher-student relationship on their attitude and the learning process. They further indicate that the kindness of the teacher plays an important role in lowering their anxiety level and helps them to learn more. Examples of such a view are illustrated in the quotes appended below.

(21) I like her to be calm and patient, and try to be considerate, because most of the students feel frightened in English classes. Most of them don't participate in class and most of those who do participate ask for their teacher's permission to answer in Arabic (P6).

(22) I like the teacher to be nice and helpful to students, so that students don't worry when they make mistakes. But if the teacher is tough with them, they will hesitate to answer, even if their answers are correct (P11).

(23) To be patient with the students and not to mock them for their wrong answers (P7).

(24) To be patient with her students and try to help those who are not good at English. For example, some students don't know letters and cannot read (P13).

As can be seen, the quotes above (21–24) show that the teacher-student relationship seems to have a considerable influence on the participants' attitudes. Therefore, negative attitudes toward learning English are mostly related to a conflictual or negative teacher-student relationship, as illustrated in the quotes below.

(25) At first, I had a negative attitude because the teacher was not supportive. But the following term, I had a teacher who changed my attitude to a positive one. She

encouraged me and I felt that I could be creative, and since then, I have had a positive attitude (P2).

(26) I had a negative attitude, as my teacher in primary school was grumpy. She always shouted at her students. I couldn't understand anything with her (P7).

In addition to the teacher-student relationship, the teacher's teaching strategy is identified in the interviews as one of the factors that influence participants' attitudes. Therefore, many participants are in favour of using interesting strategies and competitions in class. They prefer interesting and varied ways of teaching, as demonstrated in the quotes below.

(27) Maybe for other students who don't like English, it's important that their teacher uses different strategies to make the lesson more interesting, but those who like English, like me, will learn even if she doesn't have an interesting teaching style (P7).

(28) To use strategies and not to speak in Arabic at all, even if some students don't understand. As time passes, they will understand (P18).

(29) Because many students get bored, so it is better to use strategies (P12).

(30) I prefer her to use strategies, divide students into groups and have competitions between them (P13).

5.3.3 Students' attitudes towards the course

When the participants were asked about the English syllabus, they suggested some modifications that could be made to it. For instance, they suggested that providing more examples and clarification would help them because it makes things easier. The quotes below present such a view.

(31) I think the way in which the grammatical rules are explained is not detailed enough. That is, most of the students look at the book and feel depressed at the way in which a rule is explained. It is not understandable. Most of us [students] depend on the teacher to explain a grammatical rule. If she explains it, we can understand it (P6).

(32) To be honest it [the English course] is easy, but there are a few things that need more focus because they are rather difficult. Grammatical rules need to be

clarified with more illustrative examples in both the student's book and the workbook (P13).

(33) In grammar, we need more examples to make it more understandable (P16).

In addition, there were also some comments about the repetition of topics and grammatical rules studied in different school years. For example, they suggested that including new topics would help them to learn more:

(34) In writing, the selected topics are repetitive (write about yourself, your family, your friends). We need new simple topics. Something that we can write about concisely. It can be short and simple (P2).

(35) I notice that the content of this year is similar to what we learned last year. I mean, the grammatical rules got a little bit deeper than in the previous year (P6).

(36) It's boring because it repeats what we already studied in the intermediate stage. The grammatical rules are the same as those in the intermediate stage (P7).

The students also commented on the vocabulary items they learn in school:

(37) I think the vocabulary needs to be increased in the unit (P2).

(38) For me, I think it is good and intensive, but sometimes, we learn some vocabulary that we don't use in actual life. In addition, every year, the vocabulary we learn becomes more complicated than before (P15).

While these quotes (31–38) show negative views about the syllabus, there are some positive views as well. For instance, one participant attributes her improved level in English to the syllabus they have:

(39) The syllabus is improved and includes more topics and grammatical rules. So, my language has improved more (P11).

Despite some of the negative views highlighted by some of the participants towards learning English, the teacher and the syllabus, the participants were aware of the importance of English, and they were able to identify various reasons which are mostly linked to their future.

5.3.4 Stability of attitudes towards learning English

The data show that most of the participants' attitudes towards English are not stable. As Table 5.4 shows, there are only six participants who have a stable positive attitude towards English (4, 5, 10, 12, 13, 15). Participants 1 and 8 experienced a change in their attitude towards English, from positive to negative. In contrast, almost half of the participants experienced a change from a negative to a positive attitude (2, 3, 7, 9, 11, 14, 16, 17). The remaining two participants (6 and 18) have a mixed attitude towards English: their attitude is sometimes positive and sometimes negative.

Table 5.4: Stability of participants' attitudes towards learning English

Participant	Stability of attitudes	Reasons of change
Participants 1, 8	Positive → Negative	• Difficulty of the language/subject
Participants 2, 3, 7, 9, 11, 14, 16, 17	Negative → Positive	• Teacher • Being more proficient in English
Participants 4, 5, 10, 12, 13, 15	Positive	
Participants 6, 18	Mixed attitudes	• Teacher • Difficulty of the language/subject

In the case of the two participants whose attitudes changed from positive to negative, the difficulty of the language seems to be the reason for their negative attitude:

(40) At first, I liked English then as it became difficult, I started to hate it (P1).

(41) In the primary stage, English subject was very simple and clear. In the intermediate stage, it became a bit harder, so I didn't like it anymore (P8).

(42) It is positive, but sometimes when I feel that the English subject is difficult, I become frustrated, and I wish I wasn't studying it (P6).

In addition to the difficulty of the subject, the teacher was another factor that is linked to negative attitudes by some of the participants who have mixed attitudes towards English:

(43) Sometimes negative and sometimes positive. If it is negative, I think the teacher has an influence because they sometimes make you hate the subject. When I was in the intermediate stage, I had a very negative attitude. I didn't like to attend classes because the teacher was mean. But in the secondary stage, English feels like a hobby to me. It is not necessary to study it, I like it, and I like using it (P18).

In contrast, the participants who experience a change from negative to positive attitudes highlight the importance of the teacher in changing their attitudes:

(44) At first, I had a negative attitude because the teacher was not supportive. But the following term, I had a teacher who changed my attitude to a positive one. She encouraged me and I felt that I could be creative, and since then, I have had a positive attitude (P2).

(45) I had a negative attitude, as my teacher in primary school was grumpy. She always shouted at students. I couldn't understand anything with her. Then in the intermediate stage, I became very motivated because one of my friends was very excellent. I tried to be like her, and I became an excellent student, thank God (P7).

Moreover, Participant 9 indicates that the change is caused by her improved level in English. She says,

(46) I didn't like English, but then as my level in English became better, I like it (P9).

The remaining group of the participants are those who indicate no change in their attitudes towards English. They have had a positive attitude since they started learning English:

(47) No, it hasn't changed. It has always been positive (P5).

(48) Since I started learning English, I like it because in the society where I live most of them speak English, therefore I tried to learn to be better than them (P13).

Participant 13 (quote 48) indicates that the social surroundings and her frequent use of the language make her attitude always positive towards the language and also motivate her to be better in English than others.

5.3.5 Factors influencing students' attitudes towards learning English

As discussed in Chapter 2 (Section 2.2.3.3), there are several factors that can influence a student's attitude. These factors start with the parents' influence at home and then move on to other factors, such as teachers, friends and media.

5.3.5.1 Family and friends

When the participants were asked about the factors that might influence their attitudes towards learning EFL, they indicated that their parents and friends play a big role in shaping their attitude:

(49) I think the milieu. That is the attitude of the social surroundings will automatically influence its members. There are different reasons for why I think English is very helpful. Also, I have been inspired by one of my family members who had learnt English and when I saw her, I went 'Wow'! She is really distinctive, and I wish to be like her. So, I like it [English] (P2).

(50) My parents and my teacher. Also, my friends because we are competing with each other (P3).

(51) My friends maybe we encourage each other to learn English because English is essential nowadays (P13).

(52) My parents have a big role, also because I can practice the language with them (P7).

(53) My family supports me very much. They bought me the books and dictionaries that help me to learn. Also, my teachers always encourage me (P10).

(54) If people around me do not encourage me to learn English as a new language and so on, this will make me hate the language and I will not learn, but if there is someone who encourages me to learn it and tells me that it is an important language and so on, of course I will learn it (P18).

These quotes mainly present the positive influence of one's surroundings in general, family, friends and the teacher in particular. It is important to note that family has the strongest influence on participants' attitudes.

Another participant corroborates the influence of her surroundings by noting both the positive and negative influences on attitude:

(55) People around me talk about English and how important it is, so I aim to learn it, and also hearing native speakers of English, the language style and so on. Sometimes, my classmates talk negatively about the teacher which has a negative influence on me to the extent that I don't participate with the teacher in the class (P16).

In her response (quote 55), Participant 16 highlights a positive influence in connection with the importance of the language, and also the pleasant feelings she experiences when hearing the language spoken by native speakers, which indicates that she has intrinsic motivation (IM) (see further Section 5.4). However, she is also influenced by the negative attitudes of her friends towards the teacher.

5.3.5.2 Teacher-related factors

The teacher and her teaching strategies play a big role in changing learners' attitudes to positive as explored in Section 5.3.2. When asked about the factors influencing attitudes, many participants indicated that teacher plays a big role in influencing their attitudes towards EFL:

(56) My teacher, or if I watch a program in English. They motivate me to learn English (P4).

(57) The teacher can make me love the language or hate the language (P13).

(58) Maybe how the teacher treats her students can influence (P17).

Furthermore, Participant 18 does not have a stable attitude towards English. It is sometimes positive and sometimes negative. The reason behind this oscillation is explained in the following quote:

(59) Sometimes negative and sometimes positive. If it is negative, I think the teacher has an influence because they sometimes make you hate the subject. When I was in the intermediate stage, I had a very negative attitude. I didn't like to attend classes because the teacher was mean. But in the secondary stage, English feels like a hobby to me. It is not necessary to study it, I like it, and I like using it (P18).

5.3.5.3 Future plans

The link between learning English and future plans including better job opportunities is evident in many of the responses on the factors influencing attitudes:

(60) I have a future goal that requires English language. Therefore, I try to improve my language skills to achieve my future goal (P11).

(61) The job I aspire to depends largely on English, so this influences my attitude (P16).

Other responses include self-confidence as a factor influencing attitude. For example, Participant 15 indicates in her response that the main factor stems from the learner themself. The following quote illustrates her view:

(62) I think the main factor is the person themselves. It's in their own hands. As God says, "The Almighty changes the fate of no people unless they themselves show a will for change." (The Holy Quran, XIII: 11). The person can have a positive or negative influence on themselves. For me, the affecting factors are when the person loses their confidence gradually, that means when they start doubting their abilities. So, I think the main factor is self-confidence. If the person could develop their self-confidence, they would practice the language even if the linguistic outcome is simple. They would practice more because self-confidence is the most important factor (P15).

In this response (62), the participant indicates the importance of being self-confident because it helps the learner to practise the language, which is an important language learning strategy for a more successful language learning.

5.3.5.4 Difficulty of the language/ subject

The difficulty of the language or subject is identified as one of the factors that contribute to negative learning attitudes. Participants 1 and 8 attribute their negative feelings towards English to the difficulty of English. Their views are presented in the following quotes:

(63) I feel that it is difficult, and I don't understand anything from my teacher (P1).

(64) In the primary stage, English subject was very simple and clear. In the intermediate stage, it became a bit harder, so I didn't like it anymore (P8).

Moreover, when Participant 6 is asked about the stability of her attitude towards English, she responds:

(65) It is positive, but sometimes when I feel that the English subject is difficult, I become frustrated, and I wish I wasn't studying it (P6).

Her response shows that she has mixed attitudes (sometimes positive and sometimes negative). It seems that her perceived difficulty of English as a subject directs the change of her attitude from positive to negative.

5.3.6 Relationship between students' attitudes and language learning strategies

This section analyses the relationship between attitude towards the learning situation and language learning strategies. It explores whether a positive or negative attitude towards the learning situation has an influence on the choice of language learning strategies. Research shows that learners with a positive attitude use more language learning strategies than those who have a negative attitude (e.g. Jabbari and Golkar 2014; Lan and Lucas 2015). In addition, MacIntyre and Noels (1996) examined the correlation between the main components of Gardner's (1985) socio-educational model (motivation, attitude towards the learning situation, integrativeness, language anxiety) and learning strategy use. The findings of their study show that effective strategy use correlated positively with attitude towards the learning situation, integrativeness and motivation. Moreover, the difficulty of using learning strategies correlated positively with language anxiety, but negatively with attitude towards the learning situation, integrativeness and motivation. Furthermore, there was a significant correlation between the frequency of strategy use and the four elements of Gardner's socio-educational model (i.e. integrativeness, motivation, attitude towards the learning situation, language anxiety). Gardner (1985) also argues that a positive attitude towards the learning situation is consistently linked to L2 achievement.

When exploring the relationship between attitude and language learning strategies, the data show that there is a positive relationship between attitude towards the learning situation and the use of language learning strategies. Participants with a negative attitude (i.e. P1 and P8) do not seem to put in much effort to learn the language as was reported. Only sometimes does Participant 1 use Google Translate when she encounters a difficult word (see Section 5.2.1). In addition, the remaining participants who have a positive attitude (2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18) show more use of language learning strategies. They report that they use various language learning strategies, such as cognitive, metacognitive, compensation, memory and social strategies, and they also report that they use social media. More details about the language learning strategies used can be found in Sections 5.2.1, 5.2.2 and 5.2.3.

5.3.7 Relationship between students' attitudes and achievement

When comparing the participants' attitudes towards the learning situation with their achievement scores, the data show that participants who hold a negative attitude towards the learning situation are always low achievers, whereas participants with a positive attitude towards the learning situation can be high or low achievers. A deeper understanding can be gained through analysing the participants' responses as to whether their attitude towards the learning situation influences their performance in English or not.

The participants can be divided into four groups based on their responses. The first group, which represents the majority, indicates that there is no relationship between their attitude towards the learning situation and their level of achievement. In contrast, the second group, represented by Participant 12, believes that their performance is influenced by their attitude towards the learning situation. In addition, some participants (i.e. Participants 2, 16, 17) highlight the influence of their attitude towards the teacher specifically as regards their performance. The last group (i.e. Participants 1 and 3) emphasise the influence of their attitude towards the course, in particular, on their performance. Furthermore, a closer look at the data shows that, mostly, high achievers indicate a lack of influence of their attitude towards the learning situation on their performance, whereas most of the low achievers assert the influence of their attitude towards the learning situation on their performance, with some exceptions in years 10 and 11. More details with examples are presented below.

As stated above, the majority of the participants indicated that their attitudes towards the learning situation did not influence their performance. They agree that they need to do well regardless of their feelings towards the teacher or the subject:

(66) No, it is not, because my relationship is with the language itself, not the teacher nor the subject (P5).

(67) No, I don't think so. The main aim is that I get a grade; the only thing between me and the teacher is the book (P6).

(68) No, because my performance in the exam depends on me and my efforts. When I study, I don't just stick to the book, I try to search for more information from other sources, so that the information sticks in my mind and I can answer in exams (P11).

(69) No, it will not. I don't study for a teacher or for a content of a specific subject. Everyone is studying for a specific goal that they want to achieve. So, at the end of the day if the teacher is good or not, or if the subject is complicated or not, I have a goal that I want to achieve. And that's what I want, and I will start right now if it is God's well (P15).

As can be seen in these responses (66-69), the participants highlight the need of studying English because it is a compulsory school subject they need to pass. In contrast, Participant 12 indicates that her attitudes towards the learning situation highly influence her performance in English:

(70) Yes, If I don't like the teacher, I will feel bored and will not attend classes. I will not study hard, and in the exam, I will be shocked (P12).

(71) Yes, very much. For example, if the lesson talks about maternity or about different age groups, I will not be interested, and this will influence my performance. But if the lesson is about designing, I will be interested even if it is a small part of it (P12).

The participants who argue that there is a relationship between their attitudes towards the teacher and their performance have contrasting levels of achievement. For instance, Participant 2, who is a high achiever, states

(72) The teacher has an influence; that is if students like their teacher, they will like the subject, and they will do well in exams. In contrast, if we don't like the teacher, we will not concentrate on understanding the lesson during the class. Instead, we will just think about when the class will finish. Regarding the English subject, it has a slight influence because, in the end, it is a compulsory subject that I should study (P2).

A similar view that emphasises the influence of the attitudes towards the teacher on performance is highlighted by Participants 16 and 17, who are low achievers. The following quotes present their views:

(73) If the teacher is not positive and doesn't help her students, it will have an influence, just like my first teacher influenced me negatively. But I think if the teacher explains well, the students will be motivated. This is what I believe (P16).

(74) Yes, sometimes positively and sometimes negatively. If I like the teacher, I do well, but if I don't like her, I don't do well. I think it makes a difference if the teacher is grumpy or doesn't explain well (P17).

On the other hand, Participants 1 and 3 argue that their attitude towards the subject, not the teacher, that has an influence on their performance:

(75) My attitude towards the English subject influences my performance. If I don't like it, I will not have a good mark in the exam (P3).

(76) I think the teacher doesn't influence my performance, but I hate this subject (P1).

In quote 76, Participant 1 shows that her negative attitude towards the English subject influences her performance. She does not like English because she does not understand it. It is difficult for her, as she indicates when answering follow-up questions.

To conclude, most of the participants agree that their attitude towards the learning situation does not influence their performance. Regardless of their attitude, they need to study and work hard because it is a school requirement. In addition, the qualitative data show that, unlike their attitude toward the L2 course, the participants believe that their attitude towards the L2 teacher does not influence their performance in English. This indicates that, when a learner has a negative attitude towards the course, they may use fewer or less effective language learning strategies than if they hold a positive attitude; or they may not use any learning strategies. In contrast, when the learner has a negative attitude towards the L2 teacher, they may still use some learning strategies, as indicated in the examples above.

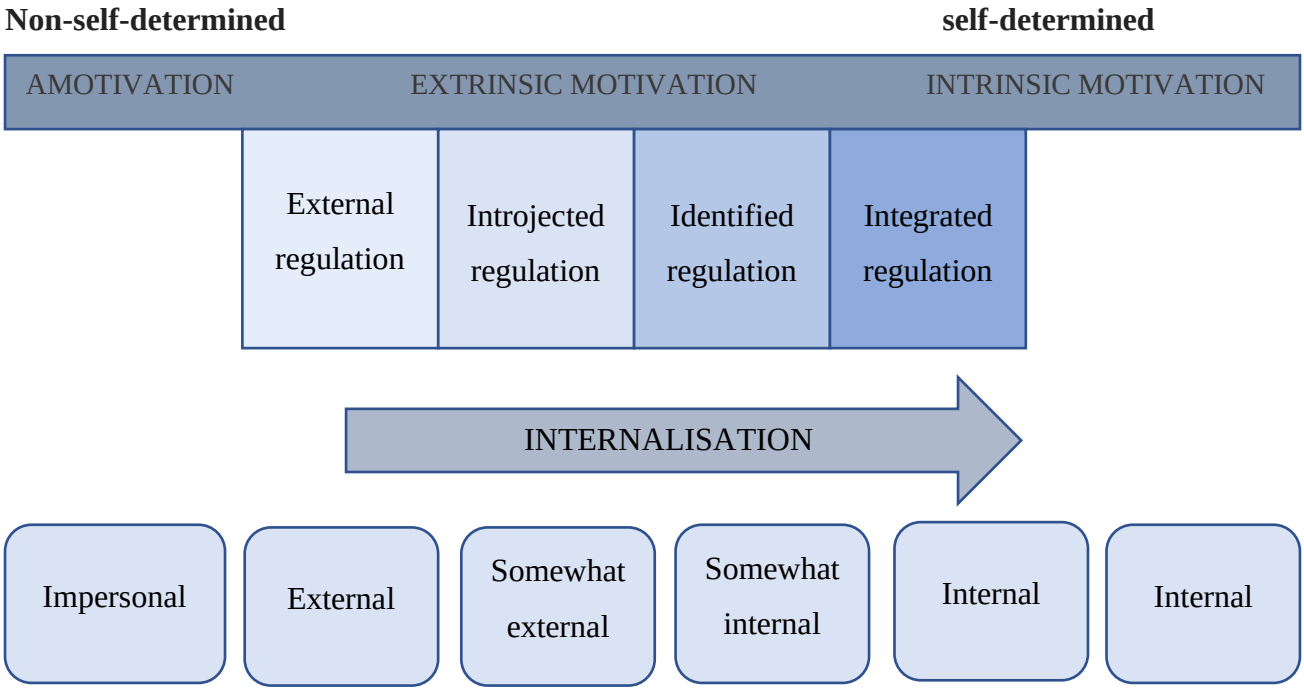
5.4 Students' motivation for learning English[1]

This section is associated with the second research question: 'What types of motivation do Saudi secondary students have for learning English?' As discussed in Section 2.2.1.2, this study uses Deci and Ryan's (1985) self-determination theory of motivation, which represents motivation on a continuum ranging from non-self-determined (or controlled) to self-determined (or autonomous) motivation, with various subtypes of motivation, as illustrated in

[1] It should be noted that Participant 9 has been removed from the analysis because the recording does not include information on motivation (at this point I am uncertain about whether it is a technical issue or an issue with the way the interview was conducted).

Figure 2.1, below. In the following, Section 5.4.1 will provide an overview of the findings on motivation. Then, Section 5.4.2 presents the students' different types of motivation to learn English, while Section 5.4.3 discusses whether students' motivation is stable or not and the factors that have an influence (positive or negative) on students' motivation to learn English. The next section, 5.4.4, addresses how students' motivation influences their use of language learning strategies to learn English. Finally, Section 5.4.5 sheds light on the relationship between students' motivation and their level of achievement in English.

Figure 2.1: Self-Determination Theory's Taxonomy of Motivation (Adapted from Ryan, R.M. and Deci, E. L. 2020, p.2)



5.4.1 Overview of the findings on motivation for learning English

In line with the quantitative data discussed in Chapter 4, the qualitative data collected from the interviews show that motivation has a great influence on learning English. Most of the participants indicate that they are motivated to learn English. Only Participants 1 and 8 indicate that they are not motivated to learn English. However, a deeper look at their responses shows that, while these participants lack intrinsic motivation, they are extrinsically motivated. They both have external regulation of extrinsic motivation. For instance, Participant 1 shows introjected regulation of extrinsic motivation. because she says:

(77) I have no choice. I should study to pass because it is a subject in the school curriculum (P1).

Participant 8 has external regulation of extrinsic motivation, as she states,

(78) It [English] is important to enter university, also for travelling either for tourism or studying (P8).

As can be seen in quotes 77 and 78, the participants state that they are not motivated to learn English because they do not enjoy it. They may think that they can only be motivated if they enjoy learning the language. However, they have some other reasons that represent controlled forms of motivation. They reflect satisfying feelings of compulsion and pressure (Participant 1) or satisfying external demands (Participant 8). Thus, they are extrinsically motivated.

5.4.2 Types of students' motivation for learning English

In general, the interview data show that there are no differences among the three year groups in terms of types of motivation; accordingly, the discussion in the subsections below does not present data according to year groups, but according to the variables investigated in relation to motivation: the types of motivation and the factors that influence students' motivation. Most of the participants (i.e. 5, 13, 14, 15, 16, 18) are both extrinsically and intrinsically motivated. Some of them (i.e. Participants 1, 3, 4, 8, 11, 12) are only extrinsically motivated, while some (i.e. Participants 2, 6, 7, 10 and 17) are only intrinsically motivated. In addition, the data show that four types of motivation appear more frequently among the participants than other types. The responses in the interviews indicate that they have different types of intrinsic motivation and/or different degrees of internalisation of extrinsic motivation. The most prominent types are external, introjected, identified regulation of extrinsic motivation and intrinsic motivation to experience stimulation. Intrinsic motivation of knowledge and towards accomplishment appear to be the least prominent in the data. More details are presented below.

5.4.2.1 Intrinsic motivation

The participants report different types of intrinsic motivation (intrinsic motivation to experience stimulation, intrinsic motivation to know, and intrinsic motivation towards accomplishment). Some participants enjoy learning English because it is attractive to them. They like to hear English spoken by native speakers. These feelings represent intrinsic motivation to experience stimulation:

(79) I admire their way of speaking. I feel that the English language is not like other languages. It is distinctive. I feel that there is something in English that automatically attracts its listeners(P2).

(80) When I see people speak English, I like the language, and I wish I could speak like them. Therefore, I enjoy it (P6).

The above quotes (79 and 80) indicate that learning English is interesting and enjoyable for these participants. They pursue their goals because they are interesting for them (Koestner and Losier 2002). Participant 10, who is curious to learn the language and to explore new things, exhibits instead intrinsic motivation to know:

(81) I like to learn new things; I don't just learn English, but I am learning other languages as well. Even if English was not important, I would still learn it. (P10)

Similarly, Participant 17 enjoys the feelings of accomplishment in English:

(82) Because I like it (English) and I want to write a novel in English (P17).

Participant 7 combines both intrinsic motivation to experience stimulation and intrinsic motivation to know. She enjoys the language with her senses, but she is also curious to find out more about the language and the different cultures it is associated with as well:

(83) Because I like it; as I told you, I enjoy it. When I hear English is spoken by native speakers, I like it. I have an ambition to study abroad. I want to try because I feel that, if I study abroad, I will be more educated and I want to learn about different cultures. I want to speak English fluently. (P7).

5.4.2.2 Extrinsic motivation

The data show that there are a few participants who are only extrinsically motivated. As shown Figure 2.1, extrinsic motivation has three regulatory styles, which vary in their degree of self-determination. The data show that most of the participants have introjected regulation of extrinsic motivation, though some have also external regulation of extrinsic motivation, and just a few have identified regulation of extrinsic motivation. Being more controlled by external factors such as parents, teachers and rewards, Participants 1, 3 and 11 have only external and introjected regulation. Their responses show that they learn English for its importance for their future, which indicates external regulation. Their responses also represent ego involvement, which indicates introjected regulation because they perform actions for controlled reasons, such as seeking approval from others and social inclusion. These are some of the responses that the students gave when asked about the reasons why they learn English:

(84) To find a job and for my parents. And also, if I travel (P1).

(85) It [English] is important in order to have a good job and for my future. Also, my family wants me to learn English. People around me in society speak English. I mean it would not be nice to be ignorant, while others understand English. Also, I want to complete my postgraduate studies (P3).

(86) To learn other languages. Any language in the world is important and has a positive impact on the learner's future, so maybe I will benefit from English. Also, my parents and one of my friends want me to study abroad with her. This might help me to learn more. They motivate me to be like them (P11).

A few participants are also extrinsically motivated to learn English but with more self-determined regulation than introjected regulation. Participants 4 and 12 have external and introjected regulation, but they also learn the language because it is personally valuable, which indicates identified regulation. They believe that learning English is useful for them. Their views are illustrated in the quotes below:

(87) My parents, my teacher. And I compete with my friends at school. Also, I learn English to communicate with other people, to watch different programmes and understand them. I thought of a job that might require English (P4).

(88) Maybe I would learn it to impress people around me, and to add it as another language. Also, to be distinctive from others. As I said before, I currently do need to learn English. Sometimes departments or schools use English more than Arabic(P12).

While all the interviewees quoted above (in Sections 5.4.2.1 and 5.4.2.2) show that they are either intrinsically or extrinsically motivated, there are other participants who have both intrinsic motivation and extrinsic motivation. They learn the language because it is interesting and enjoyable for them, but they also have some external factors that influence their motivation to learn, such as a future job, travelling, or parents. For instance, Participant 15 enjoys hearing foreign languages being spoken, which is intrinsic motivation to experience stimulation, but she also considers the importance of English for her future, which is external regulation. The following quote presents her view:

(89) Maybe if there is an inspiring person who speaks this language, you would like to be like them. So, you want to learn the language for an inspiring person. You also learn it for future requirements for jobs. That's what I think (P15).

Similarly, in addition to having intrinsic motivation to experience stimulation, Participant 14 is motivated extrinsically, as well. She shows different degrees of self-determination: identified regulation is shown in learning the language to travel abroad and communicate with people, and external regulation is shown when considering her future job:

(90) Because the language itself is beautiful. Also, for example I travel to foreign countries I can't understand what they say. If I travel abroad, I should know English. It's important. To improve myself Also, maybe I want to be an English teacher in the future or a doctor(P14).

Some participants learn the language because it is inherently enjoyable, but they also consider how English could be useful for personal reasons, which indicates identified regulation of extrinsic motivation. They also think about its importance for future jobs:

(91) I enjoy learning English. Even if it were not a global language, I would learn it so that if I want to travel to America, for example, I can speak English. To be able to teach my kids in the future. That means to be a teacher (P5).

(92) I enjoy learning English because I speak a new language. I would learn it whether it was English or any other language. I would learn it because I want to educate myself and for jobs. Maybe if I go somewhere, it can help at hospitals (P18).

These students' responses show that they have intrinsic motivation and identified regulation, which is more autonomous than introjected regulation of extrinsic motivation. Learning the language is enjoyable for them, but it is also personally worthwhile, e.g. for teaching their kids and travelling. Furthermore, Participant 18 considers the importance of English for her future job, which is external regulation.

A few participants also indicate the influence of others on their motivation to learn English. For instance, Participants 13 and 16 are motivated to learn English for personal and pragmatic reasons, but their parents also have a role in motivating them to learn. The quotes below demonstrate their views.

(93) Because it is a beautiful language and for travelling. For example, if I travel abroad, I can speak with people. Also, my parents want me to speak English well (P13).

(94) I don't learn it [English] just because it's a global language. I like it, and I like to hear it from its native speakers. I wish to sit with people who speak English. I want to show others that I can speak another language and so on. Also, as I said for my future job, that's all. Also, since I was six years old my family has wanted me to be a doctor (P16).

5.4.3 Stability of motivation and factors influencing students' motivation

The data show that all the participants indicate either a positive or negative change in their motivation towards learning English. For the majority of the participants, the motivation to learn English has increased, only for Participants 1, 6, 8 and 16 has it decreased. There are a number of factors that can influence learners' motivation to learn EFL: the difficulty of the language or the subject, teacher-related factors, their perceived competence, family, friends and travelling for studying or tourism. These factors are presented in detail with supporting quotes in the following subsections.

5.4.3.1 Difficulty of the language/subject

When the students were asked about the factors that influence their motivation to learn English, participants 1, 6, 8, and 16 state that the difficulty of the English subject and teacher-related factors negatively impact their motivation. In addition, Participants 1 and 8 indicate a decrease in their motivation as can be seen in quotes (19) and (20) below.

(95) At first, I was very motivated to learn English, but then I became less motivated because of the difficulty of the syllabus and because I didn't know how to read and write in English (P1).

(96) Yes, my motivation has changed because English was easy when I was in the primary stage but later on it became difficult and it had lots of information (P8).

These quotes confirm the dynamic nature of motivation because it is in a continuous process of change and development, depending on the influence of internal and external factors on the learner, as argued by Dörnyei (2001b). These factors include the difficulty of learning English as a school subject, which decreases learners' motivation. Moreover, the teacher's character and their teaching strategies are among the factors that may negatively influence

motivation. The following subsections present other factors which are reported as influencing motivation.

5.4.3.2 Teacher-related factors

One of the factors frequently said to influence motivation is the teacher. For instance, Participants 2 and 16 fluctuate between being more or less motivated. In their responses, they indicate how the teacher-related factors can influence their motivation either positively or negatively. The following quotes present their views:

(97) Yes, I was very motivated in the beginning, then I became less motivated because of the teacher's style, but later I became again very motivated Because I understand more than before, and also the English books that we study in, the availability of electronic dictionaries and Google Translate, so there are a lot of factors that help to learn, so nothing can stop or hinder someone to learn. (P2).

(98) To be honest, when I was in the primary stage, I was frustrated and felt depressed. I didn't like English. But in the intermediate stage, I changed because my teacher was very positive. In the first grade of the secondary stage, my teacher was not explaining well and that annoyed me, so sometimes, I don't deny, I hate English (P16).

Although Participant 2 (quote 97) indicates that the teacher had a negative impact on her motivation, she became motivated later. A possible explanation of this change could be the perceived competence: due to the availability of learning resources, she becomes more proficient and this, in turn, increases her motivation to learn more. Similarly, Participant 16 experienced a change in her motivation as she was not motivated to learn, but her new teacher made her motivated.

On the other hand, several participants highlight the positive influence of their teacher on their motivation:

(99) When I was in the primary and intermediate stages, I was not motivated, but now I have become very motivated, and I would like to learn because my teacher made me like English (P3).

(100) In the beginning I wasn't motivated, but over time when I saw people talk in English, I wondered what the difference between me and them was; I also know English, and I try my best. The first influencer is my teacher. I don't want to disappoint her. I want to be as good as she thinks, and also my mother (P7).

(101) I was not motivated, but I am very motivated now. Basically because of the teachers Also, my level in English is better than before. In addition, it depends on the teacher if the teacher is very strict and negative, I will not do well but if she is positive and supportive, I will do well (P14).

These responses suggest the importance of building positive teacher-student relationship to enhance students' motivation and performance.

5.4.3.3 Family and friends

Students' family and friends are also identified among the factors that might have an influence on the participants' motivation to learn English. The participants generally indicate that family and friends play an important role in motivating them to learn. For most of the participants, who have seen an increase in their motivation to learn English, the importance of the teacher and family is highlighted in their responses:

(102) I think the surroundings do. That is for instance, if I sat with my friends, started talking about English, and they started complaining, then I would become less motivated. But if they spoke about English positively, I would feel that it is nice that we share interests. Being in groups to learn English is fantastic and really motivating. Learning in groups differs from individual learning using for example the Internet. I think learning in groups is much better because whenever I feel demotivated, I can see that my friends continue learning. I think this is really very effective (P2).

(103) As I told you when I see people talk in English, I wish to be like them, but sometimes I feel that I am incapable. For instance, when someone talks to me, and I can't understand them, I feel incapable. I give up when I have difficulty or don't understand something quickly (P6).

(104) Because all people around me speak English, I want to be better so I can stand out. I want to change myself. Even in my everyday conversations, sometimes I use English words. This makes the interlocuter pay more attention to what I'm saying(P12).

(105) Because I saw how my sister can speak English. Even when we travel abroad, she can speak with other people fluently. Also, I think my friends might influence my motivation saying things like "Why do you learn English? or "English is not appropriate for you", etc. (P17).

These quotes indicate the important role of familial support in learning. In addition, learning in groups and competing with others may have a positive influence on motivation. However, friends with negative attitudes toward learning the language can have a negative influence on motivation (cf. quote 105).

5.4.3.4 Perceived competence

Many of the participants also highlighted their perceived competence (i.e. students' sense that they are good or getting better with their learning tasks; Froiland and Oros 2014) as an influencing factor on their motivation to learn EFL. They state that, as their level in English is better and they understand more than before, they have become more motivated to learn English:

(106) In the intermediate and secondary stages, I have become more motivated than I was in the primary stage because I can understand more (P4).

(107) My motivation increased because, as I've told you, I understand more, and my level is better. Also, my teachers and my family encourage me, so it increased, and I learned more (P10).

(108) When I was in the primary and intermediate stages, I was not aware of the importance of English. But now I am more motivated because now my level is better, and English is essential (P13).

5.4.3.5 Travelling for studying or tourism

The link between learning English and travelling to live or study abroad, or even for tourism is evident in the participants' responses:

(109) To find a job and for my parents. And also, if I travel (P2).

(110) Maybe if I have future plans, like for example travelling or living abroad. In such cases, I need to learn (P12).

To sum up, these quotes show students' motivation for learning English and the factors that influence their motivation negatively or positively such as the difficulty of the language or the subject, teacher related factors, family, friend and travelling. The next section considers the influence of motivation on students' effort to learn the language.

5.4.4 Relationship between motivation and effort

The results presented in this section analyse the link between students' motivation and effort to learn English. This analysis explores whether certain types of motivation have an influence on the learners' choice of language learning strategies, and whether certain types of motivation foster the frequent use of language learning strategies. In order to answer these questions, language learning strategies according to the different types of motivation (intrinsic, extrinsic, intrinsic & extrinsic motivation) are analysed.

Oxford and Nyikos (1989) found that motivation has the strongest influence on strategy use. They showed that, initially, the relationship between motivation and language learning strategies seems to be simple: strong motivation leads to using a variety of strategies. However, the relationship is also reciprocal: strong motivation leads to high strategy use, and high strategy use increases learning motivation, as well. Moreover, a detailed description of this relationship shows that using appropriate learning strategies leads to higher proficiency levels, which in turn generates high self-esteem that strengthens the learner's motivation, which then leads to a greater use of learning strategies etc. (1989, p.295).

When analysing the relationship between language learning strategies used and types of motivation, the data show that for all three groups of motivation (intrinsic, extrinsic, intrinsic & extrinsic motivation), cognitive strategies are the most frequently used (see also Table 5.5, below).

Table 5.5: Types of motivation and the learning strategies used by the interviewees

Participant	Type of Motivation	Language Learning Strategies
INTRINSIC MOTIVATION		
Participant 2/ Year (10) High achiever	Intrinsic motivation (stimulation)	Cognitive strategies • Watching YouTube videos or programmes • Translating. Using social media
Participant 6/ Year (10) High achiever	Intrinsic motivation (stimulation)	Cognitive strategies • Receiving and sending messages - Using resources for receiving and sending messages

		• Practising the language in natural settings Memory strategies • Creating mental linkages- Grouping Using social media
Participant 17/ Year (11) Low achiever	Intrinsic motivation (accomplishment)	Cognitive strategies • Watching videos and practising the language in natural settings. Using social media
Participant 7/ Year (12) High achiever	Intrinsic motivation (stimulation, knowledge)	Cognitive strategies • Watching YouTube videos Using social media
Participant 10/ Year (12) High achiever	Intrinsic motivation (knowledge)	Cognitive strategies • Watching movies and practising the language in natural settings Metacognitive strategies • Arranging and planning your learning- Setting goals and objectives Compensation strategies • Guessing intelligently in listening and reading- Using other clues
EXTRINSIC MOTIVATION		
Participant 1/ Year (10) Low achiever	External and Introjected regulation of extrinsic motivation	Cognitive strategies • Analysing and reasoning – Translating
Participant 3/ Year (10) Low achiever	External and introjected regulations of extrinsic motivation	Cognitive strategies • Watching YouTube videos and downloading language learning programmes Using social media
Participant 4/ Year (10) High achiever	External, introjected, and identified regulations of extrinsic motivation	Cognitive strategies • Reading English stories, and Browsing English websites Using social media
Participant 12/ Year (11) Intermediate achiever	External, introjected, and identified regulations of extrinsic motivation	Cognitive strategies • Watching videos, downloading mobile applications, and practising the language in natural settings.

		Social strategies • Asking questions- Asking for clarification or verification Using social media
Participant 8/ Year (12) Low achiever	External regulation of extrinsic motivation	No learning strategies
Participant 11/ Year (12) High achiever	External and introjected regulations of extrinsic motivation	Cognitive strategies • Reading English stories and Practising the language in natural settings. Metacognitive strategies • Arranging and planning your learning- - Setting goals and objectives. Using social media
INTRINSIC AND EXTRINSIC MOTIVATION		
Participant 5/ Year (10) High achiever	Intrinsic motivation (stimulation) and identified regulations of extrinsic motivation	Cognitive strategies • Watching videos and practising the language in natural settings Using social media
Participant 13/ Year (11) High achiever	Intrinsic motivation (stimulation), external, introjected, and identified regulations of extrinsic motivation	Cognitive strategies • Watching videos, downloading mobile applications, and practising the language in natural settings.
Participant 14/ Year (11) Low achiever	Intrinsic motivation (stimulation), external and identified regulations of extrinsic motivation	Cognitive strategies • Watching movies and practising in natural settings • Analysing and reasoning- Translating
Participant 15/ Year (11) High achiever	Intrinsic motivation (stimulation), and external regulation of extrinsic motivation	Cognitive strategies • Watching videos and practising the language in natural settings Metacognitive strategies • Arranging and planning your learning- Seeking practice opportunities
Participant 16/ Year (11) Low achiever	Intrinsic motivation (stimulation), external, introjected, and identified regulations of extrinsic motivation	Cognitive strategies • Practising the language in natural settings and using books to learn words and to form sentences. • Using YouTube or audio lessons. Compensation strategies • Using mime or gesture

Participant 18/ Year (12) High achiever	Intrinsic motivation (stimulation), external**,** and identified regulations of extrinsic motivation	Cognitive strategies • Practicing the language in natural settings. Social strategies • Asking questions- Asking for clarification or verification

The findings show no difference in the strategies used by the interviewees according to the type of motivation. For instance, Participants 7 and 3 have different types of motivation, but they use similar learning strategies. Participant 7 has intrinsic motivation to experience stimulation, and she uses the cognitive strategy of watching videos and uses social media to learn (see Table 5.5). The following quotes present her motivation type and the language learning strategies used, respectively:

(111) Because I like it; as I told you, I enjoy it. When I hear English is spoken by native speakers, I like it. I have an ambition to study abroad. I want to try because I feel that, if I study abroad, I will be more educated and I want to learn about different cultures. I want to speak English fluently. (P7)

(112) I watch videos about learning English on YouTube. Also, I follow native English YouTubers. (P7)

In addition, the data show that the participants with one type of intrinsic motivation tend to use various language learning strategies, but this does not apply to the participants with one type of extrinsic motivation. For instance, Participant 10, who has intrinsic motivation to know, uses cognitive, metacognitive and compensation strategies. On the other hand, Participant 1, who has introjected regulation of extrinsic motivation, uses only one cognitive strategy. Furthermore, Participant 8, who has external regulation of extrinsic motivation, does not use any language learning strategies (see Table 5.5).

Notably, the participants with more motivation types tend to use fewer language learning strategies than their peers. For instance, Participants 13 and 14 have different types of intrinsic motivation and extrinsic motivation and they both use cognitive strategies. For example, Participant 13 has intrinsic motivation to experience stimulation and external and introjected regulations of extrinsic motivation as she states when asked about her motivation to learn English:

(113) Because it [English] is a beautiful language and for travelling. For example, if I travel abroad, I can speak with people. Also, my parents want me to speak English well (P13).

When asked about her effort to learn English, Participant 13 says

(114) I watch English programmes. I download some applications on my phone. In hospitals, restaurants, airports, or shops, I try to talk in English even if they reply in Arabic (P13).

Her response shows that she relies on the cognitive strategies of watching programmes and using language learning applications. In addition, she practises the language in natural settings, which is also a cognitive strategy.

Finally, the data show that metacognitive strategies are associated with both intrinsic motivation and extrinsic motivation. This includes external, introjected regulations of extrinsic motivation and intrinsic motivation to experience stimulation and to know. For example, Participant 11 has extrinsic motivation to learn English:

(115) To learn other languages. Any language in the world is important and has a positive impact on the learner's future, so maybe I will benefit from English. Also, my parents and one of my friends want me to study abroad with her. This might help me to learn more. They motivate me to be like them (P11).

Her response shows that she has external and introjected regulations of extrinsic motivation. When asked about the language learning strategies she uses, Participant 11 said:

(116) Reading books. I try to read simple stories first and then move to more difficult ones to improve my language skills. I follow some accounts for learning English on Instagram. They give some words, and you try to put them in sentences, and they check if the sentences are structurally correct or not (P11).

Other examples include Participant 15 from year 11, and Participant 10 from year 12 (see Table 5.5). To conclude, it seems that participants with either type of motivation, intrinsic or extrinsic, can use effective learning strategies whenever they apply the appropriate language learning strategies to a learning task.

5.4.5 Relationship between motivation and students' achievement

In general, the qualitative data show that most of the participants who are intrinsically motivated are high achievers. In addition, regarding the participants who have both types of motivation, intrinsic and extrinsic, most of the high achievers were found to have identified

regulation (the self-determined or autonomous subtype of extrinsic motivation) Moreover, a low level of achievement is mostly associated with extrinsic motivation. A closer look at the data shows that high achievers differ from the low achievers in their use of language learning strategies. They use language learning strategies that are appropriate to the learning task, and they use them in ways that seem to contribute to effective learning, as explored in the subsections below.

5.4.5.1 Intrinsic motivation's influence on achievement

As stated above, most of the participants with intrinsic motivation are high achievers, with the exception of Participant 17, who is a low achiever (see further Section 5.6). The reason for the association between high achievement and intrinsic motivation is that learners with intrinsic motivation learn the language because it is inherently interesting for them; they do not have external factors that have a temporal influence on their motivation. In addition, because learners with extrinsic motivation may also be high achievers, other factors seem to discriminate between high and low achievers, such as effort: the effort used or the way it is used makes a difference in influencing achievement. This finding is further evidence of the importance of measuring affective factors simultaneously in relation to both achievement and behaviour (effort), as explored in Section 5.6.

The following examples focus on the differences between high and low achievers. For instance, Participants 7 and 17 are both intrinsically motivated, they use cognitive strategies and social media to learn the language However, they have contrasting levels of achievement. Since effort is the mediator between motivation and achievement (see Section 5.1), a deeper analysis of students' effort is needed. The high achiever (Participant 7) seems to be aware of the different structures of the language because she identifies that the language of YouTube videos is easier than the language of movies, which indicates her interest to learn the language while watching videos. On the other hand, the low achiever (Participant 17) did not elaborate further when talking about watching videos to learn, which might be related to her low level and inability to use this learning strategy effectively. Similarly, Participant 6 is also intrinsically motivated, but she is a high achiever. She shows a deeper level of engagement with the language. She uses cognitive and memory strategies, and she also uses social media to learn the language. She practises the language in natural settings, such as hospitals. In addition, she follows social media accounts to learn the language, and whenever she finds a difficult word, she uses a vocabulary book about different topics, which helps her to learn more.

5.4.5.2 Extrinsic motivation's influence on achievement

The data show that most of the low achievers are extrinsically motivated. However, Participant 12 is an intermediate achiever and Participant 4 is a high achiever; they have external, introjected and identified regulation of extrinsic motivation. Additionally, Participant 11 is a high achiever, and she only has controlled types of motivation (external and introjected regulation). Further exploration of the participants' language learning strategies in relation to motivation can explain the contrasting levels of achievement among the participants. For example, Participants 3 and 11 are both extrinsically motivated and use similar learning strategies, but they have contrasting levels of achievement (low and high, respectively). Participant 3 downloads learning English learning programmes and watches videos about learning English. In addition, she follows social media accounts to learn English. On the other hand, Participant 11 shows a deeper level of engagement with the language as she puts a lot of effort into the cognitive strategy of reading books. She plans her reading, starting with easy levels and then moving to the more advanced ones, which is a metacognitive strategy. In addition, she practises the language in natural settings, besides using social media accounts, to learn the language.

5.4.5.3 Influence of using both types of motivation (intrinsic and extrinsic) on achievement

Most of the participants have both extrinsic and intrinsic motivation. Some participants have the same types of motivation and use similar learning strategies, but they show contrasting levels of achievement. For instance, both Participant 13 (a high achiever) and 14 (a low achiever) use cognitive strategies to learn, but they differ in how they use these language learning strategies. When they practise the language in natural settings, such as hospitals and restaurants, Participant 13 speaks in English whenever she has the chance. Even if her interlocutors use Arabic, she just uses English to practise the language. She is aware of the importance of practising the language. On the other hand, Participant 14 speaks in Arabic when she does not know how to say something in English. She could use other compensation strategies to use English as much as possible. Oxford (1990) argues that language learners who are not skilled in the language need to use compensation strategies (e.g. adjusting or approximating the message, and using circumlocution or synonyms more than advanced

learners, see Table 5.2). These strategies help learners to continue practising the language, which helps them to become more fluent.

To conclude, both intrinsic and extrinsic motivation have a positive influence on the learning process, but the negative influence of other related factors seems to hinder effective learning, such as attitude (see Section 5.2) and anxiety (see Section 5.5).

5.5 Foreign language anxiety

This section presents the qualitative analysis of the interview data collected on foreign language anxiety. As such, it is linked to the third research question: 'Which component(s) of foreign language anxiety is/are evident in the experiences of the students when learning EFL?' As discussed in Section 2.2.2.1, foreign language anxiety is defined as "a distinct complex of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of the language learning process" (Horwitz et al. 1986, p.128). The foreign language anxiety scale measures three components of anxiety: communication apprehension, test anxiety and fear of negative evaluation. Communication apprehension is defined as a "type of shyness characterized by fear of or anxiety about communicating with people". Test anxiety refers to "a type of performance anxiety stemming from a fear of failure". Finally, fear of negative evaluation is defined as "apprehension about others' evaluation, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively" (Horwitz et al. 1986, pp.127–128).

This qualitative analysis is presented in four subsections: Section 5.5.1 presents an overview of the students' foreign language anxiety as elicited in the interviews. Then, Section 5.5.2 discusses whether the reasons for and levels of foreign language anxiety are stable or not, while Section 5.5.3 highlights how foreign language anxiety influences students' effort (use of language learning strategies). Finally, Section 5.5.4 addresses how students' achievement may be influenced by foreign language anxiety. It is important to note that the qualitative data show no differences among the three year groups (years 10, 11, and 12) in their foreign language anxiety. Therefore, as in previous sections, rather than presenting the data according to the year groups, they are presented according to the variables investigated in relation to foreign language anxiety.

5.5.1 Overview of the findings on foreign language anxiety

In line with the quantitative data presented in Chapter 4, the qualitative data show that most of the participants experience some foreign language anxiety. Only five participants (i.e. 3, 8, 10, 11, and 15) indicated that they do not have foreign language anxiety. Although Participant 8 states that she does not have foreign language anxiety, her response to other questions indicates that she has a fear of negative evaluation: she gets anxious whenever she does not know how to answer a question, as suggested by this quote:

(117) Yes, if I don't know how to answer, I get anxious because I want to answer the question and so on (P8).

Participants 11 and 15 experienced foreign language anxiety in earlier stages of school:

(118) In the early stages of learning English, I was suffering because I didn't understand much, and this made me anxious. As I understood more and tried to prepare at home, anxiety started to disappear. Thank God (P11).

(119) In the beginning, there was not much confidence. Even if I knew the correct answer, there wasn't any confidence to give an answer. Maybe the pronunciation of a word or a sentence, so I was a little anxious (P15).

Their responses indicate that, as beginners in learning English, they did not have good knowledge of English. Even when they have good understanding of English, they are not confident to use it (as in the case of Participant 15). Therefore, they exhibit anxiety. Nonetheless, they both report overcoming it. For instance, Participant 11 indicates that getting better in English helped her, and Participant 15 highlights the importance of insistence to learn without anxiety and stated:

(120) It is insistence. Whenever one makes mistakes, they try to be better the next time (P15).

5.5.1.1 Fear of negative evaluation

The participants who experience anxiety highlight some reasons that are mostly linked to fear of negative evaluation. For instance, difficulties in pronouncing words or reading correctly are among the reasons identified for anxiety. Such reasons make the participants hesitate to answer because they do not want others to evaluate them negatively:

(121) Maybe other students' reactions if for example I mispronounce a word or when the teacher doesn't understand the word I say. I feel embarrassed that she

didn’t understand me, so I need to learn how to say it correctly when I go back home (P12).

Moreover, some participants highlight making mistakes or not knowing how to answer a question as sources of their anxiety, which indicates again that they have a fear of negative evaluation:

(122) I would feel anxious if I answered a question incorrectly. Maybe because of my teacher. I don’t want to make mistakes. Also, I don’t want my friends to laugh at me (P4).

I was afraid of making mistakes. I mean I know English and I know how to speak but when the person in front of

(123) me is more proficient than me, I become afraid of making mistakes in front of them (P18).

As can be seen in quotes 119, 120 and 121, the participants try to avoid making mistakes in front of their teacher and peers. Thus, this type of anxiety makes it difficult for them to learn and might have a negative impact on their performance, as explored in Section 5.5.4. Furthermore, some participants know the answer, but they become anxious because they doubt their ability in front of more proficient speakers of English, as in the case of Participant 18. Her anxiety might emanate from low self-confidence because she underestimates her performance in front of more proficient speakers. MacIntyre et al. (1997) argue that learners who underrate their ability to learn a language and view their performance negatively feel insecure and anxious to perform learning tasks. Thus, they manage their anxiety less effectively as they avoid anxiety provoking tasks, which in turn might hinder their progress in learning the language and negatively impact on their self-confidence (Cheng et al. 1999).

5.5.1.2 Communication apprehension

In the interviews, participants were asked about their communication with their teacher in class when they have a question, and whether they use Arabic or English in their communication. In response to that, most of them indicate that they use English to communicate with the teacher when asking for clarification, for instance. Conversely, some participants do not ask their teacher for clarification, which is a sign of communication apprehension. They avoid asking their teacher even when they do not understand something. They try to find the answer by themselves:

(124) No, I don't. I try to find out by myself. I don't know because I don't want to waste other students' time in class (P7).

(125) No. I don't know I don't tend to ask her. I try to find out about it later (P9).

Given their reasons for avoiding asking the teacher, these participants are also afraid of negative evaluation.

Indeed, the data show that most of the low achievers communicate with their teacher in Arabic. That is, if they have any query, or they want the teacher to repeat or explain something, they use Arabic instead of English. They are anxious about using English and their anxiety prevents them from engaging in some language learning strategies, such as practising the language, which is an important language learning strategy. This indicates the detrimental influence of anxiety on language learning. More examples are explored in Section 5.5.4. The following quote is an example of their responses:

(126) Yes, I ask her at the end of the lesson to explain or to repeat. In Arabic (P17).

On the other hand, other participants who are intermediate and high achievers practise English as much as they can. For instance, Participants 11 and 12 state that they ask their teacher in English, but if they cannot, they ask in Arabic. They might be aware of the fact that speaking English more is likely to help them to learn.

5.5.1.3 Test anxiety

The data show that only a few participants identify some reasons that are related to test anxiety. For instance, Participants 6 has test anxiety and especially in English because she finds it difficult to express herself and deliver her message in English:

(127) I worry during the exam period, even before the exam and when other students check their answers after exams, I become anxious, especially in the intermediate stage. However, later anxiety is reduced but not in English because it is a foreign language; I can't express myself well and I can't deliver my message on the exam paper (P6).

This student's response represents exactly what distinguishes foreign language anxiety from other types of anxiety because a language learner is required to use the target language which they are not fully proficient in its use (see Section 2.2.2.1).

5.5.2 Stability of foreign language anxiety and influencing factors

In the interview, the participants were asked whether their sources and/or levels of anxiety had changed over time; only a few participants (i.e. 1, 4, 7, and 18) reported no changes in their sources of anxiety:

(128) No, they have not changed. They are the same reasons. Every year it [anxiety] becomes more and more (P1).

(129) No, they have not changed. They are the same: if I don't know the answer (P4).

(130) No, they haven't. They are the same. Thank God, it decreased. It is not as before. That means, I know the answer and I can answer. Even if I make mistakes, it's okay. But before I didn't want to make mistakes. Because I work hard to improve myself and I learn (P7).

(131) There is one reason [for my anxiety], and it is the same. For me, it is my teacher (P18).

While Participants 4 and 18 do not indicate any change in the reasons for their anxiety, Participants 1 and 7 indicate contrasting changes in their level of anxiety. That is, anxiety continuously increases for Participant 1, but decreases for Participant 7. Even the way they express their responses reveals their level of anxiety. For instance, Participant 1 is highly anxious as, when asked about her level of anxiety, she says, "Every year it increases more", while Participant 7 is more confident, which indicates low anxiety. She says about her anxiety level, "Thank God, it decreased. It is not as before. That means, I know the answer and I can answer. Even if I make mistakes, it's okay. But before I didn't want to make mistakes."

5.5.2.1 Perceived competence

A further examination of the data indicates that there are several factors that could have a positive or a negative impact on anxiety. For instance, the perceived competence is highlighted in many stances for reducing or eliminating anxiety:

(132) When I was in grade 4, I became anxious whenever I read. That is, how a word should be pronounced, or when a letter should be uttered, and when it should be silent.

Therefore, I would for example avoid reading a question; I would only give the answer. I would only attempt to read the questions that I thought I would be able to read correctly. At home, I would prepare the next lesson, try to read the questions, type them in Google and listen to their pronunciation. If I pronounced a word incorrectly, I would try to repeat the correct pronunciation till I knew how to pronounce it correctly (P2).

(133) I think because I am shy, I have anxiety. I feel it has decreased maybe because my level in English became better (P9).

(134) Yes, it gradually decreased and now it is very low. Maybe because of my friend and my teacher or because my level in I became better. Before I didn't know how to read, now I do because of my sister and because of a programme I use (P17).

As can be seen in these quotes, their improved level in English helps these participants to overcome their anxiety. For example, Participant 2 indicates that she experienced anxiety in the early stages of her learning, but she works hard, using language learning strategies that help her to improve her knowledge and overcome her anxiety: she uses the cognitive strategy of practising and the memory strategy of reviewing well.

5.5.2.2 Family, friends and the language teacher

In addition to perceived competence, Participant 17 highlights other factors that positively influence her anxiety, which include her teacher, her friends, and her sister. Her view is echoed by other participants who stress the role of their family and friends in reducing their anxiety:

(135) Yes, they have changed. My friends and my family support me. I don't care about others (P12).

(136) I was afraid to participate and that my answer might be wrong and that other students might laugh at me, but now I am not. My family members can make my anxiety disappear(P13).

In contrast, Participant 18 highlights the teacher as a source of anxiety. She has communication apprehension because she finds it difficult to communicate with more proficient speakers of English even when she knows the answer. However, she does not feel anxious during exams as she writes her answers easily on the exam paper. Thus, her performance is not influenced negatively. The following quote presents her view:

(137) It is one reason, and it is the same. For me, it is my teacher (P18).

5.5.2.3 Difficulty of the subject

Finally, participant 6 blames the difficulty of the syllabus for its negative impact on her anxiety. She states,

(138) No, it [anxiety] doesn't decrease. It slightly increases because of the difficulty of the syllabus (P6).

To conclude, the data show that there are several factors that might help to reduce or eliminate anxiety, such as the support of family, friends or the teacher, and perceived competence. They help the learner to become more confident and overcome their anxiety. On the other hand, factors such as the difficulty of the subject and the teacher might have a negative impact on the learner and increase their anxiety.

5.5.3 Relationship between foreign language anxiety and effort

When comparing anxiety with the language learning strategies used, the data show that there is a negative relationship between language learning strategies and foreign language anxiety. That is, those participants who are highly anxious tend to use fewer or less effective language learning strategies. For instance, Participants 8 has a fear of negative evaluation, and she does not use any language learning strategies. In addition, Participant 1 also has a fear of negative evaluation, and she only uses Google Translate sometimes for more difficult words. As discussed in Section 5.2.1, research shows that Google Translate accuracy is low (e.g. Van Rensburg et al. 2012; Ducar and Schocket 2018; Tongpoon-Patanasorn and Griffith 2020). It needs post-editing by humans to be more accurate. This means that using Google Translate as a language learning strategy is not as effective as human translation. It merely depends on translations that are stored on Google servers, among which there may be some inaccurate translations. In contrast, human translating is more accurate as the learner can think, edit and choose the appropriate word for the context. Thus, Google translate as a learning strategy needs to be accompanied by other learning strategies to be more effective (see Section 5.2.1).

In addition, the data show that most of the participants who have foreign language anxiety tend to use mostly cognitive strategies. The use of cognitive strategies by these anxious participants indicates that they might have facilitative anxiety. Oxford and Ehrman (1995) argue that facilitative anxiety is related positively to the use of cognitive strategies. For

instance, Participants 4, 12 and 16 have foreign language anxiety, and all of them use cognitive strategies with other different types of strategies, such as using social media or social strategies for Participants 4 and 12, respectively, and a compensation strategy for Participant 16 (see Tables 5.1 and 5.2).

Furthermore, the data show that metacognitive strategies are not used by highly anxious participants. This is because these language learners are overwhelmed, for example, by many unfamiliar words and different grammatical rules. Newness or unfamiliarity makes many language learners lose their focus, which can only be retrieved by using metacognitive strategies, such as setting goals and objectives, seeking out practice opportunities and paying attention (Oxford 1990), as in the cases of Participants 9, 10, 11 and 15 (see Table 5.3). Thus, these participants, who use metacognitive strategies, do not seem to have foreign language anxiety or they might have a low level of anxiety. For example, Participant 9 indicates that her anxiety decreases:

(139) I think because I am shy, I have anxiety. I feel it decreased. Maybe because my level in English became better (P9)

As can be seen, Participant 9 indicates a decrease in her anxiety. Furthermore, this is confirmed by her response to the question about the influence of anxiety on performance because she indicates that it has no influence on her performance. In addition, when asked about her effort to learn English, she states:

(140) I use YouTube. First of all, I should learn the grammar, so I can start speaking. Then to learn vocabulary, I try to memorise words in sentences to be easy. If I have no choice, I try to deliver my message using simple words (P9).

Her response indicates that she uses metacognitive strategies because she plans her learning through setting goals and objectives. In addition, she uses memory and cognitive strategies. She learns new words in sentences and practises the language in natural settings.

5.5.4 Relationship between foreign language anxiety and achievement

When comparing anxiety with achievement, it seems that fear of negative evaluation and test anxiety are associated with different levels of achievement (high, intermediate and low), whereas communication apprehension is only associated with high achievers. For instance, Participant 14 has test anxiety. She states that her test anxiety has a positive impact. She states that it makes her perform well in exams. However, her low level of achievement does not reflect or show the positive impact of anxiety, or that facilitative anxiety helps her to do well in exams. In contrast, Participant 18 is a high achiever with communication apprehension (she

doubts her ability in front of more proficient speakers of English), but this anxiety does not influence her performance negatively.

Turning now to the participants' responses when asked about the influence of anxiety on their performance, most of them assert the negative influence of anxiety on performance, such as Participants 1, 5, 6, 7, 12, 13, 16, 17, and 18.

(141) Yes. Negatively because if I am very anxious, I can't concentrate in the questions and maybe sometimes answer them incorrectly (P6).

(142) Negatively, in exams I'm always anxious and make a lot of mistakes (P16).

As the responses suggest, anxiety affects participants' ability to concentrate. Therefore, they cannot answer, or they answer incorrectly. In addition, some participants highlight that anxiety makes them forget what they learned:

(143) Yes, maybe I understand everything and memorise everything, but when I see the exam paper, I become anxious and forget everything (P13).

(144) Yes, when I am anxious, I forget everything. Yes, because I study hard, but when I see the exam paper, I become anxious, and I forget everything (P5).

This is in keeping with the findings in various studies (e.g. Eysenck 1979; MacIntyre and Gardner 1991b), as they show that language anxiety impairs the ability of learners to recall language items from memory.

While most of the participants agree that anxiety has a negative influence on their performance, Participant 4 and 14 states,

(145) No, I don't think so. I feel frightened, but once I start to answer the questions, I feel relieved (P4).

(146) It is a positive influence because I do well (P14).

In quote (146), Participant 14 asserts that anxiety positively influences her performance. Her anxiety motivates her to do better in exams. However, this is not reflected in her achievement because she is a low achiever; this indicates that anxiety seems to have a negative impact on her achievement.

Nonetheless, Participant 2 argues that anxiety can have either a positive or a negative influence on performance, depending on the learner's level of achievement:

(147) Those [the learners] whose performance is influenced negatively become anxious before exams because they cannot remember what they have learnt in

> classes. They only remember what they have read in books which might not be understandable for them. So, their anxiety will increase. If they [the learner] are an anxious individual but resist that anxiety, they will be more confident even if they make some mistakes because they learn from them and develop themself (P2).

Participant 2 indicates that anxiety increases and negatively influences the performance of low achievers, but high achievers resist anxiety because they are more confident, even if they make mistakes. She presents this view as a result of her personal experience. She experienced anxiety in the past but, by practising, she improved her language skills and gained in confidence, which helps her to overcome her anxiety. This relationship between anxiety and self-confidence has been examined in studies such as that by Matsuda and Gobel (2004). They suggest that students who have high self-confidence experience low levels of anxiety, which in turn influences their foreign language performance positively. In conclusion, as the quotes indicate, anxiety seems to have a negative influence on achievement. However, high self-confidence helps students to manage their anxiety. That is, the influence of other factors might decrease the negative influence of anxiety; this is explored in the next section (5.6).

5.6 Interrelationships between affective factors, effort and achievement

In response to the fourth research question "To what extent do learning affective factors (attitudes, motivation, anxiety) influence students' reporting of behaviour and achievement in EFL?", the qualitative data show that the variables examined in this study are intertwined. Furthermore, when examining the factors influencing affective variables, the qualitative data show that all three variables (attitudes, motivation, anxiety) are influenced by similar factors, which possibly further explains the intertwined relationships between them (see Sections 5.3.5, 5.4.3 and 5.5.2). In line with the relationships between the study variables presented in Chapter 4, there are some patterns of relationships that were noticed in the qualitative data, as well. These patterns are presented in accordance with each year group.

In the case of year 10 participants, the data show that there is a positive relationship between achievement and the self-determined regulation (autonomous motivation) (see Section 5.4.5.1). For instance, a comparison between two high achievers and two low achievers resulted in a number of differences. The first main difference is that high achievers have more autonomous or self-determined reasons to learn the language than low achievers. For instance,

Participants 1 and 3 are low achievers and they just have non-self-determined (introjected and external) regulation of extrinsic motivation. On the other hand, Participants 4 and 6 have self-determined regulation of motivation. That is, Participant 4 has external, introjected and identified regulation of extrinsic motivation, while Participant 6 has intrinsic motivation to experience stimulation. In addition, the learning strategies they use might explain their contrasting levels. A closer look at the data shows that Participants 1 and 3 use fewer or less effective strategies than high achievers. For instance, Participant 1 reports that she only uses Google Translate sometimes to check the meaning of difficult words. As a learning strategy, Google Translate needs to be used with other learning strategies in order to attain successful learning, (see Section 5.5.3). In a similar vein, Participant 3 uses cognitive strategies and social media to learn, but in spite of being prompted, she did not demonstrate how she uses strategies to learn (e.g. translating difficult words, guessing words from the context etc.). This inability to elaborate might be a sign of lack of knowledge to use learning strategies effectively. In contrast, high achievers Participants 4 and 6 show a better awareness of the effective use of learning strategies. For example, Participant 4 shows an advanced level of involvement with the language through reading and browsing English websites, which positively influences her language performance. Similarly, Participant 6 reports that she uses a vocabulary book to learn difficult words in social media. In this type of book, vocabulary items are categorised according to topics: e.g. tourism, restaurant, airport and so on. This involvement with the language might explain their strong language performance.

Regarding year 11 participants, the data show that foreign language anxiety influences the use of language learning strategies, which might in turn hinder good language performance. For instance, Participants 14 and 16 have foreign language anxiety and are low achievers. Although Participant 14 indicates that anxiety has a positive influence on her performance, a closer inspection shows that what she says is not reflected in her achievement because she is a low achiever. When analysing her learning strategies, the data show that her anxiety might negatively influence her use of learning strategies. That is, when practising the language in natural settings such as an airport or restaurant, Participant 14 reports that she tends to use only Arabic when she finds it difficult to speak in English. She could use other strategies such as compensation strategies (see Section 5.4.5.3), but it seems that her anxiety and fear of negative evaluation prevent her from practising the language in natural settings. Similarly, Participant 16 has a fear of negative evaluation, and she reports that she uses gestures when she finds it difficult to speak in English. Again, like Participant 14, using this compensation strategy does not help Participant 16 to practise English more, which may have a negative impact on her

performance. On the other hand, Participants 13 and 15 do not have foreign language anxiety and they use language learning strategies more effectively. For instance, Participant 13 reports that she uses English in natural settings even if the interlocutors use Arabic. In addition, Participant 15 seeks out practice opportunities through using self-talk. Both Participants 13 and 15 are aware of the importance of practising the language, which possibly helps them to be more proficient in English than participants 14 and 16, for example.

Regarding year 12 participants, the qualitative data show that there is a positive relationship between learners' attitudes and the use of language learning strategies, which may in turn influence their achievement. For instance, Participant 8 has a negative attitude towards learning the language and she reports that she does not use any learning strategies, which may negatively impact on her achievement. In contrast, Participants 10 and 11 have a positive attitude and they report that they use different learning strategies, which may positively influence their achievement. In addition, Participant 10 has intrinsic motivation while Participant 11 has extrinsic motivation, but they both still use effective language learning strategies. Moreover, the intertwined relationships among the study constructs can be illustrated further by Participants 8 and 11. They are both extrinsically motivated, but they have contrasting levels of achievement (low and high, respectively). In addition, they have contrasting attitudes towards the language (negative and positive, respectively). Furthermore, Participant 8 has a fear of negative evaluation, whereas Participant 11 does not have anxiety. Moreover, Participant 8 reports that she does not use any learning strategies while participant 11 reports that she uses cognitive, metacognitive and social strategies. Finally, the use of language strategies may influence the achievement of Participant 8 negatively and Participant 11 positively. Thus, it can be said that a positive attitude might help learners to be truly motivated to learn the language and put in a lot of effort to learn the language effectively. They are unlikely to be anxious about learning the language, which in turn might help them to be more proficient language learners. Similarly, another example is presented by Participant 10, who is a high achiever and intrinsically motivated. She holds a positive attitude and does not have anxiety. She reports that she uses effective learning strategies (cognitive, metacognitive and compensation strategies), which might have a positive impact on her achievement.

To conclude, the qualitative data show that a positive attitude and motivation are strong predictors of achievement for year 12 students, whereas for years 10 and 11 students, motivation is a stronger predictor of achievement. This might refer to the fact that year 12 participants have greater awareness of the importance of the language for their future than the younger students do because year 12 is a transitional year to university. This is examined in

more detail in the next chapter (Chapter 6), where the results of the quantitative and qualitative analyses are interpreted and discussed in relation to relevant literature.

5.7 Summary

In this chapter, the findings of the qualitative analysis have been presented in five sections in relation to the variables examined to answer the research questions. Section 5.2 conducted an analysis of students' effort (language learning strategies) to answer the last research question, RQ4. It shows that the students use similar learning strategies, but how they use those strategies explains the difference between low and high achievers. Such a finding emphasises the significance of measuring students' effort and achievement simultaneously. Additionally, measuring effort helps to explain why positive learning factors are not always associated with better learning outcomes. Then, Section 5.3. presents an analysis of students' attitudes towards the learning situation, which shows that most of the students hold a positive attitude, and negative attitudes are mostly related to a negative teacher-student relationship and/or the difficulty of the language or subject. Following this, Section 5.4 analyses students' motivation. It shows that most high achievers are intrinsically motivated, while low achievers are extrinsically motivated. Section 5.5 on foreign language anxiety shows that more anxious students use less effective learning strategies than less anxious students. Finally, an analysis of the interrelationships between affective factors, effort and achievement in response to the fourth research question is presented in Section 5.6. Although qualitative analysis has shown that students' achievement is influenced by other variables in the study (attitudes, motivation, anxiety, effort), the interrelationships between the variables vary across the three groups, as found in the quantitative analysis chapter (see Chapter 4).

To conclude, the key findings in this chapter are in agreement with those obtained by the quantitative analysis (Chapter 4). For instance, taken together, the quantitative and qualitative analyses suggest that attitude seems to shape the learning experience for the year 12 students. In particular, the quantitative analysis shows that attitude has a significant influence on effort, which has a significant relationship with achievement only for the year 12 model (see Figure 4.12). Similarly, the qualitative analysis indicates that positive attitudes are always associated with high achievement only for the year 12 students (see Section 5.6). A further example is the year 11 anxiety. The quantitative analysis shows that the year 11 students experience a slightly higher level of foreign language anxiety than the other year groups (see

Figure 4.4). By the same token, the qualitative analysis indicates that the anxiety of year 11 students seems to have a greater influence on their effort and achievement than that of year 10 and 12 students (see Section 5.6). Therefore, the next chapter (6) moves on to discuss the key findings of the quantitative and qualitative analyses in more detail.

6. Discussion

6.1 Introduction

In this chapter, the key findings of the data from a Saudi secondary school are discussed in relation to existing literature. This study paints a picture of how key affective factors (namely, attitudes, motivation and anxiety) correlate and how they influence students' behaviour and achievement in learning EFL. In order to pinpoint students' attitudes, motivation, anxiety and intended effort, key quantitative findings, along with the qualitative analysis, are discussed to get an in-depth understanding of the variables of the study and how they are related to each other.

This discussion chapter is structured according to the quantitative and qualitative findings that answer the four research questions presented in Chapter 2. Therefore, this chapter includes four sections on language learning attitude, motivation, foreign language anxiety, and the interrelationships among the variables, followed by a discussion of demotivating factors and the importance of students' autonomy in relation to the four research questions:

1- What are Saudi secondary school students' attitudes towards learning English and the learning situation?

2- What types of motivation do Saudi secondary students have for learning English?

3- Which component(s) of foreign language anxiety is/are evident in the experiences of the students when learning EFL?

4- To what extent do learning affective factors (attitudes, motivation, anxiety) influence students' reporting of behaviour and achievement in EFL?

6.2 Students' attitudes towards the learning situation

The data suggest that most of the participants in all year groups hold a positive attitude towards learning English. This finding is in line with studies such as Al Noursi (2013), who reports that the majority of high school students in the United Arab Emirates hold a positive attitude towards learning English. The same situation applies to many studies focusing on university students, like Al-Tamimi and Shuib (2009), Al Asmari (2013), Al samadani and Ibnian (2015) and Abu-Snoubar (2017).

In general, the findings of this study show that students' negative views towards learning English are mostly related to teacher- and subject-related factors. They focus on the teacher-student relationship and teaching strategies (see Section 5.3.2). This seems to refer to the fact that learning classrooms in Saudi Arabia are teacher-centred. That is, teachers speak more and explain the learning material, and students listen and respond to their teacher's questions (Rahman and Alhaisoni 2013); thus, students largely depend on their teacher as a source of information (Alkubaidi 2014). In addition, many students were not happy with the content and structure of their English syllabus, e.g. repeated topics and grammatical rules (see Section 5.3.3). However, teachers have to follow the learning curriculum designed by the Ministry of Education (Albedaiwi 2014), which means they cannot design their own curriculums to match their students' interests. This is indicative of the controlling nature of the learning context in Saudi Arabia.

However, the findings of the present study reveal that the factors influencing students' attitude towards learning English differ across the years. That is, the attitude of young learners (years 10 and 11) seems to be influenced more by classroom experience (i.e. teacher- and subject-related factors). As students age, the influence of classroom experience on students' attitude decreases and the influence of learning the language for pragmatic reasons increases. A possible explanation for these results is the educational situation. The attitude of the years 10 and 11 participants seems to be related to English as just one subject in the school programme that students need to pass. In particular, year 10 students seem to focus more on classroom experience because, in the first year of secondary school, students are not yet mature enough to develop he full awareness of what works best for their future. However, the situation is slightly different for year 11 because, at the beginning of the year, students have to choose a study path (i.e. humanities or science studies), which makes them focus more on their future. Thus, they start thinking about their future, but they still focus on their classroom experience because they have a new learning experience (i.e. study paths). Being in a transition year to university, year 12 students' attitude seems to be influenced more by utilitarian reasons for learning the language than classroom experience, because they are fully aware of the pragmatic value of being proficient in English.

This finding is in line with studies such that by Kormos et al. (2011). They examined the internal structure of language learning motivation of 518 Chilian students in three different age groups (secondary school students, university students, young adult learners). The findings revealed that the students' future goals are mainly linked to the status of English as a lingua franca. However, this link varies among the three groups. The attitude of the younger learners'

group was found to be related to instructional contexts, whereas adults' attitudes are related to the pragmatic value of learning English.

Further evidence of how attitudes differ across the school years is that most negative attitudes reported by the participants are related to the teacher in early school years, in keeping with the fact that, as noted above, in the early school years, students' attitudes are mostly influenced by classroom experience. This finding is in line with studies such as those by Mihaljevic Djigunovic (1993, 1995), longitudinal studies conducted to explore the attitudes and motivation of Croatian learners over an extended period of time. The findings showed that the motivation of young learners (7 years old) was related to the teacher, but instrumental reasons for learning the foreign language became important as they progressed in the foreign language. Similarly, Nikolov (1999) carried out a study to investigate the foreign language learning attitudes and motivation of Hungarian children between the ages of 6 and 14 years. The findings showed that the participants held a positive attitude towards the teacher and the learning context. However, the impact of teacher- and classroom-related factors decreased with age while instrumental motives increased with age. It can be concluded that students' attitudes across different school years, not particular ages, are influenced by the learning situation. In addition, the learning situation also influences other related factors, as will be explored in Sections 6.3, 6.4 and 6.5.

In conclusion, this section has discussed students' attitude towards English and the learning situation. The data suggest that most students hold a positive attitude. The participants with a negative attitude can be attributed to their negative views of the teacher or subject-related factors. However, some participants also highlighted the role of their teachers in changing their attitude to a positive one in later stages, which further emphasises the crucial role of the teacher in shaping students' attitudes. Finally, the qualitative findings also reveal that students' attitudes vary across school years, showing a decreased reliance on classroom experience and an increased reliance on utilitarian reasons for learning the language. The findings suggest that students should not restrict their attitude to classroom experience, but rather they should set their own learning goals and think about the importance of learning a global language like English for personal value to avoid the influence of a negative learning experience on achievement.

6.3 Motivation

This section discusses the findings for the second research question: 'What types of motivation do Saudi secondary students have for learning English?' While different theories exist in the literature regarding motivation, it is worth reiterating here that this study examines motivation on the basis of self-determination theory (Deci and Ryan 1985), where motivation is represented on a continuum ranging from non-autonomous to autonomous motivation. As discussed in Section 2.2.1.2, this theory involves two major types of motivation (extrinsic and intrinsic), which comprise various subtypes. The application of this framework to the data shows that there are no significant differences between the three year groups of students in terms of their motivation to learn English (see Sections 4.2.2 and 5.4.2 for quantitative and qualitative findings, respectively). However, the qualitative data suggest that the most meaningful division is not between intrinsic and extrinsic motivation, but between autonomous (i.e. identified regulation of extrinsic motivation and intrinsic motivation) and controlled (external and introjected regulation of extrinsic motivation) types of motivation. Therefore, these are the forms of motivation referred to in this section. This means that motivation is not a binary distinction between extrinsic and intrinsic. Students can have both extrinsic and intrinsic motivation, but what matters is how autonomous or controlled their motivations are. That is, having either intrinsic motivation or extrinsic motivation may not be sufficient for long-term learning. For instance, when the learning tasks are not interesting for students (i.e. they do not have intrinsic motivation), autonomy support can help students to internalise extrinsic regulations and understand the personal values in the given learning tasks (i.e. identified regulation). Thus, students can persist in their learning even when it is not enjoyable. In addition, students who have only external or introjected regulations may not continue learning once the external motives are removed. Therefore, it is important to enhance autonomous motivation for persistent and successful learning.

In general, the quantitative and qualitative data reveal that the three year groups have autonomous and controlled types of motivation. However, the findings of the qualitative data suggest there is a positive link between autonomous motivation and a high level of achievement only for year 10 participants (see Section 5.6). This link involves two issues: the predominant form of motivation for year 10 and the positive relationship between autonomous motivation and achievement. Regarding the prominent form of motivation, the qualitative data show that all three year groups have autonomous and controlled types of motivation, but the prominent form of motivation for students' behaviour and achievement seems to vary across the groups.

That is, year 10 students seem to have more autonomous than controlled motivation, whereas years 11 and 12 students seem to have increased controlled motivation in addition to autonomous motivation (the relationship between motivation, behaviour and achievement is discussed further in Section 6.5).

A possible explanation for this finding might lie in the fact that autonomous motivation to learn the language appears to decrease with age (e.g. Harter. 1981; Lepper et al. 2005; Scherrer and Preckel 2019). This suggests that learners in lower school years are more autonomously motivated than in higher school years. That is, as learners progress through the school years, their controlled motivation seems to increase due to the influence of external pressures (e.g. restrictions of the classroom environment, concerns about future professional prospects, and the influence of significant people like parents, teachers and peers). The students in years 11 and 12 seem to have autonomous motivation (see Section 5.4.2), but it seems that also controlled motivation has an influence on their learning behaviour, as suggested by the finding that some high achievers only have controlled motivation, while some have both controlled and autonomous types of motivation (see Sections 5.4.5.2 and 5.4.5.3). In addition, as mentioned previously in Section 6.2 on attitudes, older students' attitudes seem to be influenced more by the pragmatic value of learning the language (e.g. university admission, future jobs etc.), which can also help to explain why their controlled motivation seems to have a significant influence on their learning behaviour. On the other hand, the attitudes of younger learners seem to be influenced more by classroom experience (i.e. teacher- and subject-related factors) than by the pragmatic values of learning the language (see Section 6.2). Thus, they seem to have curiosity to add to their knowledge and to perform learning activities volitionally (i.e. without pressure or control by external motives), which probably explains the significant influence of autonomous motivation for year 10 students (see Section 6.2).

Autonomous motivation has been shown to decrease across different age groups ranging from primary to university students. However, before contextualising the study findings, it is worth mentioning here that previous studies do not always use the same division of motivation as used in this study (i.e. autonomous and controlled); therefore, the results are not always in complete alignment. Thus, for clarity purposes, the forms of motivation used in other studies are presented in combination with those used in this study. For instance, Harter (1981) assessed the motivation of over 3,000 students (from grade 3 to grade 9, i.e. from 8 to 14 years) in four American states. She found a decrease in intrinsic (i.e. autonomous) motivation from grade 3 to grade 9. Similarly, Scherrer and Preckel's (2019) meta-analysis study of 107 longitudinal studies revealed a decrease in intrinsic motivation from elementary

to high school stages. In these studies, the researchers referred to motivation broadly as extrinsic and intrinsic, without specifying exactly which types of extrinsic and intrinsic motivation were under consideration. In any case, their findings are in keeping with those in this study because intrinsic motivation is included in autonomous motivation.

Other studies have also reported a decrease in motivation with age but, rather unhelpfully for this dissertation, they refer to motivation generally without specifying exactly which type of motivation. For instance, Orhan Özen's (2017) meta-analysis study found that motivation has strong influence on achievement for primary school students, but low influence on achievement for secondary school, high school and university students. However, although this finding might imply a decline in motivation with age since the focus is on motivation, it is also possible that there are other learning affective factors that play a role in terms of the different impact they have on achievement. Therefore, it is important to measure other factors related to motivation as well in order to get a deeper understanding of how the interrelationships among learning factors can influence students' language achievement. Similarly, Bećirović (2017) conducted a study on 185 students from grades 5, 10 and 12 to investigate the relationship of EFL motivation with gender and achievement. Even though the study focused on gender, Bećirović (2017) also explored motivation across different years. The findings revealed that female students are generally more motivated than male students, and both male and female students in grade 5 showed a higher level of motivation than the students in grade 12. Overall, the findings of the present study and those mentioned above highlight a decrease in autonomous motivation as learners age, due to the influence of external factors related to classroom experiences, including peers and teachers, or the educational situation of the learner (e.g. being in a transitional year between school and university).

However, several studies indicate that this decline in autonomous motivation could be alleviated with teachers' support because, in an effective learning environment, teachers can help students to develop high autonomous motivation. For instance, Carreira et al.'s (2013) study on Japanese elementary school students (grades 3, 4, 5 and 6) showed that a teacher's support contributes to enhancing students' autonomous motivation. Autonomy-supportive classrooms help students make their own decisions and choices, which fosters students' enjoyment in learning the language. Further evidence is provided by Oga-Baldwin et al. (2017), who carried out a longitudinal study in Japanese elementary schools and found no decrease in students' autonomous motivation. It was relatively stable due to teacher's support of students' autonomy.

In conclusion, this section has discussed the differences in FL motivation among secondary school students in Saudi Arabia. The analysis of qualitative data has shown an increase in controlled motivation for years 11 and 12 students. In view of this situation, teachers must work on minimising the increase of controlled motivation for students in higher school years. For instance, this can be done through using less controlling teaching approaches and giving the students the opportunity to choose in learning tasks (Alamer 2022).

6.4 Foreign language anxiety

In response to the third research question, "Which component(s) of foreign language anxiety is/are evident in the experiences of the students when learning EFL?", the analysis of the questionnaire revealed that, in general, the students in the three year groups have a moderate level of foreign language anxiety (see Section 4.2.3). This finding contradicts the findings in studies carried out on different learning levels ranging from primary to university, such as Na's (2007) in China, and Nahavandi and Mukundan's (2013) in Iran, which indicate that students experience high levels of anxiety in learning English. Nonetheless, it is in agreement with many studies such as Arnaiz and Gullien (2012) in Spain; Lian and Budin (2014) in Malaysia, Liu and Chen (2015) in Taiwan, AlAsmari (2015b), Alshahrani and Alandal (2015), Alsowat (2016), Gawi (2020) and Alsalooli and Al-Tale (2022) in Saudi Arabia. These varying results indicate that levels of foreign language anxiety are associated with different variables.

For instance, in the Saudi context, many studies reveal that learners do not experience high anxiety in learning EFL. This might be attributed to the single-sex education system that is implemented in Saudi Arabia. This is supported by studies like Mahmoodzadeh's (2013) in Iran and Aldarasi's (2020) in Libya. They identified mixed-sex classrooms as a significant source of anxiety for foreign language learners. Aldarasi elaborated on this and indicated that the Islamic religion, traditions and norms in Libya, which impose restrictions on communication with the opposite sex, make students feel anxious and stressed when learning alongside the opposite sex. The influence of single-sex education in reducing students' anxiety is evident in other contexts as well. For instance, in America, Hart (2015) found that single-sex education may alleviate the fears of middle-school students, who tend to have high levels of social anxiety. Similarly, Gurian et al. (2009) encouraged the implementation of single-sex classes for girls in America because they found that they help girls to cope with the anxiety caused by mixed-sex classes.

In spite of the moderate level of anxiety experienced by the participants, the quantitative data in Section 4.2.3 revealed that all the components of foreign language anxiety identified by Horwitz et al. (1986), listed in Section 2.2.2.2, are evident in their learning experiences. This finding aligns with those of Gawi (2020) and Alsalooli and Al-Tale (2022) in relation to Saudi university students. In a similar vein, most of the quotes in the qualitative data revealed that anxiety is related to fear of negative evaluation, test anxiety and communication apprehension: e.g. mispronouncing words, reading incorrectly, making mistakes, not knowing how to answer a question, communicating with teachers and fear of failing the course (see Section 5.5). Similar reasons were also reported by Alsowat, who points out that the most anxiety-provoking causes for Saudi university students are "worrying about consequences of failing, forgetting things they knew, and feeling uneasiness during language tests" (2016, p.193).

A possible explanation for the participants experiencing communication apprehension might be the relatively few opportunities for the students to communicate in English in Saudi Arabia, because Arabic is the only official language and the language of communication in daily life. English is only taught as a school subject. Hence, students only practise it in formal settings, i.e. classrooms. This limited exposure to the language makes it difficult for some students to communicate in English. In addition, due to the nature of formal classrooms in Saudi Arabia, students' performance is continuously monitored and evaluated, which explains why most of the participants experience fear negative evaluation from their teachers and their peers (see Sections 4.2.3 and 5.5) (cf. Alamer and Almulhim 2021). Furthermore, some participants were found to experience test anxiety, which can be attributed to their low self-confidence because they doubt their language skills (see Section 5.5). This finding is in line with Lawal et al. (2017), who found that students with low self-confidence experience high levels of test anxiety.

Studies on foreign language anxiety tend to report a general increase or decrease of anxiety across school years. For instance, MacIntyre and Gardner (1994), Onwuegbuize et al. (1999) and Dewaele (2002) reported that older learners have a higher level of foreign language anxiety than younger ones. MacIntyre and Gardner (1994) indicate that older learners may experience higher levels of anxiety than younger learners because the former are normally more concerned about the accuracy of their outcomes in comparison to the latter. On the other hand, Dewaele (2007) argues that younger learners may show higher levels of anxiety than older learners when they experience a new learning situation. His findings align with the finding of the present study. In particular, the study at hand has shown that year 11 students in the Saudi context seem to have a slightly higher level of foreign language anxiety than both

the younger group (year 10) and the older group (year 12). In addition, the findings highlight test anxiety as the strongest type of anxiety for year 11 participants. These findings might be explained in connection to the educational context because, as noted above, in Saudi Arabia at the beginning of year 11, students have to choose a study path (i.e. humanities or science studies). Thus, year 11 students may feel worried because they are experiencing a new learning situation. They do not know whether they have made the right choices or not, whether the subjects will be easy or difficult. Therefore, they think about how to get high grades in these subjects, which might explain why the item *I worry about the consequences of failing English classes* got the highest mean score among other components of anxiety and among other year groups (see Section 4.2.3).

Nonetheless, it should be noted that the reaction of year 11 students to the new learning experience may affect all subjects, not just English. In other words, students may experience general learning anxiety, not just foreign language anxiety. Indeed, some interviewees reported that they are anxious in all subjects (e.g. Participant 12), whereas others stated that they do not feel at ease only during English classes (e.g. Participant 14, see Section 5.5), but this needs further investigation. These reported views emphasise that the influence of the new learning context should be taken into consideration by educational policymakers to help students cope with their anxieties.

Along these lines, year 11 is different from years 10 and 12 for a number of reasons. Choosing a study path at the beginning of year 11 makes the students worry about individual subjects. In contrast, year 12 students are more concerned about getting a high General Point Average (GPA) for university admission, which possibly lowers their anxiety levels for individual subjects. In addition, students in year 12 are more familiar with their chosen study path and learning context, which might make it easier for them to cope with anxiety. This finding is consistent with Teimouri et al.'s (2019) meta-analysis study on elementary, high school and college students, which revealed varied patterns of relationships between language anxiety and language achievement. For instance, learners in language institutes showed the weakest correlation between language anxiety and language achievement, whereas primary school students showed the strongest correlation. The strength of the correlation drops from elementary to intermediate, and then there is a slight increase from intermediate to secondary school. Teimouri and his colleagues attributed these ups and downs of anxiety to two variables: the age of the learners and features of the learning context. Their findings highlight the influence of the educational context as it might present new experiences for learners, which makes them feel more anxious. In addition, in their meta-analysis, they measured the

correlation between language anxiety and language achievement using different measures of achievement (course grades, language tests, self-perceived competence, GPA). Their findings revealed that self-perceived competence correlated strongly with language anxiety, followed by the correlation between language anxiety and both course grades and language tests. Finally, the weakest correlation was between language anxiety and GPA. This might be attributed to the fact that GPA represents the average of students' scores in different subjects, not only L2 achievement.

On the other hand, year 10 students seemed to feel less anxious than year 11 participants. This might be attributed to the fact that the educational situation does not change much for them, even though they transfer from middle to secondary school, because this study was carried out in an educational complex which includes the three stages of school: primary, intermediate and secondary. Thus, the fact the same students stay and move together throughout the three stages seems to make the students feel less anxious. Moreover, year 10 students are not yet involved in making choices and decisions about their futures, as opposed to year 11 and 12 students, who are closer to university studies. The differences between the three groups of this study suggest that foreign language anxiety might be provoked by the educational situation of the learner. The educational context for year 11 students creates a new learning experience, which possibly makes them feel slightly more anxious than the other two groups (i.e. years 10 and 12).

In conclusion, this section has discussed the sources and levels of foreign language anxiety for high school students in Saudi Arabia. The results revealed that the participants experience a moderate level of anxiety. However, it was found that year 11 participants experience a slightly higher level of anxiety than those in years 10 and 12. Given the situation that foreign language anxiety differs across the school years, changes in learning or educational situation must be considered and teachers must pay more attention to it and try to create a relaxed environment for students that help them alleviate their anxiety.

6.5 Interrelationships between affective factors, students' behaviour and achievement

This section discusses the findings for the fourth research question "To what extent do learning affective factors (attitudes, motivation, anxiety) influence students' reporting of behaviour and achievement in EFL?" The quantitative and qualitative analyses, presented in Chapters 4 and

5, respectively, have provided further confirmation of the close interrelationships between attitudes, motivation and anxiety and their influence on students' behaviour, which in turn seems to contribute to their achievement. In particular, quantitative analysis of the questionnaire using SmartPLS revealed a different model for each year group. Similarly, qualitative analysis of the interviews showed different patterns of relationships for each year group. Therefore, this section will look at these models and patterns of each year group in turn.

In line with previous studies such as Noels et al. (1999), McEown and Oga-Baldwin' (2019) and Alamer and Almulhim (2021), the present study found that students who have autonomous motivation tend to have a more positive attitude. They also tend to make more effort to learn, which contributes to higher achievement. In contrast, more controlled motivation can be associated with a negative attitude and less effective effort, which contributes to low achievement. However, for years 11 and 12, as explained in Sections 5.4.5.2 and 5.4.5.3, there seems to be an increase in controlled motivation, and the latter seems to contribute to higher achievement. This is possibly because in years 11 and 12, students are closer to entering university, so they are thinking about their future and university studies. Therefore, they are controlled by external incentives. Furthermore, the second key finding revealed that the three year groups have a moderate level of anxiety, but it seems that the new learning experience for year 11 students, in comparison to years 10 and 12 students, makes their anxiety slightly higher and has a greater negative influence on their effort and achievement. Finally, the third key finding is that the differences between the participants in achievement, motivation and anxiety are shown in their use of language learning strategies. That is, less anxious learners with autonomous motivation and high achievers both tend to use more effective strategies or deeper approaches to learning than more anxious learners with controlled motivation and low achievers. For example, two students in year 10 report that they use cognitive strategies, but one of them only uses Google-Translate to check the meaning of difficult words in comparison to the other student who also uses translation as a learning strategy but shows a higher level of involvement with the language through translating celebrity news (see Section 5.2.1). The next paragraphs discuss these findings in more detail for the three year groups.

The descriptive statistics in Chapter 4 show no differences among the three year groups in terms of types of motivation. Similarly, structural equation modelling analysis indicates that the loading values of autonomous motivation are higher than the loading values of controlled motivation for the three groups (these values measure how well a variable is related to its indicators; see Section 4.2.5). However, analysis of the relationships in the model and

qualitative analysis of the interviews reveal that the influence of types of motivation (autonomous and controlled) on students' behaviour seems to be different in the three year groups. In other words, the reported learning behaviour of year 10 participants seems to be enhanced more by autonomous motivation, whereas for years 11 and 12, both autonomous and controlled motivation seem to play a significant role in enhancing their reported learning behaviour.

6.5.1 Year 10 data

As pointed out above, this Section (6.5) addresses the relationships between the study variables. The quantitative results of the PLS-SEM analysis of the year 10 data showed that the model explained about 48% of the variance in effort (see Section 4.2.5.4). Attitude has been shown to have a significant influence on other variables in the model (i.e. motivation, anxiety and effort). However, the model showed non-significant relationships between achievement and other variables. In particular, the better-fit model for year 10 presented in Figure 4.7 shows significant relations between the study variables (attitude → effort, attitude → motivation, and attitude → anxiety). Although these are the only significant relationships in the model that best represent the data of year 10, there are other relationships that were noticed in the qualitative data. The positive link between attitude and motivation, and between attitude and effort, also suggests a positive link between motivation and effort. That is, a positive attitude motivates students to make a lot of effort to learn because, in accordance with the socio-educational model from Gardner (1985), a positive attitude and effort are components of motivation. Gardner defines motivation as "the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes towards learning the language" (1985, p.10) (see Section 2.2.1). Moreover, research shows that attitude is the antecedent of motivation (Kormos and Csizér 2008), and motivation is the antecedent of effort, not achievement (Dörnyei 2005). In addition, the close links between these affective factors can be further explained by the fact that they are influenced by very similar factors, including teacher-related factors, family, friends and the difficulty of the language (see Sections 5.3.5 and 5.4.3). These views highlight the close link between motivation and attitude, and that motivation has a direct influence on effort, which seems to have a positive impact on students' achievement.

The analysis of the interviews in Chapter 5 suggests that, while a negative attitude is associated with low achievers, a positive attitude is linked with high and sometimes low achievers. This means that a positive attitude may not influence the achievement of some

participants in year 10, which indicates the influence of other related factors on students' attitudes to make them effective. As has been argued in the literature, attitude is not the direct antecedent to achievement, and this makes it difficult to establish a connection between them (Dörnyei 2005). Therefore, it is important to measure other related factors (i.e. motivation, anxiety and effort) because they seem to influence the relationship between attitude and achievement. This finding might be explained by the influence of classroom experience on year 10 students' attitudes (see Section 6.2). These students may hold a positive attitude, but once they have a bad experience with the teacher, they may feel frustrated and not put in much effort to learn, which negatively impacts on their achievement. However, being less dependent on the classroom experience by setting clear learning goals helps students to make an effort to learn, regardless of how they feel about the teacher or the subject. Thus, it minimises the influence of a negative learning experience on students' achievement.

In addition, qualitative analysis of the year 10 data showed a positive relationship between autonomous motivation, reporting of effort and achievement. That is, participants who have autonomous motivation use more, or more effective, language learning strategies, which seems to have a more positive impact on their achievement than those with only controlled types of motivation (see Section 5.6). The association between high achievement and autonomous motivation only indicates that the reported learning behaviour of the year 10 participants seems to be enhanced more by autonomous motivation. The predominance of autonomous motivation may be explained by the fact that year 10 students seem to focus more on their classroom experience than on out-of-school contexts (e.g. university studies or future jobs). Year 10 students seem to perform their learning tasks volitionally for curiosity, pleasure and to add to their knowledge (i.e. more self-determined and less controlled by external factors). This finding may also be supported by the influence of attitude on motivation, where their attitude is mostly influenced by their classroom experience (i.e. teacher- and subject-related factors). That is, students with a negative attitude towards the language attribute their negative views to the teacher or the difficulty of the subject, which suggests that their attitude is mostly influenced by their classroom experience (see Section 6.2). This finding lends support to previous studies that have shown that the attitudes of younger learners are more influenced by their classroom experience than are older learners, who have their own learning goals and are less dependent on classroom experience in their attitudes (e.g. Nikolov 1999; Kormos and Csizér 2008). The close relationship between attitude and motivation is also highlighted in previous studies (e.g. Gardner 1985; Chalak and Kassaian 2010; Aldosari 2014).

In addition, the findings also revealed that autonomous motivation is associated with more effective effort. That is, students with autonomous motivation tend to use deep approaches to learning, which seems to contribute to better learning outcomes (see Section 5.6). This finding fully supports self-determination theory, whereby every individual is inherently inclined to satisfy basic psychological needs for autonomy, competence and relatedness, which has a positive impact on their motivation, well-being and academic achievement (Ryan and Deci 2020). The finding also aligns with previous studies like Yamauchi and Tanaka (1998), Turban et al. (2007), Wang (2008), Dornyei and Ushioda (2011), Vasalampi et al. (2012), Hiver et al. (2020) and Alamer (2022). For instance, Yamauchi and Tanaka (1998) observed that autonomous motivation is associated with deeper approaches to learning for Japanese elementary students. Similarly, Turban et al. (2007) and Vasalampi et al. (2012) carried out studies on university students in China and Finland, respectively. They observed that autonomously motivated students made more effort and used more effective strategies, which had a positive influence on their achievement.

Regarding year 10 anxiety, the data suggest that they have a moderate level, but it does not seem to have a significant influence on their learning behaviour and achievement (see Sections 4.2.3 and 5.6). This finding might be explained by the more important effect that autonomous motivation has on year 10 students' learning behaviour (as discussed above). Previous research highlights the positive impact of autonomous motivation on students' well-being (see Burton et al. 2006; Ryan and Deci 2020). That is, the more autonomously motivated the students, the less anxious they are. This finding also accords with earlier observations such as Burton et al.'s (2006) on elementary and university students in Canada. Burton and her colleagues observed that autonomous motivation helps students to maintain their psychological well-being and to make more effort in learning, which is associated with greater achievement. In contrast, controlled motivation is associated with increased anxiety (cf. McEown and Oga-Baldwin 2019; Alamer and Almulhim 2021). Another possible explanation for the lower influence of anxiety is the educational situation of year 10 students, as it is less controlled and pressured because learning the language is not decisive for them, unlike for year 12 students, for instance. In addition, although year 10 is a transition year from intermediate to secondary stage, and students are expected to have a high level of anxiety, year 10 students did not show a negative influence of anxiety on their effort and achievement. This might be because this study was conducted in an educational complex (i.e. a building that includes three sections: one for the primary stage, one for the intermediate stage, and one for the secondary stage). Thus, the same students stay and move together throughout their school education.

On the other hand, the qualitative findings for year 10 reveal that low achievement is associated with controlled motivation. Even though some interviewees mentioned learning English for utilitarian reasons (e.g. Participant 3, see Section 5.4.2.2), it seems that these students had not yet internalised those learning values within their self-system. That is, students might know that learning English is important for future employment, for instance, but the process of internalising such a learning goal as a personal value efficiently seems to be influenced by the learning context (cf. Deci et al. 1991). Year 10 is not a decisive year for the students' future like year 12, for instance, and also the parents may not put much pressure on their children to learn. Thus, the educational situation in year 10 possibly explains the absence of strong external incentives that motivate the students to make a lot of effort and have high achievement.

This finding is consistent with Lepper et al. (2005), who conducted a study on 797 school students (from third grade to eighth grade). They reported a positive correlation between intrinsic (i.e. autonomous) motivation and achievement, and a negative correlation between extrinsic (i.e. controlled) motivation and achievement. Further evidence is provided by Alamer and Lee (2019), who investigated 441 university students in Saudi Arabia and found that autonomous motivation had a positive connection to L2 achievement, and controlled motivation had a negative connection to L2 achievement. Nonetheless, these findings are not entirely supported. For example, Khodadady and Ashrafborji (2013) found no significant relationship between motivation (extrinsic and intrinsic) (i.e. autonomous and controlled types of motivation) and EFL achievement for 493 female students in a language institute in Iran. A possible explanation for this disparity in the findings might be related to the learning context. That is, Khodadady and Ashrafborji's study was conducted in a language institute, where learning is not compulsory, as in school or university. Thus, those learners might be motivated, but they may not put in much effort because they are not too concerned about achievement.

6.5.2 Year 11 data

Addressing the relationship between the study variables, quantitative analysis (PLS-SEM) of the year 11 model revealed that the model explained 24% of the variance in effort (see Section 4.2.5.9). That is, attitude has a significant influence on motivation and anxiety, and motivation has a significant influence on effort. Similar to year 10, the relationships between achievement and other variables in the model turned out be insignificant. Thus, the model for year 11 data

displays significant paths between the following variables: attitude → motivation, attitude → anxiety, motivation → effort (see Figure 4.10). Students with a positive attitude report that they are motivated to make a lot of effort to learn, and they are less anxious, whereas it is quite the opposite for students with a negative attitude (see Section 4.2.5.9). However, similar to year 10, qualitative analysis of year 11 has shown that positive attitudes are not always associated with high levels of achievement. As discussed for year 10, this finding might be explained by the influence of classroom experience on students' attitudes (see Sections 6.5.1 and 6.2).

Unlike year 10, the quantitative and qualitative findings for year 11 show that not only autonomous but also controlled types of motivation seem to play a significant role in enhancing the learning behaviour of year 11 students (see Section 6.3), because they contribute to high achievement. However, it seems that some students in year 11, who are autonomously motivated (e.g. Participant 17), are low achievers; this indicates that they may only have limited autonomous motivation. In addition, as discussed in Section (6.4), year 11 students showed a slightly higher level of anxiety than other year groups, which seems to be an indication of this limited autonomous motivation and increased controlled motivation. As repeatedly mentioned in the literature, the more autonomously motivated the learners, the less anxious they are (e.g. Noels et al. 1999; Alamer and Lee 2019). That is, learning the language volitionally without being controlled by external factors because it is inherently enjoyable or because it is personally valuable makes students less anxious. They also feel fully engaged when performing learning tasks, which makes them put in a lot of effort into them. Accordingly, they feel more competent and less anxious.

Controlled motivation also seems to play a significant role for year 11students because some high achievers have both controlled and autonomous types of motivation (e.g. Participants 13 and 15; see Section 5.6). It is not uncommon for controlled motivation to contribute to high achievement, but previous studies have shown that controlled motivation is associated with short-term motives, which can be reduced or diminished once external incentives are removed (Noels et al. 1999; McEown and Oga-Baldwin 2019). In addition, controlled motivation is associated with poor well-being or increased anxiety, and also with low achievement (McEown and Oga-Baldwin 2019; Alamer and Almulhim 2021). In other words, students who learn the language to satisfy external factors (e.g. to gain rewards, or to satisfy their parents and teacher) are very likely to experience language anxiety (e.g. Alamer and Almulhim 2021), and anxious students are less motivated to engage in learning activities, which negatively influences their achievement (Aida 1994). In view of this, anxiety might

negatively influence year 11 students' effort and achievement because of the positive relationship between controlled motivation and anxiety. As in earlier studies (e.g. Steinberg and Horwitz 1986; Gardner et al. 1997), anxious students were found to use less effective learning strategies than less anxious students. For instance, instead of using explanations of difficult words or synonyms, they report that they use gestures or the mother tongue (see Section 5.6). They make fewer attempts to use the target language than less anxious students.

As discussed in Section 6.4, the anxiety of year 11 participants might be attributed to their educational situation of choosing a study path. That is, the learning context of year 11 as a new learning experience seems to aggravate the students' anxiety, to the extent that it has a negative influence on their effort and achievement. Other researchers have also found that the learning context has a bearing on students' anxiety (e.g. MacIntyre 2017; Teimouri et al. 2019). Further evidence of the influence of the new learning situation on anxiety appears in the comparison between years 11 and 12, which indicates that familiarity with the learning situation seems to make year 12 students less anxious than those in year 11. Additionally, this constant interaction of anxiety with other variables, including the type of setting, demonstrates the dynamic nature of anxiety (cf. Gregersen et al. 2014; Waninge 2015; MacIntyre 2017).

6.5.3 Year 12 data

Unlike years 10 and 11, where attitude, motivation and anxiety only predict students' effort, the quantitative findings of the PLS-SEM analysis of year 12 data have shown that the same variables predict both students' effort and achievement (see Section 4.2.5.12). In particular, the year 12 model showed the following significant relations between the study variables: attitude $\rightarrow$ motivation, attitude $\rightarrow$ anxiety, attitude$\rightarrow$ effort, effort $\rightarrow$ achievement (see Table 4.30). In line with the quantitative findings, the qualitative findings show that attitude seems to influence students' motivation and anxiety, which in turn influence their effort and achievement. Students with a positive attitude report that they are less anxious and more motivated to make a lot of effort to learn, which seems to have a positive impact on their achievement, while the opposite is the case for students with a negative attitude. Indeed, unlike in years 10 and 11, attitude seems to shape the quality of the learning experience of year 12 students because a positive attitude is always associated with intermediate and high achievers, and a negative attitude is linked to a low level of achievement. This finding is in line with Al samadani and Ibnian's (2015) study, which investigated the relationship between university students' attitudes and achievement. They found that students with high levels of achievement had the

most positive attitudes, followed by medium level students, and finally low-level achievers. Similarly, Al-Mohanna and Dhawi (2017) also found that high achievement is associated with a more positive attitude for Saudi EFL university students.

The constant positive relationship between attitudes and achievement for year 12 might be explained by the fact that the language attitude of year 12 students seems to be influenced more by utilitarian reasons for learning English (see Section 6.2). Therefore, students are more aware of the value of English for their future, and they work hard for that reason, regardless of the fact that English is a school requirement that needs to be fulfilled. In other words, future plans and being in a transition year to university may increase the dedication and effort of year 12 students to learn English effectively. It seems that students tend to engage with the language and persist in their learning when they think it is worthwhile, which might also explain the significant relationship between the reporting of behaviour and achievement in the year 12 model (see Fig. 4.12).

Another possible explanation might be the influence of family or parents on their children's attitude, encouraging them because they believe that learning English is very beneficial. While such parental influence is also evident in other school years, one can hypothesise that in year 12 in particular, parents care about the academic achievement of their children because it is a decisive year for their future. Moreover, teachers and schools as a whole might care more about final year students (year 12) because of the significance of this year in school, which has a positive impact on students' attitudes and makes them work hard for greater achievement. All these factors contribute to explaining how a positive attitude influences the achievement of year 12 participants.

The qualitative analysis also points to the influence of year 12 students' attitudes on motivation. That is, a negative attitude is associated with controlled motivation, but not autonomous motivation. However, similar to year 11, controlled motivation is not always associated with a negative attitude and negative learning outcomes: qualitative analysis revealed that controlled motivation is also linked to a positive attitude and high achievement. For example, Participant 11 is a high achiever and has external and introjected regulation (controlled types of motivation; see Section 5.4.5.2). This finding is not fully in line with self-determination theory, which assumes that controlled motivation is associated with a negative outcome. This lack of disparity between types of motivation for the students in years 11 and 12 might be explained by the dynamic interaction between learners and the learning context. That is, the students seem to internalise the value of learning the language in a self-determined way. This is evident in the quantitative analysis because the scores for identified regulation for

year 11 and 12 students are higher than those for external and introjected regulation (see Table 4.2). However, the new learning situation of year 11 students (choice of a study path) and the learning context of year 12, where students are pressured or controlled by their teachers and/or parents to get high grades, seem to have an impact on students' motivation, preventing them from fully internalising learning values within their self-system. This means that the learning context influences the satisfaction of the basic psychological needs for autonomy, competence and relatedness (Ryan 1995; Vallerand et al. 1997). In addition, their educational situation (i.e. being closer to entering university) might enhance their awareness of the importance of learning the language. Therefore, even when they only have controlled motivation, they put in a lot of effort and use effective learning strategies, which seems to contribute to better learning outcomes.

Earlier studies emphasise the controlling nature of the learning climate in high school. For example, Ratelle et al. (2007) investigated the motivation of high school and university students in Canada. They found that autonomous motivation is more likely to be enhanced at university than in high school because universities have a less-controlling nature in comparison to the school context. This view highlights the dynamic interaction between learners and the learning context in influencing human motivation (Deci and Ryan 1987). That is, individuals may have different types of motivation and these types, whether external or internal, influence learning behaviour, but features of the learning context make some types of motivation more prominent than others (Noels et al. 2019). Thus, it can be said that this dynamic interaction between the learner and the learning context seems to have an influence on the relationship between motivation and learning outcomes, which explains why controlled motivation is not always related to negative outcomes. However, when controlled motivation contributes to high achievement, it predicts short-term persistence in learning, whereas autonomous motivation predicts long-term persistence (Deci and Ryan 1987, 1991; Ryan 1995; Pelletier et al. 2001); this highlights the importance of enhancing students' autonomous motivation.

As regards year 12 anxiety, the qualitive analysis indicates that year 12 students' anxiety seems to influence their effort and achievement less than that of year 11 students. The reason behind this might be related to the fact that year 12 students are used to the learning experience, which is considered new for year 11 students and aggravates their anxiety. Furthermore, year 12 participants appear to be anxious about their general points average (GPA) and not just their English language achievement, which possibly lowers their anxiety for individual subjects. This finding is in line with studies like Teimouri et al.'s (2019) meta-analysis, where language anxiety showed the weakest correlation with GPA.

Thus, on the basis of the year 12 analysis, it seems that the students' attitudes shape the quality of their learning (i.e. attitude influences their effort and achievement). This is suggested by the fact that the qualitative analysis indicates that students with a positive attitude, whether they have controlled or autonomous motivation, report that they are less anxious and use more effective learning strategies than students who have a negative attitude (see Section 6.3). This pattern of relationships provides further support for the dynamic interaction of motivation and anxiety with the learning context. The students use effective strategies to learn the language because they seem to be aware of its importance for their future. However, because controlled motivation predicts short-term goals, it is important that parents and teachers support students' autonomy to enhance persistence in learning, well-being and high achievement. Indeed, parental support for student autonomy has been emphasised, particularly in connection with transition years to high school or university, because they are stressful periods for students (Ratelle et al. 2004, 2005). Although both teachers and parents play a significant role in enhancing students' autonomy, Bureau et al.'s (2022) meta-analysis demonstrates that teachers' autonomy support is a stronger predictor of autonomous motivation than parental autonomy support.

Based on the discussion of the interrelationships between the study variables across the three year groups, the findings highlight the significant influence of the learning context on students' effort and achievement. Students seem to put in a lot of effort when they think it is worthwhile (e.g. in a decisive year for university admission), which is the case for year 12 students. Such a view may explain the main difference between the PLS-SEM models of the three groups (i.e. the significant relationship between effort and achievement only for year 12 students). We can conclude that the Saudi learning context does not seem to be supportive for students to learn in an autonomous way (cf. Alrabai 2017). They are controlled more by external incentives, indicating the importance of creating learning environments that are supportive of autonomy.

6.5.4 Demotivating factors and the importance of students' autonomy

The findings of the present study provide additional support for the suggestion that the influence of affective factors on effort and achievement differs across years of study. In line with self-determination theory, year 10 data suggest a positive relationship between autonomous motivation and achievement, whereas year 11 and 12 data show that both autonomous and controlled motivation contribute to high achievement, which is only partially

in line with the theory. Therefore, it was important to investigate the demotivating factors that might have an influence on motivation and why controlled motivation seems to increase in older students. According to Dörnyei and Ushioda (2011), demotivation refers to "specific external forces that reduce or diminish the motivational basis of a behavioural intention or an ongoing action" (p.139). Kikuchi (2011) expanded this definition by including internal forces and defined demotivation as "the specific internal and external forces that reduce or diminish the motivational basis of a behavioural intention or an ongoing action" (p.11). Demotivating factors include external factors related to teacher, subject, learning context and inadequate school facilities, as well as internal factors such as a negative attitude towards the language and reduced self-confidence (Dörnyei and Ushioda 2011).

The present study has shown that most of the participants who reported a decrease in their motivation attributed it to teacher-related factors, which include teacher-student relationship, teaching materials and/or teaching methods (see Section 5.4.3.2). This finding is in line with studies such as Chamber (1993), Dörnyei (1998b, as cited in Dörnyei and Ushioda 2011), Oxford (2001), Zhang (2007), Kikuchi (2009, 2011), Dörnyei and Ushioda (2011) and Alyousif and Alsuhaibani (2021), who also identified teacher-related factors as one of the main sources of demotivation. However, the influence of the teacher can also be positive, as reported by many participants (see Sections 5.4.3.2). They mentioned that the competence of the teacher and a supportive teacher-student relationship changed their negative attitudes to a positive one, and they also became more motivated to learn (see Sections 5.3.5.2 and 5.4.3.2). These responses reinforce the crucial role played by the teacher. While teachers may sometimes negatively influence their students' motivation, their support can also enhance autonomous motivation and persistence in learning for students (Deci and Ryan 1985; Noels et al. 1999).

A few participants attributed the decrease in their motivation to the difficulty of the language or English as a subject. This finding aligns with previous studies, like Chambers (1993), Ushioda (1998) and Sakai and Kikuchi (2009). These studies indicate that some features of learning materials, such as uninteresting content or too many books, are a source of demotivation for students. Addressing this issue, Ushioda (1998) suggests some strategies that might help students restore their motivation, such as: "setting oneself short-term goals, positive self-talk, and indulging in an enjoyable L2 activity that is not monitored in any way by the teacher or by essays or exams" (p. 86), such as watching a movie (see Dörnyei and Ushioda 2011, p.146). The strategies suggested by Ushioda (1998) indicate that, in addition to the important role of the teacher, students have to make some effort to learn the language using

strategies that suit their own individual abilities and interests so as to be remotivated to learn and attain their learning goals successfully.

Furthermore, given the critical role of autonomous motivation in learning (because it is associated with a more positive attitude, less anxiety, more effort to learn and greater achievement), self-determination theory asserts the importance of satisfying learners' basic psychological needs for autonomy, competence and relatedness through autonomy-supportive classrooms. Such a view is supported by many researchers like Noels et al. (1999), Hirmori (2003), Jang et al. (2010), Oga-Baldwin et al. (2017), Alamer and Lee (2019) and Alamer and Almulhim (2021). Teachers can support learner's autonomy though reducing the evaluative nature of classrooms and encouraging students to make their own decisions when performing learning tasks. Their support for students' autonomy results in positive learning outcomes, as earlier studies, like Deci et al. (1981), have shown; they observed that elementary students with autonomy-supportive teachers reported higher intrinsic motivation, perceived competence and self-esteem than students with controlling teachers. Similarly, Standge et al. (2006) note that in British physical education, autonomy support for students results in high autonomous motivation, which in turn is linked to more effort and persistence in learning. Finally, Vansteenkiste et al. (2004) found that having intrinsic goals to learn and autonomy-supportive classrooms result in students' use of deep learning strategies and high performance, as opposed to controlling classrooms.

Students also need to have a sense of competency, which can be achieved when teachers provide them with clear instructions to help them understand learning tasks, and hence expand their learning ability. Furthermore, providing students with informative feedback helps them to understand and master the learning activities at hand. Finally, teachers can support students and help them build a sense of relatedness. It is important that students feel that they are part of a group, and that their teacher cares about them and values them showing autonomous motivation for performing their learning tasks; otherwise, students are very likely only to be controlled by external incentives (Niemiec and Ryan 2009). As such, autonomous motivation contributes to better learning outcomes and teachers play a crucial role in enhancing students' autonomous motivation, academic performance and well-being. In light of this, self-determination theory has important implications for reforming educational policies and the classroom experience in Saudi Arabia.

6.6 Summary

This chapter has discussed the key findings from the quantitative and qualitative analyses with reference to the literature. The main findings in response to the four research questions revealed that students' overall attitudes towards English and the learning situation are positive. There are few students with a negative attitude, which stems from a negative classroom experience. In addition, the types of motivation vary among the three groups, showing an increase in controlled motivation with age due to the influence of the learning context. With respect to foreign language anxiety, the participants showed a moderate level of anxiety, which is, however, negatively influenced by the learning situation in year 11. Further, the findings make clear the association of autonomous motivation with a more positive attitude, less anxiety, more effective effort and better achievement, while exactly the opposite is the case for controlled motivation. Finally, these findings highlight the importance of enhancing students' autonomy.

7. Conclusion

7.1 Introduction

In alignment with Saudi Vision 2030, fluency in English is required in different sectors in Saudi Arabia to prepare Saudi people for the labour market, so they can contribute to the development of the country. In view of this, the ideal for successful language learning nowadays is a learning environment where teachers are facilitators of learning. They help learners to be independent in their learning. Such a view aligns with self-determination theory, which is based on the satisfaction of learners' basic psychological needs for autonomy, competence and relatedness (Ryan and Deci 2017). On the basis of this theory, the present study has aimed to investigate the relationships between affective factors, effort and achievement and to elucidate the obstacles that might hinder successful English learning in Saudi Arabia.

This chapter sets out the conclusion of this study in five sections. The first section (7.2) presents a summary of the key findings of the study. Then, Section 7.3 identifies the contribution of this research to the field of foreign language learning in general, and to the Saudi context in particular. The chapter also states some implications for practice in Section 7.4. Finally, the chapter highlights the limitations of this research and makes recommendations for future research in Section 7.5.

7.2 Summary of findings

This study has utilised both quantitative and qualitative tools (questionnaire and semi-structured interviews) to gain a deeper understanding of the relationships between motivation, attitude, anxiety, effort and achievement when learning EFL. Accordingly, four research questions were addressed in this study:

1- What are Saudi secondary school students' attitudes towards learning English and the learning situation?
2- What types of motivation do Saudi secondary students have for learning English?
3- Which component(s) of foreign language anxiety is/are evident in the experiences of the students when learning EFL?

4- To what extent do learning affective factors (attitudes, motivation, anxiety) influence students' reporting of behaviour and achievement in EFL?

The findings show that attitude and motivation are strong predictors of effort and achievement when learning EFL. Additionally, the influence of the learning situation results in different degrees of affective factors, the effort expended to learn the language and, in turn, learning outcomes. Examining students' effort in addition to their achievement helps to gain better insights into the relationships between affective factors and to explain the variation in learning outcomes.

I found that students' positive attitudes are mostly related to the importance of learning English for utilitarian reasons, which has a strong influence on their motivation, anxiety, effort and, in turn, achievement. However, the strength of this relationship varies across the secondary school years (10, 11 and 12). In particular, among the PLS-SEM models of the three year groups, only the year 12 model shows a significant relationship with achievement. Similarly, in the qualitative analysis, a positive attitude is always associated with high achievement only for year 12. In view of these findings, it seems that students put in more effort when they think it is worthwhile (e.g. for university admission or university studies), which explains why, sometimes, a positive attitude is associated with low achievement in the other year groups (10 and 11). Indeed, attitude has been shown to be a more significant predictor of students' effort and achievement when it is related to the importance of learning English for pragmatic reasons independent of the classroom experience. That is, when students' attitude is related to learning English only as a school requirement, it is subject to a change for the worse once students have a bad classroom experience. Therefore, for more effective language learning, it is important that students set learning goals independent of their classroom experience.

In agreement with self-determination theory, the findings show that autonomous motivation is associated with a more positive attitude, less anxiety and more effective learning effort, which in turn contribute to better learning outcomes. However, the findings suggest as well that controlled motivation is also associated with high achievement for older learners (years 11 and 12 students), which helps to provide a more nuanced approach to our understanding of the interaction between motivation and achievement. Indeed, all year groups have shown autonomous motivation, but there seem to be an increase in controlled motivation for the older year groups, which may be attributed to the educational situation of the students. They are in their final secondary years and closer to university admission than year 10 students. Hence, even when students have autonomous motivation, the need to get high grades for

university admission, which has a bearing on their motivation. Therefore, the influence of the learning context seems to prevent learners from being fully autonomous and makes controlled motivation more salient than autonomous motivation. Finally, the new learning situation of year 11 students, who have to choose a study path that will, in turn, determine their university and career choices, seems to aggravate their anxiety, which negatively influences their learning effort and achievement.

These findings highlight the effectiveness of using self-determination theory to measure students' motivation to learn the language (i.e. autonomous and controlled motivation). This theory is mainly focused on the influence of social-contextual factors supporting or hindering people to flourish through satisfying their basic psychological needs for autonomy, competence and relatedness (Ryan and Deci 2017). The findings provide important insights into how motivation needs to be explored further. They show that motivation is not straightforward as just extrinsic and intrinsic motivation, but rather as autonomous and controlled motivation, which also has been the focus of most recent studies. For example, McEown and Oga-Baldwin (2019) and Alamer and Almulhim (2021) (see Sections 6.5.1 and 6.5.2). The fact that autonomous motivation is associated with better learning outcomes and long-term goals highlights the significance of enhancing students' autonomous motivation.

On the basis of self-determination theory, the Saudi learning context does not seem to be supportive for students to learn effectively. Students seem to be more controlled by external motives and put in effective effort to learn when they think it is worthwhile. Thus, it is important to create autonomy-supportive environments for more effective language learning. Such implications of self-determination theory can be very helpful since the implementation of this study coincides with an era of reform in Saudi Arabia (see Section 2.2.2.2). According to Niemiec and Ryan, "SDT has strong implications for both classroom practice and educational reform policies" (2009, p.133).

In view of this, the study has also shed light on the main factors that influence students' motivation and emphasised the importance of satisfying their psychological needs. The results show that the main factors are teacher- and subject-related. This implies that teachers play a significant role in influencing students' motivation. In view of this, it largely depends on teachers to make the classroom autonomy-supportive because they are aware of their students' concerns and interests. Teachers can address students' concerns through adopting teaching methods that help to satisfy students' basic psychological needs for autonomy, competence and relatedness. On the other hand, controlling teachers make their students lose their sense of autonomy and competence, which results in the fact that students put only minimal effort into

their learning, simply aiming to pass their exams (Noels et al. 1999). Therefore, policymakers and stakeholders in the Saudi education system need to give some thought to the importance of enhancing students' autonomy and creating the conditions needed to increase autonomous motivation and decrease controlled motivation among language learners.

7.3 Contribution of the study

This study contributes to the understanding of the overlapping and complex nature of affective factors (namely, motivation, attitude, anxiety) in language learning using a mixed-methods approach. The review of existing literature (conducted in Chapter 2) indicates that previous studies have primarily focused on these variables individually, and mostly in relation to achievement at the university level. To the best of my knowledge, until now, no studies have examined the influence of affective factors on effort and achievement simultaneously using a mixed-methods approach. Adopting this approach has enabled me to establish the significant role of the learning context in influencing the relationship between affective factors and achievement. Investigating students' effort in addition to their achievement in this study helps to understand why sometimes, a positive attitude or positive motivation does not contribute to high achievement.

Furthermore, while most studies use quantitative methods to measure these factors, combining both quantitative and qualitative methods in this study helps to obtain a deeper understanding of the relationships between the study variables. The findings highlight the significant role of autonomous motivation in the effectiveness of language learning and students' well-being, indicating that the Saudi learning context does not seem to be supportive of autonomy (cf. Alrabai 2017). Therefore, students are more controlled by external motives.

Moreover, most studies on affective factors in the Saudi context tend to target university students. Examining these factors for secondary school students instead contributes to the field in Saudi Arabia because the secondary stage is a transitional stage to university education. Students need to be equipped with a good command of English because it is important for university studies. At university, English is taught as a compulsory subject in all schools, and it is also the medium of instruction in some schools like Medicine or Engineering. In addition, as a global language, English helps students have access to better job opportunities. Therefore, focusing on the secondary stage is important because students still have the chance to improve their language before they start university. The findings offer insights into how these factors

correlate and provide further confirmation of the importance of enhancing students' autonomous motivation for more effective language learning.

7.4 Implications for practice

The findings of this study have implications for teachers, policymakers and stakeholders in the Saudi system of education. When the interviewees were asked for their suggestions for a positive attitude and motivation for learning English and to reduce students' foreign language anxiety, they made some useful suggestions (see Section 3.3.2).

Regarding the enhancement of positive attitudes and motivation to learn English, the students emphasised the critical role of the teacher. They suggested that English teachers should use interesting teaching strategies and learning activities. They also point out that teacher should be supportive and positive because negativity on the part of the teacher results in frustration and demotivation to learn. In relation to this view, some interviewees also emphasised the importance of a supportive environment, not only at school, but also at home, because familial or parental encouragement will help students to be more motivated and successful. Additionally, some students suggest that watching YouTube videos about other people's experiences in learning English can motivate students to learn more. Finally, considering the importance of learning English for students' future makes them more motivated and to have a more positive view of learning English.

With respect to reducing anxiety, the students indicated that their teachers should be caring and supportive. They should listen to students and understand their concerns. They also suggested that teachers should simplify difficult grammatical rules and use Arabic to help students understand learning materials. Additionally, the students emphasised that flexibility from teachers over assignments when students are under stress would help to reduce their anxiety. Last but not least, the students point to watching YouTube videos about the experience of other people in learning the language to reduce students' anxiety. These suggestions by the interviewees emphasise the significant role of the teacher to enhance students' learning.

In addition, the findings of the study align with the students' suggestions, as they highlight the significant impact of autonomous motivation on effective learning. Therefore, it is important to satisfy students' basic psychological needs for autonomy, competence and relatedness. Stakeholders and policymakers should create learning environments supportive of autonomy and design English language curriculums in ways that helps teachers boost students' autonomy. To achieve this, they have to provide the supporting tools and resources needed to create autonomy-supportive classrooms for students. In addition, they have to ensure that

teachers have sufficient training programmes to implement teaching methods that enhance students' autonomous motivation. Traditional rote learning in teacher-centred classrooms continues to be a typical feature of classrooms in Saudi Arabia (Tamer 2013; Alrabi 2017; 2019). Therefore, learning environments in Saudi Arabia need to shift from teacher-centred to student-centred to promote students' autonomy.

Moreover, as pointed out in Section 5.3.3, the students' views on courses suggest that it is important to allow students to have a voice in their learning and make their own decisions, which fulfils their need for autonomy. Primarily, teachers need to have a role in planning and designing the learning curriculum to fulfil their students' needs and interests. Once teachers feel more autonomous, it will be reflected in their teacher-student relationships.

Furthermore, as shown in Section 5.5, the quotes on foreign language anxiety show that students' fear of reading in English, pronouncing new words and communicating in English with their peers or teachers seem to be linked to evaluative situations. Thus, the language classroom seems to be evaluative in nature. Although teachers are required to constantly evaluate their students' performance, they can minimise this evaluative nature by encouraging students to answer and participate in learning activities even if they make mistakes. Moreover, providing students with clear instructions for learning activities and giving them informative feedback will help them master their learning (i.e. foster their competence), which will increase their motivation to learn and reduce their anxiety (see Sections 5.4.3.4 and 5.5.2.1). Finally, the interviewees highlighted the critical role of significant others (family, friends and teachers) in encouraging them to learn. Such a view suggests that satisfying students' need for relatedness has a positive impact on their learning (see Sections 5.4.3, 5.3.5 and 5.5.2). Such practices by stakeholders would be expected to be effective and fruitful and increase students' needs satisfaction, which will subsequently contribute to better learning outcomes and well-being.

To conclude, the findings of the present study have important implications for learning and teaching contexts in general, and the Saudi context in particular. The positive influence of autonomous motivation on language learning urges the need for autonomy-supportive classrooms. Classrooms need to change from teacher-centred to learner-centred, where the teacher is a facilitator of learning, not just a content provider. Students should be involved and participate actively in their learning. Teachers should apply the teaching methods that satisfy students' basic psychological needs for autonomy, competence, and relatedness. Students should be given the opportunities to make their own decisions in learning and to be less controlled by the teacher. That is, teachers should afford students the chance to choose amongst

different learning tasks and make their own decisions so that they can satisfy their need for autonomy. Previous studies have shown that controlling events in the classroom such as deadlines of assignments, tests, and competitions reduce students' self-determination. This is because when learners concentrate on the aim of winning rather than on the process of performing the task well, they are extrinsically motivated (Amabile et al 1976; Deci et al 1981; and Amabile 2018). Moreover, teachers should give students positive and informational enough feedback to help them master the learning tasks and to enhance their perceived competence. Thus, students feel competent and more self-confident, which helps them to be more motivated and less anxious. Finally, students need to feel that they are parts of a group and are valued in order to satisfy their need for relatedness. Satisfying these psychological needs for students would result in better learning outcomes and wellbeing (Niemiec and Ryan 2009; Ryan and Deci 2020; and Alamer and Almulhim 2021).

7.5 Limitation of the study and recommendations for future research

This study has some limitations that need to be acknowledged. The first limitation is in relation to the variables examined in this study, due to the significant role of autonomous motivation on learning, future research into the relationships between affective factors should include types of motivation as separate variables (i.e. autonomous motivation and controlled motivation) instead of motivation as a variable and the subtypes of extrinsic and intrinsic motivation as indicators. The results would then be more informative in terms of explaining specifically how autonomous and controlled types of motivation are related to other variables that influence students' effort and achievement. Thus, future research endeavours need to explore further autonomous and controlled motivation instead of extrinsic and intrinsic motivation as the latter may not be sufficient to foster long-term persistence in learning (see Section 6.3).

Second, this study has used a cross-sectional design to investigate the relationships between attitudes, motivation, anxiety, effort and language achievement. While this limitation did not prevent answering the research questions, the design of the present study only allows depicting associations between the study variables. In future research, it would be better to employ a longitudinal design to address cause-and-effect relationships among the variables.

Third, the participants of the present study were 133 students from a single secondary school in Saudi Arabia. Although this small sample was adequate to answer the research questions, it does not allow for generalising the findings to all secondary students in Saudi Arabia. However, even with a large sample size, the findings still cannot be generalised because learners are different, and learning contexts are also different. Generalisation might be possible if further studies are conducted in secondary schools from different regions in Saudi Arabia. Furthermore, due to the segregated nature of the Saudi education system, this study used a single-sex sample (females only) and, as such, is not representative for all Saudi learners of English. Thus, conducting a similar study including male students would provide a more comprehensive representation of the relationships between affective factors and the effort and achievement of students learning English in secondary schools, because gender differences have been shown in earlier studies. For example, Abu-Ghararah (1999) conducted a study on Saudi secondary and university students and found that males had higher levels of anxiety than females. Furthermore, in language motivation research on Saudi university students, Javid et al. (2012) and Daif-Allah and Aljumah (2020) found that females were more motivated to learn English than males.

Finally, the tools used in this study (questionnaire and semi-structured interviews) are self-reported. As noted by Ushioda (2008, p.29), "the most promising line of inquiry lies in enabling language learners' voices and stories to take centre stage". Thus, using interviews along with a questionnaire allowed students' voices to emerge. The complex nature of the data collected, examining intertwined learning factors, and detailed quantitative and qualitative analyses, allowed me to answer the research questions and outline significant implications for learning contexts and the Saudi education context in particular (see Section 7.4). However, these types of tools tend to be biased because participants may not provide true information due to what is commonly called "social desirability or prestige bias" (Dörnyei 2003b). People might present themselves in a more favourable way by giving responses they believe the researcher expects or likes. Such a discrepancy between actual and reported responses can be minimised by anonymising the responses to promote their truthfulness (Dörnyei 2003b), a procedure that has been followed in this study. For future research, it would be helpful to include other tools like classroom observation to measure the actual learning behaviour and to get a deeper understanding of the learning context. Such tools would help to provide better insights into the nature of the classroom environment, whether it is controlling or autonomy-supportive, whether teachers are learning facilitators or content providers etc. In addition, classroom observation would also help to obtain valuable insights into classroom interaction

(student-student and student-teacher interaction). Furthermore, issues raised by the students related to teachers and subjects (e.g. study topics and teaching methods) can be examined more thoroughly. However, due to time constraints and the complex nature of the study, observation was not employed in this research.

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Appendices

Appendix A (Parents' information and consent form for questionnaire and interviews)

Appendix A.1: Parents' Information and Consent Form: questionnaire and interviews (the English version)

Researcher's name: Aeshah Alnemari
Project: Analysing Affective Factors in Relation to Students' Achievement and Behaviour in EFL in Saudi Arabia.

My PhD dissertation aims to investigate the correlation between several affective language learning variables (motivation, attitudes, and anxiety), students' achievement and behaviour. Understanding this correlation will contribute to improving students' achievement in learning English as a foreign language in general and in Saudi Arabia in particular. Accordingly, this research promises to provide valuable insights that should be taken into consideration by teachers, parents and the students themselves.

In order for the research to be successful, I need to:
(1) Gather information about the students' aforementioned learning variables: I will do this by asking all the students in grades 10, 11, and 12 to fill in a questionnaire and by requesting volunteers to take part in an interview. All the students will be asked to volunteer for the interview; their teachers will decide which students are selected for the interview from those who have volunteered, taking into consideration the need to have two students from each achievement level in each grade. The interviews will be audio-recorded for analysis purposes and all the recordings will be deleted when this degree is completed. Students will be identified by their academic number, so as to protect their anonymity.

(2) Have access to the students' achievement scores: At the end of the term, the school will send me the participants' achievement scores. This information will be provided anonymously by using the participants' academic numbers. I will not access this information until the coding of the questionnaire and interview data is completed, so as to avoid any bias.

All data will be anonymous and will be stored securely, with restricted access (only the researcher and her supervisors will have access to them). No identifying information will be collected. The data collection and analysis will be for the purposes of my PhD dissertation. The results from this study will be published in my dissertation for Cardiff University and may also be disseminated further in the academic community either in conferences or academic journals. Your child's participation in the study will not impact upon their academic results, as their teachers will not be informed about the answers of any specific student.

Please note that, in keeping with the guidelines of the Saudi Government and the University of Cardiff's Ethics Committee, the *** Secondary School will assume that parent / carer consent for the child's participation in this study has been given unless you contact the School to say that you do not give your permission for your child to take part in the study. If you do not want your child to take part in this study, it would be very helpful if you would contact the school by 25/10/2018. Both you and your child have the right to request her withdrawal from this study at any point without giving a reason.

If you have any questions, please feel free to contact me via e-mail (AlnemariAF@cardiff.ac.uk). You can also send your queries to my supervisors: Dr Sara M. Pons-Sanz (pons-sanz@cardiff.ac.uk) and Dr Michelle Aldridge-Waddon (AldridgeM@cardiff.ac.uk).

Thank you very much for your cooperation. I really appreciate your help.

Appendix A.2: Participants' information and consent form for questionnaire (the Arabic version)

أطروحة الدكتوراه الخاصة بي تهدف إلى بحث العلاقة بين بعض العوامل المؤثرة في تعلّم اللغة (الدوافع، المواقف من اللغة، القلق) وتحصيل الطالبات وسلوكياتهن تجاه تعلم اللغة الإنجليزية. فهم هذا العلاقة سيسهم في تحسين مستوى تحصيل الطالبات في تعلّم اللغة الإنجليزية كلغة أجنبية بشكل عام وفي المملكة العربية السعودية بشكل خاص. وبناء على ذلك، يعد هذا البحث بتقديم رؤى قيمة يجب أن تأخذ بعين الاعتبار من قبل المعلمات وأولياء الأمور والطالبات أنفسهن.
لكي يكون البحث ناجح احتاج إلى:

١- جمع معلومات حول عوامل تعلم اللغة المذكورة أعلاه: سأفعل ذلك عن طريق مطالبة جميع الطالبات في الصوف ١٠، ١١، و١٢بملء استبانة وطلب متطوعات للمشاركة في مقابلة. سيطلب من جميع الطالبات التطوع للمقابلة، وسيقررن معلماتهن الطالبات الذين تم اختيارهن من أولئك المتطوعات، مع الأخذ في الاعتبار ضرورة وجود طالبتين من كل مستوى تحصيلي في كل صف، سيتم تسجيل المقابلات صوتيا لأغراض التحليل وسيتم حذف جميع التسجيلات عند الحصول على الدرجة، سيتم التعرف على الطالبات من خلال ارقامهن الاكاديمية، وذلك لحماية عدم الكشف عن هوياتهن.

٢- الحصول على درجات تحصيل الطالبات: في نهاية الفصل الدراسي سترسل لي المدرسة درجات تحصيل الطالبات المشاركات، وسيتم تزويدي بهذه المعلومات بدون الكشف عن هوية الطالبات وذلك عن طريق ارقامهن الاكاديمية. لن أتمكن من الحصول على الدرجات حتى يتم الانتهاء من ترميز بيانات الاستبانة والمقابلة لتجنب أي تحيز.

جميع البيانات ستكون مجهولة وسيتم تخزينها بشكل آمن مع وصول مقيد فقط (لن يطلّع عليها سوى الباحثة ومشرفتيها) . لن يتم جمع أي معلومات تعريفية. كما أن جمع البيانات وتحليلها سيكون لغرض أطروحة الدكتوراه. نتائج هذه الدراسة سيتم نشرها في اطروحة الدكتوراه بجامعة كارديف ومن الممكن أن يتم نشرها في المجتمع الأكاديمي إما في مؤتمرات أو في مجلات علمية. مشاركة ابنتك في الدراسة لن تؤثر على نتائجها الدراسية، حيث لن يتم ابلاغ معلماتهن بإجابات أي طالبة معينة.

يرجى ملاحظة انه تماشيا مع توجيهات الحكومة السعودية ولجنة الاخلاقيات بجامعة كارديف، ستفترض الثانوية *** ان موافقة ولي الأمر على مشاركة الطالبة في هذه الدراسة قد اعطيت مالم تتواصل مع المدرسة لتخبرهم بأنك لا تمنح الاذن لابنتك للمشاركة في الدراسة . في حال عدم رغبتك بمشاركة ابنتك. فمن الأفضل التواصل مع المدرسة في موعد اقصاه ٢٠١٨/١٠/٢٥. كما ان لك الأحقية ولابنتك طلب الانسحاب من الدراسة في أي وقت بدون ابداء سبب لذلك.

إذا كان لديك أي استفسار يُرجى التواصل مع الباحثة عن طريق البريد الإلكتروني:

AlnemariAF@cardiff.ac.uk

كما يمكنك ارسال استفسارك للمشرفات على البحث بجامعة كارديف على عناوين البريد الإلكتروني التالية:

AldridgeM@cardiff.ac.uk , pons-sanz@cardiff.ac.uk

شكراً جزيلاً لتعاونك وأقدر فعليا مساعدتك.

Appendix B (Participants' information and consent form for questionnaire)

Appendix B.1: Participants' information and consent form for questionnaire (the English version)

This research project is for my PhD dissertation, and it aims to investigate the correlation between several affective language learning variables (motivation, attitudes and anxiety), students' achievement and behaviour.

This research will shed a light on the importance of these variables and thus it should be taken into consideration by teachers, parents, and the students themselves. Understanding this correlation will contribute to improving students' achievement in learning English as a foreign language in general and in Saudi Arabia in particular.

In order for the research to be conducted, the school will send me the participants' achievement scores once the analysis of the questionnaire data has been completed. This information will be provided anonymously by using the participants' student numbers.

You will be asked to complete a questionnaire by choosing the applicable answers. Also, if you have any comments, please do not hesitate to add them in the open box provided at the end of the questionnaire. The questionnaire is expected to take approximately twenty minutes to complete.

All data will be anonymous and will be stored securely, with restricted access (only the researcher and her supervisors will have access to them). No identifying information will be collected. The data collection and analysis will be for the purposes of my PhD dissertation. Your participation in the study will not impact upon your academic results. The results from this study will be published in my dissertation for Cardiff University and may also be disseminated further in the academic community either in conferences or academic journals.

You have the right to withdraw from this study at any point without giving a reason. If you have any questions, please contact the researcher via the email AlnemariAF@cardiff.ac.uk. Also, you can send your inquiries to the supervisors of this research at Cardiff University to the following email addresses:

pons-sanz@cardiff.ac.uk , AldridgeM@cardiff.ac.uk.

Thank you very much for participating in this study. I really appreciate your cooperation by filling out this questionnaire as accurately as possible.

The researcher named above has briefed me to my satisfaction on the research for which I have volunteered. I understand that the school will send my level of achievement to the researcher anonymously to compare it with the research findings. I understand that I have the right to withdraw from the research at any point without giving a reason. I also understand that my rights to anonymity and confidentiality will be respected.

Participation in the study:

☐ I consent to the information stated above

☐ I don't consent to the information stated above

Appendix B.2: Participants' information and consent form for questionnaire (the Arabic version)

إن مشروع البحث هذا لأطروحة الدكتوراه الخاصة بي ويهدف إلى بحث العلاقة بين بعض العوامل المؤثرة في تعلّم اللغة (الدوافع، المواقف من اللغة، القلق) وتحصيل الطالبات وسلوكياتهن تجاه تعلم اللغة الإنجليزية. بحث العلاقة بين هذه العوامل يبين أهميتها ولذا يجب أن تؤخذ بعين الاعتبار من قبل المعلمات والوالدين والطالبات أنفسهن حيث إنّ فهم هذا العلاقة سيسهم في تحسين مستوى تحصيل الطالبات في تعلّم اللغة الإنجليزية كلغة أجنبية بشكل عام وفي المملكة العربية السعودية بشكل خاص.

سيُطلب منك تعبئة الاستبانة باختيار الإجابة الأكثر ملائمة لك وإذا كان لديك أية ملاحظات تودين إضافتها لا تترددي في كتابتها في المكان المخصص في نهاية الاستبانة. ستستغرق تعبئة الاستبانة منك عشرون دقيقة تقريبا.

جميع البيانات ستكون مجهولة وسيتم تخزينها بشكل آمن مع وصول مقيد فقط (لن يطلّع عليها سوى الباحثة ومشرفتيها) كما أن جمع البيانات وتحليلها سيكون لغرض أطروحة الدكتوراه. إن مشاركتك في الدراسة لن تؤثر على نتائجك الدراسية. نتائج هذه الدراسة سيتم نشرها في اطروحة الدكتوراه بجامعة كارديف ومن الممكن أن يتم نشرها في المجتمع الأكاديمي إما في مؤتمرات أو في مجلات علمية. لك الأحقية في الانسحاب من الدراسة في أي وقت بدون اعطاء سبب لذلك. إذا كان لديك أي استفسار يُرجى التواصل مع الباحثة عن طريق البريد الإلكتروني: AlnemariAF@cardiff.ac.uk

كما يمكنك ارسال استفسارك للمشرفات على البحث بجامعة كارديف على عناوين البريد الإلكتروني التالية:

AldridgeM@cardiff.ac.uk , pons-sanz@cardiff.ac.uk .

شكراً جزيلاً للمشاركة في هذه الدراسة وأقدر فعليا تعاونك في تعبئة الاستبانة بدقة تامة.

أنا طالبة الثانوية المشاركة في هذه الدراسة قد تم اخباري بملخص البحث الخاص بالباحثة المدونة أعلاه كما أعلم بأن لي أحقية الانسحاب من الدراسة في أي وقت بدون اعطاء سبب لذلك. كما اتفهم احترام حقوقي وحفظ بياناتي بكل سرية.

المشاركة في الدراسة:

☐ أوافق على المعلومات المدونة أعلاه

☐ لا أوافق على المعلومات المدونة أعلاه

Appendix C (Questionnaire)

Appendix C.1: Questionnaire (the English version)

1-I learn English because of its importance in getting a better job in the future.

2- English is one of my favourite courses.

3- I tremble when I know I am going to be called on in the English class.

4- I learn English because I would feel ashamed if I could not speak a second language.

5-My English course is boring.

6-Learning English is important to me because I want to get high marks in English proficiency tests (as IELTS and TOEFL).

7-I am usually at ease during tests in my English language course.

8-English is a burden for me.

9-I learn English for the pleasure I experience when I do well in my English class.

10- In the English class, I feel relaxed.

11-Learning English is important to have a better salary in the future.

12 -I would like to study English even if I were not required.

13- I don't usually get anxious when I have to respond to a question in my English classes.

14- learning English helps me develop a more positive self-image.

15-I learn English because I feel happy when hearing foreign languages spoken.

16- I feel confident when I speak in English language classes.

17-I really like learning English.

18- I don't worry about making mistakes in the English class.

19-I learn English for the happiness I experience while I speak in English.

20-My English teacher is a great source of inspiration to me.

21-When I am studying English, I ignore distractions and stick to the job at hand.

22-Learning English can broaden my outlook in life.

23-In the English class, I can get so nervous I forget things I know.

24- I tend to approach my English homework in a random and unorganised manner. 25-I learn English because I think it is good for my personal development.

26- I prefer to see an English film dubbed in Arabic to the film in its original language with Arabic subtitles.

27-I don't understand why some students get so upset over English language classes.

28- I am afraid that the other students will laugh at me when I speak English.

29-I find studying English very boring.

30-I feel confident when asked to participate in my English class.

31-I learn English for the pleasure I get from hearing English spoken by native English speakers.

32- It frightens me when I don't understand what the teacher is saying in English.

33-I would prefer to have a different English teacher.

34- I learn English for the enjoyment I experience when I grasp a difficult construct in the second language.

35 -I don't pay too much attention to the feedback I receive in my English class.

36- English is an important part of the school program.

37- I make a point of trying to understand all the English I see and hear.

38- I worry about the consequences of failing my English language course.

39-Learning English is important to me because I would like to spend a longer period living abroad (e.g. studying and working).

40-I don't get anxious when I am asked for information in my English class.

41- I always feel that the other students speak English better than I do.

42-My English teacher is inconsiderate.

43-I learn English for the satisfaction I feel when I am in the process of accomplishing difficult exercises in the second language.

44-My English course is difficult.

45-I am working hard at learning English.

46- Learning English is important to me, so that I can read English books, newspapers, or magazines.

47-I learn English because I want to be the kind of person who can speak more than one language.

48-I learn English to impress the people around me.

49-My English teacher has an interesting teaching style.

50-I learn English because an educated person is supposed to be able to speak English.

51-My English course is enjoyable.

52-I feel very self-conscious about speaking English in front of other students.

Appendix C.2: Questionnaire (the Arabic version)

١-أتعلّم الإنجليزية لأهميتها في الحصول على وظيفة أفضل في المستقبل.

٢-الإنجليزية هي إحدى موادي المفضلة.

٣-أرتجف عندما أعرف أنّني سأُسْأَل في حصة الإنجليزية.

٤-أتعلّم الإنجليزية لأنني أشعر بالخجل إذا كنت لا أستطيع التحدث بلغة ثانية.

٥- مادة الإنجليزية مملة.

٦- تعلّم الإنجليزية مهم بالنسبة لي لأنني أريد الحصول على درجات عالية في اختبارات اتقان اللغة الإنجليزية مثل الآيلتس والتوفل.

٧- عادة أشعر بالاطمئنان أثناء تأدية اختبارات اللغة الإنجليزية.

٨- الإنجليزية عبأ بالنسبة لي.

٩- أتعلّم الإنجليزية لأنني استمتع عندما أؤدي بشكل جيد في حصة الإنجليزية.

١٠- في حصة الإنجليزية أشعر بالراحة.

١١- تعلّم الإنجليزية مهم للحصول على راتب أفضل في المستقبل.

١٢- أود أن أدرس الإنجليزية حتى وإن لم أكن ملزمة بذلك.

١٣- في العادة لا أشعر بالقلق عندما يتوجب عليّ إجابة سؤال في حصص الإنجليزية.

١٤- تعلّم الإنجليزية يساعدني على تطوير صورة أكثر إيجابية عن نفسي.

١٥- أتعلّم الإنجليزية لأنني أشعر بالسعادة عند سماع لغات أجنبية.

١٦- أثق من نفسي عندما أتحدث في حصص الإنجليزية.

١٧- أنا حقاً أحب تعلّم الإنجليزية.

١٨- لا يقلقني ارتكاب الأخطاء في حصة الإنجليزية.

١٩- تعلّم الإنجليزية لأنني أشعر بالسعادة عندما أتحدث الإنجليزية.

٢٠- معلمتي في مادة الإنجليزية مصدر الهام كبير بالنسبة لي.

٢١- عندما أدرس الإنجليزية أتجاهل الملهيات وألتزم بما بين يديّ.

٢٢- أتعلّم الإنجليزية لتتسع نظرتي في الحياة.

٢٣- في حصة الإنجليزية ممكن أن أشعر بتوتر لدرجة أنّني أنسي الأشياء التي أعرفها.

٢٤- أميل لحل واجباتي المنزلية بطريقة عشوائية وغير منظمة

٢٥- أتعلّم الإنجليزية لأنني أعتقد أنّ ذلك جيدًا لتطوري الشخصي.

٢٦- أفضّل مشاهدة فيلم مدبلج بالعربية على الفيلم بلغته الأصلية(الإنجليزية) مع الترجمة للعربية.

٢٧- لا أفهم لماذا يشعرن بعض الطالبات بالتوتر الشديد في حصص الإنجليزية.

٢٨- أخشى أن يضحكن عليّ الطالبات الأخريات عندما أتحدث الإنجليزية.

٢٩- أجد أنّ دراسة الإنجليزية جداً مملة

٣٠- لدي ثقة بنفسي عندما أُسْأَل للمشاركة في حصة الإنجليزية

٣١- أتعلّم الإنجليزية لأنني استمتع عند سماع الإنجليزية من المتحدثين الأصليين.

٣٢- أشعر بالخوف عندما لا أفهم ما تقوله معلمة الإنجليزية.

٣٣- أفضّل أن يكون لدي معلمة أخرى في مادة الإنجليزية.

٣٤- أتعلّم الإنجليزية لأنني استمتع عندما أفهم فكرة معقدة في الإنجليزية كلغة ثانية.

على أدائي في حصة الإنجليزية. ٣٥- لا أُعير اهتمامًا للملاحظات التي اتلقاها من المعلمة

٣٦- الإنجليزية جزء مهم في البرنامج المدرسي.

٣٧- أحرص على محاولة فهم كل ما أسمعه وأراه بالإنجليزية.

٣٨- اقلق من عواقب الرسوب في الإنجليزية.

٣٩- أتعلّم الإنجليزية لأنني أريد أن أقضي وقتًا طويلًا للعيش خارج البلاد (مثلًا للدراسة والعمل).

٤٠- لا أشعر بالقلق عندما أَسْأَل عن معلومات في حصة الإنجليزية.

٤١- دائمًا أشعر بأن الطالبات الأخريات يتحدثن الإنجليزية أفضل مني.

٤٢- معلمتي في مادة اللغة الإنجليزية غير متفهمة ومراعية لمشاعر الآخرين.

٤٣- أتعلّم الإنجليزية لأنني أشعر بالرضا عندما أنجز تمارين صعبة في الإنجليزية كلغة ثانية.

٤٤- مادة الإنجليزية صعبة.

٤٥- أعمل بجدية لتعلّم الإنجليزية.

٤٦- أتعلّم الإنجليزية لأتمكن من قراءة الكتب والصحف والمجلات الإنجليزية.

٤٧- أتعلّم الإنجليزية لأنني أريد أن أكون الشخص الذي يستطيع التحدث بأكثر من لغة.

٤٨- أتعلّم الإنجليزية لأثير إعجاب الناس من حولي.

٤٩- لدى معلمتي في مادة الإنجليزية أسلوب تدريس ممتع.

٥٠- أتعلّم الإنجليزية لأن الشخص المثقف من المفترض أن يكون قادر على التحدث بالإنجليزية.

٥١- مادة الإنجليزية ممتعة.

٥٢- أشعر بالخجل جدًا عند التحدث بالإنجليزية أمام الطالبات الأخريات.

Appendix D (Interviews)

Appendix D.1: Interview questions (the English version)

Attitudes

1-What do you think about learning English?

2-What is your attitude towards learning English?

3-Do you do any activities outside the school framework to learn English?

4-How important is the English language teacher and the English syllabus in learning the language?

5-In your opinion, how do you prefer your English teacher to be, what is her characteristics?

6-What do you think of your English syllabus?

7-Since you have started learning English, has your attitude toward English, the teacher, and the syllabus changed?

8-What are the factors that may influence your attitudes toward learning English?

9-Do you think your performance in English exams is influenced by whether you like your teacher and the subject, or not?

10-What are your suggestions to enhance students' positive attitudes toward learning English? Or if they have a negative attitude, how would you help them to change it to a positive one?

Motivation

1-Do you enjoy learning English?

2-Imagine that we are in an ideal world and that English is not an international language and it is not important to learn. Would you still learn it?

3-Do you have any other reasons?

4-Since you have started learning English, have your motivations changed or remained the same? Why?

5-What are the factors that influence your motivation?

6-Do you think that your motivation influences your performance in the exam? Can you explain how?

7-What are your suggestions to enhance students' motivation to learn English?

Anxiety

1-Have you ever experienced anxiety in English classes?

2-What are the situations or reasons that make you anxious?

3-If you don't understand something, do you ask your teacher to explain or repeat?

4-What are the factors that influence your anxiety?

5-Do you think that the level or the reasons for your anxiety have changed or remained the same?

6-Do you think that your performance in the exam is influenced by anxiety?

What are your suggestions to reduce students' anxiety?

Concluding question

Would you like to add anything to our discussion about learning English that you think is important and I overlooked?

Appendix D.2: Interview questions (the Arabic version)

الاتجاهات أو المواقف

- ما هو رأيك في تعلّم الإنجليزية؟ ١

٢- ما هو موقفك تجاه تعلّم الإنجليزية؟

٣- هل تبذلين أي جهود خارج الإطار المدرسي لتعلّم اللغة الإنجليزية؟

٤- ما مدى أهمية المعلمة أو المنهج الدراسي في تعلم اللغة الإنجليزية؟

٤- منذ أن بدأت تعلّم اللغة الإنجليزية هل تغير موقفك تجاه اللغة، المعلمة، والمادة) أم بقيت كما هي؟

٥- ماهي العوامل التي تؤثر على موقفك تجاه تعلّم الإنجليزية؟

٦- هل تعتقدين أن ادائك في الامتحان يتأثر بمدى حبك للمعلمة والمادة أم لا؟

٧- ماهي اقتراحاتك لتعزيز مواقف الطالبات الإيجابية تجاه تعلّم اللغة الانجليزية؟ أو إذا كان لديهن مواقف سلبية كيف يمكن أن تتحول إلى إيجابية؟

الدافعية

١-هل تستمعين بتعلّم الإنجليزية؟

٢- تخيلي أنه احنا في عالم مثالي واللغة الإنجليزية ليست لغة عالمية وليس من المهم تعلمها هل ستتعلمينها؟

٢- هل لديك أسباب أخرى؟

٣- منذ أن بدأت تعلّم اللغة الإنجليزية، هل تغيرت دافعيتك لتعلّم اللغة أم بقيت كما هي؟

٤- ماهي العوامل التي تؤثر على دافعيتك؟

٥- هل تعتقدين أن دافعيتك تؤثر على أدائك في الامتحان؟ هل يمكنك التوضيح كيف؟

٦- ماهي اقتراحاتك لتعزيز دافعية تعلّم اللغة الإنجليزية لدى الطالبات؟

القلق

١-هل سبق وأن عانيت من القلق في حصص اللغة الإنجليزية؟ في حالات معينة؟

٢- ماهي الحالات أو الأسباب التي تجعلك متوترة؟

٣- إذا لم تفهمي شيء ما، هل تسألين معلمتك أن تشرح أو تكرر؟

٤- هل تعتقدين أن مستوى أو أسباب توترك تغيرت أو بقيت كما هي؟

٥- ماهي العوامل التي تؤثر على القلق لديك؟

٧- هل تعتقدين أنّ قلقك يؤثر على أدائك في الامتحان؟

٨- ماهي اقتراحاتك للحد من القلق لدى الطالبات؟

السؤال الختامي:

هل لديك أي اضافة عن تعلم اللغة الإنجليزية تعتقدين انها مهمه وانا اغفلتها في نقاشنا؟

Appendix D.3: An example of an interview with a student (Participant 5) (the English version)

In the beginning I explained the three affective language learning variables that would be discussed in the interview.

Researcher: What do you think about learning English?

Student: It is important because if we want to study abroad, we need to have a good understanding of English.

Researcher: What is your attitude toward learning English? Do you have a positive or negative attitude?

Student: It is positive.

Researcher: Why?

Student: I like English; therefore, I should learn it.

Researcher: What are other reasons that make your attitude positive?

Student: My mother always encourages me to learn English because she wants me to be an English teacher.

Researcher: Do you do any activities outside the school framework or you only stick to what you learn at school and don't do anything else?

Student: I watch videos on YouTube, follow some accounts on Twitter. I watch English drama movies and all of them are without Arabic subtitles.

Researcher: Excellent. Do you think that this improves your language more than watching them with subtitles?

Student: Yes.

Researcher: If you go to a hospital or a shop and the workers there speak English, or if you go to a restaurant and the menu is in English, do you try to speak in English, or just in Arabic?

Student: I try to speak in English, but if I don't know something, I use Google Translate everywhere in a hospital, restaurant, airport…etc.

Researcher: How important is the English language teacher and the English syllabus in learning the language?

Student: The teacher has an important role because she teaches me and improves my English language more.

Researcher: Okay, what about the syllabus?

Student: I think it is very good and beneficial. It also has grammar.

Researcher: Since you have started learning English, has your attitude toward English, the teacher, and the syllabus changed?

Student: No, it hasn't. It has always been positive.

Researcher: What are the factors that might influence your attitudes to be always positive?

Student: My mother.

Researcher: What else?

Student: I myself like it.

Researcher: What about your teacher, do you think that she can influence your attitude toward English?

Student: Yes, of course. She makes me like it more.

Researcher: If you didn't have a good teacher, would you hate English?

Student: I would hate the teacher but not the subject of English.

Researcher: Do you think your performance in English exams is influenced by whether you like your teacher and the subject, or not?

Student: No, it is not, because my relationship is with the language itself, not the teacher nor the subject.

Researcher: Okay, what are your suggestions to enhance students' positive attitudes toward learning English, or if for example your friend has a negative attitude, how would you help her to change it to a positive one?

Student: I would advise her to buy books, to read more in English. For me, at first, I didn't like English, but as time passed, I started to like it. That means if they read English stories and books, they will like the language.

Researcher: Now, we will move to the next section which is motivation. Do you enjoy learning English?

Student: Yes, very much.

Researcher: Imagine that we are in an ideal world and that English is not an international language and it is not important to learn. Would you still learn it?

Student: Yes, I would learn it so that if I want to travel to America, for example, I can speak English.

Researcher: Do you have any other reasons?

Student: To be able to teach my kids in the future. That means to be a teacher, I need to have experience.

Researcher: Okay, what are the factors that influence your motivation to learn English either negatively or positively?

Student: Exams, that is if many chapters are included in the exam, I feel very anxious, and I can't study well because I fear getting a low grade in the exam.

Researcher: So, when you feel pressured you become less motivated?

Student: Yes.

Researcher: Do you think that your motivation influences your performance in the exam?

Student: Yes, sometimes.

Researcher: Positively or negatively?

Student: Positively.

Researcher: What are your suggestions to enhance students' motivation to learn English?

Student: I would advise them and try to help them. If they don't know something, I would explain it to them.

Researcher: Okay. Now, we will move to the third section which is anxiety. Have you ever experienced anxiety in English classes?

Student: Yes, when I started learning English in the primary and intermediate stages. When I was in the intermediate stage, I was afraid that I would find English hard.

Researcher: Did you always feel anxious in all English classes or just sometimes?

Student: Just sometimes.

Researcher: When is that, in which situations?

Student: When I was not ready.

Researcher: What about in the secondary school, have you gotten rid of anxiety?

Student: Yes, thank God.

Researcher: What is the reason for that?

Student: Frankly speaking, I don't know, because every day I try to prepare at home. But even if I make mistakes, I don't care about what others might say, whereas before in the intermediate stage, I didn't want to make mistakes and other students to laugh at me.

Researcher: Excellent. What about in exams, do you feel anxious?

Student: If I had been absent in a lesson and I had a question in the exam from that lesson, I would feel anxious.

Researcher: Okay, if you don't understand something, do you ask your teacher to explain or repeat?

Student: Yes, I do.

Researcher: Do you ask her in English or in Arabic?

Student: Sometimes in English, sometimes in Arabic.

Researcher: Do you think that the reasons for your anxiety have changed or remained the same?

Student: In the past, I used to get anxious if I didn't know something, but currently anxiety has disappeared completely.

Researcher: Do you think that your performance in the exam is influenced by anxiety?

Student: Yes, when I am anxious, I forget everything.

Researcher: So, do you mean it influences you negatively?

Student: Yes, because I study hard, but when I see the exam paper, I become anxious, and I forget everything.

Researcher: What are your suggestions to reduce students' anxiety? If you are anxious, how would you like others to treat you?

Student: First of all, I would try to be self-confident when I answer a question. Even if other students might laugh at me, it is okay. They will forget it as time passes. Or maybe if they laugh, I will have a reaction to study harder and do better.

Researcher: Imagine that you are a teacher, and you have an anxious student, how would you treat her?

Student: I would advise her not to be afraid and try to explain to her more.

Researcher: Would you like to add anything to our discussion about learning English that you think is important and I overlooked?

Student: No, I wouldn't.

Researcher: Okay, that's all. Thank you.

Appendix D.4: An example of an interview with a student (Participant 5) (the Arabic version)

في البداية شرحت للطالبة العوامل العاطفية الثلاثة التي سيتم مناقشتها

الباحثة: ما هو رأيك في تعلم اللغة الإنجليزية؟

الطالبة: شيء مهم عشان إذا بنتعلم في الخارج يكون عندنا فهم جيد للغة الإنجليزية.

الباحثة: ما هو موقفك تجاه تعلم اللغة الإنجليزية؟ هل لديك موقف سلبي أو إيجابي؟

الطالبة: إيجابي

الباحثة: لماذا؟

الطالبة: أنا أحب اللغة الإنجليزية لذلك لازم أتعلمها.

الباحثة: ماهي الأسباب الأخرى التي جعلت موقفك إيجابي؟

الطالبة: أمي دائما تشجعني إني أتعلم اللغة الإنجليزية لأنها تريد أن أصبح معلمة لغة إنجليزية.

الباحثة: هل تبذلين أي جهد خارج الإطار المدرسي أو فقط تكتفين بما تتعلين في المدرسة؟

الطالبة: أشاهد مقاطع يوتيوب، اتابع حسابات في تويتر، واشاهد أفلام دراما وكلها بدون ترجمة.

الباحثة: ممتاز. هل تعتقدين ان هذا أثرى اللغة لديك أكثر من مشاهدة الأفلام المترجمة؟

الطالبة: نعم

الباحثة: لو ذهبت إلى مستشفى أو للسوق والعاملين يتحدثون الإنجليزية، أو لو ذهبت إلى مطعم وقائمة الطعام باللغة الإنجليزية، هل تحاولين التحدث باللغة الإنجليزية أو فقط بالعربي؟

الطالبة: أحاول التحدث باللغة الإنجليزية لكن إذا ما عرفت شيء ما، استخدم ترجمة قوقل في كل مكان عايدي في مستشفى، مطعم، أو مطار ..... الخ.

الباحثة: ما مدى أهمية المعلمة أو المنهج الدراسي في تعلم اللغة الإنجليزية؟

الطالبة: المعلمة لها دور مهم جدا لأنها تدرسني وتطور لغتي أكثر.

الباحثة: طيب، ماذا عن المنهج الدراسي؟

الطالبة: اعتقد انه جيد جدا، ومفيد وكمان فيه قواعد.

الباحثة: منذ أن بدأت تعلم اللغة الإنجليزية هل موقفك تجاه اللغة الإنجليزية، المعلمة، والمنهج الدراسي اتغير؟

الطالبة: لا ما اتغير على طول إيجابي.

الباحثة: ماهي العوامل التي ممكن أن تؤثر على موقفك بأن يكون إيجابي على طول؟

الطالبة: امي

الباحثة: ايش كمان؟

الطالبة: انا من نفسي أحبها.

الباحثة: ماذا عن المعلمة، هل تعتقدين أن لها تأثير؟

الطالبة: ايوه طبعا، تخليني أحبها أكثر.

الباحثة: إذا ما كانت معلمتك جيدة هل بتكرهين اللغة الإنجليزية؟

الطالبة: راح أكره المعلمة لكن مو مادة الإنجليزي.

الباحثة: هل تعتقدين انه ادائك في امتحان اللغة الإنجليزية يتأثر بمحبتك او كرهك للمنهج او المعلمة؟

الطالبة: لا يؤثر لأنه علاقتي باللغة نفسها مو المعلمة او المادة.

الباحثة: طيب، ماهي اقتراحاتك لتعزيز مواقف الطالبات الإيجابية تجاه تعلم اللغة الإنجليزية، أو لو مثلا صاحبتك لديها موقف سلبي كيف تساعدينها ليتحول لموقف إيجابي؟

الطالبة: انصحها انها تشتري كتب، وتقرأ أكثر باللغة الإنجليزية. بالنسبة لي، ماكنت أحب الإنجليزي بعدين مع الوقت بدأت أحبه. يعني لو يقرأون قصص انجليزية وكتب بيحبون اللغة.

الباحثة: الان، سننتقل للقسم الثاني اللي هو الدافعية، هل تستمتعين بتعلم اللغة الإنجليزية؟

الطالبة: ايوه جدا.

الباحثة: تخيلي أنه احنا في عالم مثالي واللغة الإنجليزية ليست لغة عالمية وليس من المهم تعلمها هل ستتعلمينها؟

الطالبة: ايوه اباتعلمها عشان لو ابغى اسافر لأمريكا مثلا أستطيع اتحدث بالإنجليزية

الباحثة: هل لديك أسباب أخرى؟

الطالبة: عشان أستطيع ادرس ابنائي في المستقبل. يعني أصبح معلمة، احتاج يكون عندي خبرة

الباحثة: طيب، ماهي العوامل التي تؤثر على دافعيتك لتعلم اللغة سواءً بشكل إيجابي او سلبي؟

الطالبة: الاختبارات يعني لما الاختبار يتضمن عدة فصول اتوتر وما أقدر اذاكر زين لأني أخاف اجيب درجة واطية

الباحثة: يعني لما تنضغطين تقل دافعيتك؟

الطالبة: ايوه.

الباحثة: هل تعتقدين ان دافعيتك تؤثر على ادائك في الامتحان؟

الطالبة: ايوه احياناً.

الباحثة: بشكل إيجابي أو سلبي؟

الطالبة: بشكل إيجابي.

الباحثة: ماهي اقتراحاتك لتعزيز الدافعية لتعلم اللغة الإنجليزية لدى الطالبات؟

الطالبة: انصحهم وأحاول اساعدهم اذا فيه شيء ما يعرفونه اشرحه لهم.

الباحثة: طيب، الان ننتقل للجزء الثالث اللي هو القلق، هل سبق وان عانيت من القلق في حصص الإنجليزي؟

الطالبة: ايوه لما بدأت اتعلم انجليزي في المراحل الابتدائية والمتوسطة. لما كنت في المرحلة المتوسطة كنت أخاف يكون الإنجليزي صعب.

الباحثة: هل كنت دائماً قلقة في كل حصص الإنجليزي أو أحيانا فقط؟

الطالبة: أحيانا فقط.

الباحثة: متى؟ في أي المواقف؟

الطالبة: إذا كنت غير مستعدة.

الباحثة: ماذا عن المرحلة الثانوية؟ هل تخلصت من القلق؟

ايوه الحمدالله **الطالبة**:

الباحثة: لماذا، ما هو السبب؟

الطالبة: بصراحة ما أدري ليه لأني صرت أحضّر كل يوم في البيت، لكن، حتى لو أخطأت ما يهمني ايش ممكن يقولون عني الاخرين، بينما قبل، لما كنت في المرحلة المتوسطة ماكنت ابغى اغلط والطالبات الاخريات يضحكون علي.

الباحثة: ممتاز، طيب كيف في الاختبارات، تشعرين بقلق؟

الطالبة: إذا كنت غائبة في درس وجاني سؤال في الاختبار من ذاك الدرس اتوتر..

الباحثة: طيب، إذا ما فهمت شيء ما، تطلبين من معلمتك تشرح او تعيد؟

الطالبة: ايوه.

الباحثة: تسألين بالعربي أو الإنجليزي؟

الطالبة: أحيانا بالعربي وأحيانا بالإنجليزي.

الباحثة: هل تعتقدين ان أسباب القلق تغيرت عندك ويلا زي ماهي؟

الطالبة: في الماضي كنت اتوتر إذا ما عرفت شيء ما، لكن حاليا القلق اختفى تماما.

الباحثة: هل تعتقدين ان توترك يوثر على ادائك في الامتحان؟

الطالبة: ايوه لما أتوتر أنسى كل شيء.

الباحثة: اذاً، يؤثر بشكل سلبي؟

الطالبة: ايوه لأني اذاكر بجد، لكن لما اشوف ورقة الامتحان أنسى كل شيء.

الباحثة: ماهي اقتراحاتك للحد من التوتر لدى الطالبات؟ إذا كنت متوترة كيف تحبين الاخرين يعاملونك؟

الطالبة: أول شيء أحاول أكن واثقة من نفسي لما اجاوب على سؤال. حتى لو الطالبات الاخريات يضحكون عليّ، عايدي. أو ممكن لو يضحكون تصير عندي ردة فعل إني اجتهد أكثر وأؤدي بشكل أفضل.

الباحثة: طيب تخيلي لو كنت معلمة وعندك طالبة متوترة، كيف راح تعامليها؟

الطالبة: انصحها انها ما تخاف واحاول اشرح لها أكثر.

الباحثة: طيب ممتاز، هل لديك أي اضافة عن تعلم اللغة الإنجليزية تعتقدين انها مهمه وانا اغفلتها في نقاشنا؟

الطالبة: لا ما عندي.

الباحثة: طيب ،كذا انتهينا، شكرا لك.

Appendix E (Participants' information form for interviews)

Appendix E.1: Participant Information Form: interviews (English version)

Researcher's name: Aeshah Alnemari

Project: Analysing Affective Factors in Relation to Students' Achievement and Behaviour in EFL in Saudi Arabia.

Project information:

My PhD dissertation aims to investigate the correlation between several affective language learning variables (motivation, attitudes and anxiety), students' achievement and behaviour.

This investigation will hopefully contribute to improving students' achievement in learning English as a foreign language in general and in Saudi Arabia in particular.

In order for the research to be conducted, the school will send me the participants' achievement scores once the interviews and the coding of the questionnaire data has been completed. This information will be provided anonymously by using the participants' student numbers.

The interview will be audio-recorded for analysis purposes, and it is expected to take about half an hour. All data will be anonymous and will be stored securely, with restricted access (only the researcher and her supervisors will have access to them). The data collection and analysis will be for the purposes of my PhD dissertation, and all the recordings will be deleted when this degree is completed. The results from this study will be published in my dissertation for Cardiff University and may also be disseminated further in the academic community either in conferences or academic journals.

You have the right not to answer any question, stop the interview and withdraw from this study at any point without giving a reason. Your participation in the study will not impact upon your academic results.

If you have any questions, please contact the researcher via this email address: alnemariaf@cardiff.ac.uk. You may also send your inquiries to the supervisors of this research at Cardiff University via the following email addresses: pons-sanzs@cardiff.ac.uk, AldridgeM@cardiff.ac.uk.

Appendix E.2: Participant Information Form: interviews (the Arabic version)

نموذج معلومات المشاركات في المقابلات الشخصية

اسم الباحثة: عائشة النمري

المشروع: تحليل العوامل المؤثرة في تعلّم اللغة الإنجليزية وعلاقتها بتحصيل الطالبات وسلوكياتهن تجاه تعلّم اللغة في المملكة العربية السعودية

معلومات المشروع:

أطروحة الدكتوراه الخاصة بي تهدف إلى بحث العلاقة بين بعض العوامل المؤثرة في تعلّم اللغة (الدوافع، المواقف من اللغة، القلق) وتحصيل الطالبات وسلوكياتهن تجاه تعلم اللغة الإنجليزية. آمل أن يسهم فهم هذا العلاقة في تحسين مستوى تحصيل الطالبات في تعلّم اللغة الإنجليزية كلغة أجنبية بشكل عام وفي المملكة العربية السعودية بشكل خاص.

ولكي يتم اجراء هذا البحث عند الانتهاء من المقابلات واكمال ترميز بيانات الاستبيان، سترسل المدرسة للباحثة الدرجات التحصيلية للطالبات، دون الكشف عن هويتي وذلك باستخدام الأرقام التسلسلية للطالبات.

سيتم تسجيل المقابلات صوتيًا لأغراض التحليل ومن المتوقع أن تستغرق حوالي نصف ساعة. جميع البيانات ستكون مجهولة وسيتم حفظها بشكل آمن وسيكون الوصول إليها بشكل مقيّد فقط الباحثة ومشرفتيها يمكنهم الاطلاع عليها. جمع البيانات وتحليلها سيكون لغرض أطروحة الدكتوراه، وسيتم مسح جميع التسجيلات بعد انتهاء الباحثة من الكتابة. نتائج هذه الدراسة سيتم نشرها في اطروحة الدكتوراه بجامعة كارديف ومن الممكن أيضَا أن يتم نشرها فيما بعد في مؤتمرات أو مجلات علمية.

لك الأحقية في عدم الإجابة عن أي سؤال أو إيقاف المقابلة والانسحاب من الدراسة في أي وقت بدون إعطاء سبب لذلك. كما أن مشاركتك في الدراسة لن تؤثر على نتائجك الدراسية.

إذا كان لديك أي استفسار يُرجى التواصل مع الباحثة عن طريق البريد الالكتروني .AlnemariAF@cardiff.ac.uk
كما يمكنك ارسال استفسارك للمشرفات على البحث بجامعة كارديف على عناوين البريد الإلكتروني التالية:
.AldridgeM@cardiff.ac.uk ,
pons-sanz@cardiff.ac.uk

Appendix F (Participants' consent form for interviews)

Appendix F.1: Participant Consent Form: interviews (the English version)

Researcher's name: Aeshah Alnemari

The researcher named above has briefed me to my satisfaction on the research for which I have volunteered and have been further selected by my teacher. I understand that I have the right to withdraw from the research at any point without giving a reason. I can do so verbally, by letting the researcher know, or via e-mail, contacting the researcher at alnemariaf@cardiff.ac.uk. I am also aware of the fact that I can let the researcher know at any time if I am experiencing discomfort for the interview to stop or to finish completely. In addition, I understand that my rights to anonymity and confidentiality will be respected.

I agree to participate in the interview and to have our discussion recorded. I also give consent to my achievement score being sent to the researcher by the school anonymously to compare it with the research findings.

☐ I consent to the information stated above

☐ I don't consent to the information stated above

Student number ----------

Thank you for your participation.

This form will be produced in duplicate. One copy should be retained by the participant and the other by the researcher.

Appendix F.2: Participant Consent Form: interviews (the Arabic version)

نموذج قبول المشاركة للمقابلات الشخصية

اسم الباحثة: عائشة النمري

أنا الطالبة في المرحلة الثانوية قد تم إخباري بملخص البحث الخاص بالباحثة المدونة أعلاه والذي تطوعت للمشاركة فيه وقد تم اختياري من قبل معلمتي. كما أعلم بأن لي الأحقية في الانسحاب من الدراسة في أي وقت بدون إعطاء سبب لذلك وذلك إما شفهياً بإخبار الباحثة أو عن طريق إرسال رسالة بالبريد الإلكتروني للباحثة على:

Alnemariaf@cardiff.ac.uk

أدرك تماما أنه يمكنني إخبار الباحثة عندي شعوري بعدم الارتياح في أي وقت لإيقاف المقابلة أو انهائها تمامًا، وكذلك أتفهم احترام حقوقي وحفظ بياناتي بكل سرية.

كما أوافق على المشاركة في المقابلة الشخصية وتسجيل المقابلة صوتياً، وكذلك أوافق على ارسال درجتي التحصيلية في المادة للباحثة عن طريق المدرسة دون الكشف عن هويتي لمقارنة ذلك بنتائج البحث.

☐ أوافق على المعلومات أعلاه.

☐ لا أوافق على المعلومات أعلاه.

أشكرك على مشاركتك.

سيكون هذا النموذج على نسختين: إحداهما للطالبة والأخرى للباحثة.

Appendix G (Results of the Measurement Model of the Initial Model of Year 10)

Variables	Outer loadings	Cross Loadings			Composite Reliability (CR)	Average of Variance Extracted (AVE)
		Motivation	Attitudes	Anxiety		
Intrinsic Motivation (to experience stimulation)	0.899	0.899	0.626	-0.193	0.916	0.647
Intrinsic Motivation (towards accomplishment)	0.820	0.820	0.511	-0.138		
Intrinsic Motivation (to know)	0.828	0.828	0.518	-0.026		
External regulation of Extrinsic Motivation	0.785	0.785	0.276	0.035		
Introjected regulation of Extrinsic Motivation	0.606	0.606	0.045	0.332		
Identified regulation of Extrinsic Motivation	0.855	0.855	0.565	-0.236		
Attitudes towards the teacher	0.523	0.096	0.523	-0.500	0.861	0.687
Attitudes towards language learning	0.944	0.638	0.944	-0.390		
Attitudes towards the course	0.947	0.609	0.947	-0.474		
Fear of negative evaluation	0.723	-0.063	-0.238	0.723	0.803	0.578
Communication apprehension	0.849	-0.135	-0.509	0.849		
Test Anxiety	0.700	-0.101	-0.337	0.700		

Fornell-Larcker Criterion of the Year 10 Initial Model

	Motivation	Attitudes	Anxiety
Motivation	**0.804**		
Attitudes	0.610	**0.829**	
Anxiety	-0.140	-0.509	**0.760**

HTMT Criterion of the Year 10 Initial Model Constructs

	Achievement	Anxiety	Attitudes	Effort	Motivation
Achievement					
Anxiety	0.123				
Attitudes	0.181	0.733			
Effort	0.143	0.210	0.736		
Motivation	0.209	0.262	0.636	0.563	

Appendix H (Results of the Measurement Model of the Initial Model of Year 11)

Variables	Outer loadings	Cross Loadings			Composite Reliability (CR)	Average of Variance Extracted (AVE)
		Motivation	Attitudes	Anxiety		
Intrinsic Motivation (to experience stimulation)	0.908	0.908	0.606	-0.338	0.906	0.619
Intrinsic Motivation (towards accomplishment)	0.839	0.839	0.534	-0.414		
Intrinsic Motivation (to know)	0.816	0.816	0.462	-0.220		
External regulation of Extrinsic Motivation	0.650	0.650	0.414	0.228		
Introjected regulation of Extrinsic Motivation	0.629	0.629	0.390	0.017		
Identified regulation of Extrinsic Motivation	0.840	0.840	0.418	-0.182		
Attitudes towards the teacher	0.525	0.221	0.525	-0.149	0.852	0.670
Attitudes towards language learning	0.943	0.688	0.943	-0.633		
Attitudes towards the course	0.920	0.461	0.920	-0.676		
Fear of negative evaluation	0.846	-0.178	-0.480	0.846	0.883	0.716
Communication apprehension	0.810	-0.174	-0.498	0.810		
Test Anxiety	0.881	-0.395	-0.671	0.881		

Fornell-Larcker Criterion of the Year 11 Initial Model

	Motivation	Attitudes	Anxiety
Motivation	**0.787**		
Attitudes	0.607	**0.819**	
Anxiety	-0.310	-0.662	**0.846**

HTMT Criterion of the Year 11 Initial Model Constructs

	Achievement	Anxiety	Attitudes	Effort	Motivation
Achievement					
Anxiety	0.194				
Attitudes	0.252	0.753			
Effort	0.065	0.126	0.330		
Motivation	0.141	0.376	0.682	0.528	

Appendix I (Results of the Measurement Model of the Modified Model of Year 11 on the Basis of the Year 10 Modified Model)

Variables	Outer loadings	Cross Loadings			Composite Reliability (CR)	Average of Variance Extracted (AVE)
		Motivation	Attitudes	Anxiety		
Intrinsic Motivation (to experience stimulation)	0.909	0.909	0.606	-0.340	0.906	0.619
Intrinsic Motivation (towards accomplishment)	0.835	0.835	0.534	-0.417		
Intrinsic Motivation (to know)	0.807	0.807	0.461	-0.220		
External regulation of Extrinsic Motivation	0.655	0.655	0.413	-0.230		
Introjected regulation of Extrinsic Motivation	0.639	0.639	0.390	0.016		
Identified regulation of Extrinsic Motivation	0.837	0.837	0.418	-0.184		
Attitudes towards the teacher	0.526	0.222	0.526	-0.151	0.852	0.670
Attitudes towards language learning	0.943	0.688	0.943	-0.634		
Attitudes towards the course	0.920	0.464	0.920	-0.677		
Fear of negative evaluation	0.846	-0.174	-0.480	0.846	0.883	0.715
Communication apprehension	0.804	-0.173	-0.498	0.804		
Test Anxiety	0.886	-0.396	-0.671	0.886		

HTMT Criterion of the Modified Model of Year 11 on the Basis of the Year 10 Modified Model				
	Anxiety	Attitudes	Effort	Motivation
Anxiety				
Attitudes	0.753			
Effort	0.126	0.330		
Motivation	0.376	0.682	0.528	

	Fornell-Larcker Criterion of the Modified Model of Year 11 on the Basis of the Year 10 Modified Model			
	Anxiety	Attitudes	Effort	Motivation
Anxiety	**0.846**			
Attitudes	-0.663	**0.819**		
Effort	-0.118	0.261	1.000	
Motivation	-0.311	0.609	0.490	**0.787**

Appendix J (Results of the Measurement Model of the Initial Model of Year 12)

Variables	Outer loadings	Cross Loadings			Composite Reliability (CR)	Average of Variance Extracted (AVE)
		Motivation	Attitudes	Anxiety		
Intrinsic (to experience stimulation)	0.887	0.887	0.690	-0.473	0.797	0.429
Intrinsic (towards accomplishment)	0.759	0.759	0.652	-0.612		
Intrinsic (to know)	0.663	0.663	0.215	-0.017		
External regulation of extrinsic motivation	0.503	0.503	0.144	-0.051		
Introjected regulation of extrinsic motivation	0.151	0.151	-0.113	0.312		
Identified regulation of extrinsic motivation	0.702	0.702	0.254	-0.103		
Attitudes towards the teacher	0.744	0.422	0.744	-0.151	0.908	0.769
Attitudes towards language learning	0.932	0.702	0.932	-0.634		
Attitudes towards the course	0.940	0.608	0.940	-0.677		
Fear of negative evaluation	0.877	-0.391	-0.622	0.846	0.890	0.731
Communication apprehension	0.807	-0.324	-0.499	0.804		
Test Anxiety	0.878	-0.491	-0.741	0.886		

Fornell-Larcker Criterion of the Year 12 Initial Model					
	Achievement	**Anxiety**	**Attitudes**	**Effort**	**Motivation**
Achievement					
Anxiety	-0.535	**0.855**			
Attitudes	0.589	-0.745	**0.877**		
Effort	0.475	-0.421	0.559		
Motivation	0.500	-0.483	0.671	0.635	**0.655**

HTMT Criterion of the Year 12 Initial Model Constructs				
	Achievement	Anxiety	Attitudes	Effort
Achievement				
Anxiety	0.566			
Attitudes	0.636	0.864		
Effort	0.475	0.439	0.603	
Motivation	0.453	0.522	0.646	0.678