SECOND LANGUAGE WRITING SELF-EFFICACY AND TOLERANCE OF AMBIGUITY: AN INVESTIGATION OF THEIR INTERACTIONS AND DEVELOPMENTAL CHANGE IN THE SAUDI HIGHER EDUCATION CONTEXT

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ABSTRACT

The aims of the current research are threefold. Firstly, to investigate the relationship between second language self-efficacy (SLSE) and second language tolerance of ambiguity (SLTA) among Saudi L2 learners at two levels of specificity; general and domain-specific. Secondly, to examine the change that takes place in second language writing self-efficacy (SLWSE), tolerance of ambiguity (SLWTA), and the interaction between them over time and what factors contribute to it. Finally, to apply a relatively new dynamic systems theory (DST) perspective for the interpretation of research findings with the aim of obtaining a holistic view of the currently investigated areas. To that end, participants were asked at the outset of the study to complete two general questionnaires that assess their general senses of perceived self-efficacy in learning English, Questionnaire of English Self-Efficacy (QESE) developed by Wang and Pape (2005), and assess their tolerance of ambiguity in relation to their English language learning, Second Language Tolerance of Ambiguity Scale (SLTAS) developed by Ely (1989). In the second phase of the research, data were collected at different timescales using domain-specific questionnaires, SLWSES which was developed from Shell, Murphy and Bruning (1989) and SLWTAS which was developed from Ely (1989). Along with that, every time participants completed their domain-specific questionnaires, they were asked to write an essay to explain their evaluations, elaborate on their responses and to give examples to support their choices. The findings of this research fill in the gap in SLA literature by indicating a significant correlation between SLSE and SLTA. Additionally, results reveal that the interaction between SLWSE and SLWTA is dynamic, as it changes over time from being significant to not significant. Factors that contribute to these results were discussed. The study concluded with highlighting its implications, for both theory and practice, and outlining its limitations and recommendations for further research.

IX
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Dedication

This work is dedicated to my parents.
CHAPTER 1

INTRODUCTION

This study aims to investigate the relationship between self-efficacy (SE) and tolerance of ambiguity (TA) at two levels of specificity among Saudi second language (L2) learners of English at a public university in Saudi Arabia. This chapter will familiarise the readers with the current study by shedding some light on its background, the research context, its significance and aims. Finally, it will outline the thesis structure.

The research background

I have been an English second language (ESL) learner, teacher and academic consultant over a period of several years. During that time, I noticed the individual differences between learners as far as the rate of their L2 learning and achievement are concerned. When considering the second language acquisition (SLA) literature for answers to explain the individual differences, affective factors show an immense contribution. What is relative to this study stems from my experience as an academic consultant for L2 learners in a public university in Saudi Arabia. The role involves responding to students’ needs, such as problems, struggles and insecurity, as well as motivating them to achieve their potential. The meetings with students took place at regular intervals with the aims of discussing their progress individually and keeping a record of it. Through my role as an academic consultant, supervising various groups of learners from different educational and social backgrounds, I came to the conclusion that confidence in one’s ability, self-efficacy, is the key factor in L2 learning development.
I remember a case of a student who could not write her assignments as she believed she did not have the ability to do so. With a great deal of unfinished homework, that was an ongoing issue, which resulted in her not attending the classes. Despite my numerous attempts to help, constant resistance was encountered by repeatedly saying “I cannot do it”. Thus, any difficulties faced were not overcome, yet her frustration deepened.

This occurrence was not individual, as many students experienced the same problem. As a consequence, academic consultants took further steps and proposed with the support of the English department an initiative called “Yes I can”. Its aim was to encourage students to believe in themselves and their ability to achieve what they planned for by showing them that everything is learnable with some time and efforts. The idea received positive reactions among students at that time and proved to be successful.

This prompted me to deeply investigate what factors enhance students’ SE and what contribute to their confidence in their capability to learn or lack of it English in general and writing in particular. Therefore, I explicitly discussed this topic with students in the class and asked them about whether their confidence in their ability was stable or changeable throughout the subjects and whether it improved over time. Interestingly, students’ responses differed and more surprisingly the majority were aware of how this issue impacted their learning. Their answers can fall into four categories, namely: being able to overcome the doubts, resistance to change, being specific to one lesson and not the other and being general feeling experienced in all classes.

I remember that a great number of students expressed their opinions that certain language skills, mainly writing and speaking, were related more to SE than other skills such as reading. One student stated that she felt more relaxed during the reading lessons given the fact that the majority of class time and work were devoted to the teacher. Another reason was that
reading involved a great deal of clarity and the materials were easily accessible to her. The reaction of others was unanimous.

According to the students’ learning experiences, writing in the L2 entails being in the grey area, which means for instance guessing words, attempting spelling or new styles. It cannot be done without believing in oneself. It was interesting to notice the interaction between these two factors, which prompted me to delve literature for more insights into this area. Surprisingly, nothing was found in terms of this phenomenon. Therefore, I was encouraged to conduct a full-length study that can provide answers and explanations of this relationship.

From a social cognitive perspective, Bandura (1977) has introduced self-efficacy beliefs as part of motivation for learning. Among many other beliefs that can influence an individual’s motivation, SE beliefs are the most predictable, influential and pervasive. Dörnyei (2009) stresses that motivation is only possible if individuals believe in their capabilities to achieve them. That is, seeing self as a successful L2 writer, who masters the language and uses it fluently, will only motivate those who believe in their abilities to do so. Acknowledging the significance of SE beliefs and the important role they play in motivating students to learn, this study will be conducted to investigate SE in a L2 in general and writing in particular.

The L2 learning and using context is full of ambiguities such as spelling irregularities and exceptions to grammar rules (Dewaele & Ip, 2013). Thus, learning a L2 may entail as a prerequisite a belief in one’s capability to face ambiguities, overcome challenges and be open to new ideas and beliefs. Students with low SE may become stressed and anxious when they face ambiguities, because they do not perceive themselves as capable of mastering such difficulties. A higher tolerance for ambiguity (TA) may also help students to feel more SE and increase their engagement in learning. Although we can imagine that such a simple link between SE and TA exists, there is no evidence in L2 literature to support such a claim. So this
pioneering study will examine the link between SE and TA in the L2 context at two levels of specificity, general (English) and domain-specific (L2 writing) context.

At the specific level, SE and TA will be studied in relation to L2 writing. This is because examining the development of writing enables the researcher to assess the overall language development. Within the process of writing, learners not only generate ideas but also need to write them in proper grammar, correct spelling and organise them in coherent paragraphs and discourse structures. Thus, writing in a L2 is a complex task that may provoke anxiety for intolerant of ambiguity learners. It requires a sense of SE in that one is able to step out of his/her comfort zone and to produce language, rather than just receiving it through reading and listening. When writing, students express their thoughts and ideas using their own words and using meaningful sentences. Students who believe that they cannot write in a L2, may find writing stressful and may, as a consequence, avoid writing at all. This research will hopefully find some answers for questions such as: what makes students comfortable when writing and what makes them confident in their writing abilities; and how these two variables interact to shape students writing experiences in Saudi classes.

Before discussing the research significance and aims, it felt necessary to familiarise the readers with the context of this study, Saudi Arabia, by providing the relevant information related to its educational background, its historical development and English teaching at schools and universities. The subsequent sections are going to elaborate on these topics.

**Saudi educational system**

The current study focuses on education in the Kingdom of Saudi Arabia, which is the largest country in Southwest Asia. Saudi Arabia borders Jordan and Iraq to the north, Kuwait to the northeast, Bahrain, Qatar, United Arabs Emirates and the Arabian Gulf to the east and the Red Sea to the west, Yemen to the south, and Oman to the southeast. In 2017, the population
of the country was estimated to be approximately 29 million, with 20% of the population living in Riyadh, the capital and largest city of Saudi Arabia. Of this population, foreigners formed 30% (The World Factbook, 2017). Arabic is the country’s sole official language and Islam is its religion.

During the modern history period, after King Abdulaziz unified the several regions that constitute the Kingdom of Saudi Arabia, spreading peace and stability, he focused heavily on education. As a consequence, the year 1925 witnessed the birth of formal and public education in Saudi Arabia, which was developed by the Directorate of Education (The General Administration for Eradication of Illiteracy Programs, 2008). The developments continue until present. According to CIA The World Factbook, adult literacy in the Kingdom of Saudi Arabia reached 97% in 2015 for males, and 91% for females. Such a rapid stride in education could not have materialised without generous support from the Saudi government, which made education accessible to all. In fact, 23% of 2016 budget, which was roughly 38 billion pounds, was allocated to education (Jadwa Investment, 2015)

The relevant aspect of this research is the development of English teaching and learning in Saudi Arabia and will be the core point of the following sections.

**Teaching English in schools**

English was introduced gradually into the Saudi curriculum. Firstly, it became a part of intermediate and high school curricula in 1952. Then, it was integrated into the grade six primary school curriculum in 2005. Recently in 2012, the Ministry of Education announced that English had been incorporated into the curriculum for grade four, age 9. Many have argued for the implementation of English language learning as a core subject beginning in grade one, age 6, as in many private schools throughout the country.
Students who graduate from high schools will have studied English for 9 years and completed approximately 24 English books, 18 pupil’s books and 6 workbooks. A pupil’s book is designed to cover the four skills of reading, writing, speaking and listening. These books also illustrate grammar rules and teach new vocabulary. Workbooks are exercise-based and intended for the practice of newly learned skills (Alsaif & Milton, 2012).

Generally speaking, the teaching of English, similarly to any other subjects, is shaped by the cultural identities of students (Elyas & Picard, 2010). English is localised in these books. For instance, the characters presented follow the Saudi dress code and have Arabic names. Most of the themes or units of the books are on Saudi Arabia, Saudi culture, Saudi history or life in Saudi Arabia. As far as the teaching methods are concerned, the dominant one in Saudi Arabia is grammar-translation which relies heavily on memorisation and repetition. Moreover, Arabic is used to explain newly introduced grammar rules and vocabulary (Assalahi, 2013).

**Teaching English in higher education**

Recently a rapid increase in the number of high education institutions has been noticed. Eighteen new public universities have been granted charters, including the King Abdullah University of Science and Technology, Najran University, Jazan University, Majmaah University, the University of Ha'il, Al Jouf University, the University of Tabuk, Shaqrah University, and Al Baha University, among others. Ten private universities and 30 private colleges have been recently opened, with many others in the planning stages. Examples of private universities in the country include Dar Al Uloom University, Prince Sultan University, Effat University and Al Yamamah University. The Ibn Sina National College for Medical Studies and Al-Farabi College of Dentistry and Nursing are examples of private colleges.

There is a worldwide tendency to adopt English as a medium of instruction (MOI) across the higher education institutions, such as the case in Saudi Arabia where faculties, such
as science, engineering and medicine are taught in English in all universities (Ebad, 2014). Such decision has received various reactions among students due to the fact that Arabic is the only MOI in both primary and secondary schools. Therefore, to solve such dilemma, the idea of preparatory year program (PYP) was introduced in 2007. In PYP students receive around 20 hours per week of English teaching that aim to improve their English-related skills, writing, reading, speaking and listening.

Research on the PYP Saudi students’ perceptions of English as MOI is inconclusive. For instance, students in Al-Kahtany, Faruk and Al-Zumor’s study (2015) perceive English as a hindrance to their learning because of low perceptions of their English competence and a strong sense of attachment to their first language (L1), Arabic. On the contrary, Al-Asmari (2013) indicated that Saudi PYP students show a more positive attitude towards English as a MOI. They express their great interest in learning English irrespective of whether it is a university requirement or not.

Likewise, Al-Shamy (2012) reported that PYP Saudi students have a favourable attitude towards the English language, English countries, native speakers and English culture. Students appreciate their English teachers and their English classes. Analysing questionnaire and interview data, linked students’ attitude to their motivation. Students are 100% instrumentally motivated to learn English to get a better job. In addition, parental encouragement to master language correlated with their positive attitude. Al-Shamy (2012) concluded that Saudi university students have a positive attitude towards learning English which results from being instrumentally motivated and parentally encouraged.

Al-Samadani and Ibnian (2015) found that Saudi undergraduate students, English majors, have a positive attitude towards learning English. They believe that English is an international communication language that opens the door for better job opportunities. They
are motivated to master English to help them when they travel abroad to pursue their higher education.

It is worth stressing that English in Saudi Arabia has a very limited functionality, with Arabic as the sole official language. Saying so, individuals have little opportunities to practise and use English outside their classrooms.

**Teaching of English writing in Saudi Arabia.** Learning to write in a L2 is a complex task as it involves several cognitive processes such as planning, thinking, organising, writing a topic sentence and supporting ideas. Coupled with these, learning to write requires learning proper grammar, spelling and learning sufficient vocabulary to enable one to express ideas clearly. Such complexity makes writing rather a difficult skill to teach and learn (Javid & Umer, 2014).

Al-Khairy (2013) conducted research to investigate the weaknesses in Saudi English major undergraduate students’ writing and the reasons behind their writing handicaps. Although those students are supposed to be at an advanced level of English, they are not capable of writing essays and do not consider writing essays is important to their academic success. They have practised writing at sentence and paragraph levels only. However, in writing such simple tasks their writings are still unsatisfactory, as they suffer from a great deal of spelling and grammatical mistakes and lack of proper writing skills. Major causes of students’ weaknesses include, inadequate number of language courses, lack of opportunities to practise language outside the classrooms, lack of teaching facilities and inappropriate teaching methodologies.

In the same vein, Javid and Umer (2014) found that Saudi students English majors do not need essay level writing skills to pursue their undergraduate studies. Those students who are supposed to master English at a reasonable level, are still making elementary mistakes in
grammar and spelling even at sentence levels. Saudi students blame their teachers and the inappropriate teaching methodologies for their writing deficiencies and weaknesses.

In a piece of qualitative research, Huwari and Al-Khasawneh (2013) analysed and interpreted interview data, and findings revealed that Saudi university students relate their weaknesses in English writing to four main reasons. First is grammatical difficulties; students declare that they cannot write, even a sentence, without committing grammatical mistakes. Second reason is lack of proper knowledge about how to write. Students, for example, do not know how to write good topic sentences and how to write good supporting sentences. Third reason is the lack of practice. Students do not write outside the classroom. Some of the students in this study do not perceive writing as important to their future lives. The final reason is students’ English language learning background. Students pointed out that school teachers pay less attention to writing and do not encourage students to practise their writing inside and outside the classroom. School curricula focus more on teaching reading, listening and grammar than on writing and speaking.

Factors that contribute to effective teaching and learning of English are investigated by Javid, Farooq and Gulzer (2012). University students and teachers agreed that lecture-based classrooms should be replaced by more interactive and learner-centred ones. The education system should also move away from being examination-oriented, where exams and grades are overemphasised, to more quality-oriented education. Teachers should encourage students to develop their skills for lifelong learning and thus master learning.

This brief overview sheds light on some weaknesses in Saudi students’ writing and the causes of such deficiencies. Moreover, it shows how writing is taught in Saudi classes and how students perceive English and its speakers. This will provide some contextual background for this study.
Research significance

A vital significance of this study is its contribution to finding a remedy to the gaps encountered in SLA research which are identified by Hiromori, Matsumoto and Nakayama (2012):

Understanding the ways in which L2 learners differ from one another is one of the primary concerns of those involved in second language acquisition (SLA) research. Although studies conducted so far offer various insights into effective L2 teaching, they also have several drawbacks, such as (1) they have focused on each learner variable individually, thus lacking a holistic perspective; (2) they have employed cross-sectional designs, thus lacking a developmental perspective; and (3) they have dealt with each learner variable on a general level, and have not related these variables to specific language skills or tasks. (p. 49)

As it can be gathered from the quotation above, SLA research faces numerous limitations resulting from its lack of a progress indication, its focuses on individual rather than relational perspective on affective factors and its concerns general rather than domain-specific levels of research. In order to address these limitations, the current research investigates more than one variable related to L2 learning through applying both longitudinal and cross-sectional approaches at two levels of specificity: at a general English level and at a L2 writing level. Outcomes from such dense analysis will contribute significantly to understanding of L2 learning in general and L2 writing in particular.

As far as I am aware, this is pioneering research that investigates the relationship between second language self-efficacy (SLSE) and second language tolerance of ambiguity (SLTA) as discussed earlier in the research background section. Additionally, to the best of my
knowledge, it is the first study that thoroughly examines their dynamic interactions in relation to L2 writing. The outcomes form this research may be of vital importance as it represents a vivid and dynamic picture of the L2 learning development of research participants.

Further significance of this study is in its employing a mixed methods approach to data collection and analysis. This process was conducted by utilising both quantitative (i.e. four questionnaires) and qualitative methods (i.e. written journals) to allow for thorough and comprehensive outcomes. Implementing such mixed methods in conducting this research has undoubtedly various advantages to enhancing this study results’ significance, namely focusing on the strengths of each method and therefore limiting the weaknesses involved, as well as considering both individual and group variations. It needs to be mentioned that eclectic methodology leads to a greater validity as far as obtaining findings is concerned. Further discussion of research methodology is found in chapter 4.

In addition, this study is significant since it adopts a Dynamic Systems Theory (DST) perspective to the understanding and interpretation of the outcomes that takes into consideration a wide range of interrelated factors. Kramsch (2011) points out that DST looks at the whole ecology of learning: the learner in interaction with current others (teacher, textbook, fellow learners, native speakers), with absent or with past others (through texts), with his/her perceptions of present and past others, of past and present selves, and with whole discourses about the language, its speakers, its writers and the ideologies and worldviews they vehiculate. (pp. 12 & 13)

Additionally, DST perceives learners and learning development as changing and emerging constructs that can be malleable. Thus, it provides significant implications for both L2 teachers and students, as addressed in chapter 7.
Another contribution of this study is of vital importance to both L2 teachers and learners involved. In terms of L2 teaching “explicit understanding of individual-difference dimensions can enhance the work of all teachers” (Oxford & Ehrman, 1993, p. 188). In particular, it facilitates lesson planning, lesson delivery and the evaluation of students’ performance. Therefore, it may provide invaluable insights into their classroom management process. Additionally, findings from this research may contribute to raising awareness among students, especially in the context of taking responsibility for their own learning experiences considering all factors affecting their development.

This study takes place in Saudi Arabia which also adds to its significance. In Saudi education, teaching of English writing receives little attention. The schools follow a traditional approach to language teaching, where the focus is on reading and grammar. This work is significant as it considers an area that has been little studied in terms of research and which is not seen as important in teaching. Coupled with this, the context is very teacher-centred; thus, paying attention to learners’ understanding and experiences will be somewhat new, and therefore of significance.

Another vital aspect of this study is that it facilitates the opportunities for further investigations by developing two new questionnaires for assessing SLWSE and SLWTA. Due to the fact that there is a scarcity in terms of measurement related resources published in SLWSE and SLWTA, there was a pressing need for developing these scales with a particular attention to a group of Saudi students and their specifications. Therefore, this study provides a framework for subsequent research regarding not only Saudi L2 learners, but also the other groups of students in Arab or different foreign language contexts.

**Research aims**

The current study is conducted to fulfill the following aims:
1- To investigate Saudi English majors’ perceptions of SLSE and SLTA.
2- To examine the relationship between SLSE and SLTA among Saudi learners in a higher education context.
3- To explore the relationship between SLWSE and SLWTA.
4- To understand the change that takes place in SLWSE, SLWTA and the interaction between them over time and what factors contribute to it.
5- To apply a relatively new DST perspective for the interpretation of research findings with the aim of obtaining a holistic view of the currently investigated areas.

In order to achieve these aims, the study is conducted to answer the following research questions:

1- At the general level of analysis, is there a relationship between SLSE and SLTA among Saudi L2 learners?
2- At the specific level of analysis, is there a relationship between SLWSE and SLWTA among Saudi L2 learners?
3- How does the relationship between SLWSE and SLWTA evolve over time?
4- Is there a significant change in students’ SLWSE and SLWTA as the academic term unfolds?
5- Are there any typical trajectories in the obtained results? What are their major characteristics?

The organisation of the thesis

This thesis consists of seven chapters that appear in the following order:

Chapter 1 introduces the thesis by setting up the research background and the primary motivation behind the study. It then sheds light on the unique characteristics of the research context, Saudi educational context, paying special attention to the teaching of English there.
Subsequently, the research significance and general aims of the study are thoroughly explained. The chapter concludes with an outline of the thesis structure.

Chapter 2 is dedicated to an extensive review related to the research literature on self-efficacy. Since the topic has its roots in psychology, psychological literature is prioritised to define SE, determine its sources, and to raise awareness of its relation to four psychological processes essential for learning, namely: cognitive, motivational, affective and selection. Then, SE in L2 in general and L2 writing literature in particular is reviewed. The aim is to define SE in L2 context and to examine its relationship with language achievement, motivation, anxiety, self-regulation and mindset.

Chapter 3 is about tolerance of ambiguity. First, a thorough review of the psychological literature on TA is presented followed by an examination of studies that perceived TA as a personality trait vs. its perception as a context-specific construct. Then, the definition of TA in the L2 context is discussed. Subsequently, a critical review of the various conceptualisations of TA found in the L2 literature, as a personality trait, learning style, learning strategy and a context specific trait, is presented. Finally, TA relationships with learning achievement, anxiety, perfectionism and willingness to communicate are discussed.

Chapter 4 is devoted to research methodology employed in this study. It begins with the definition and justification of the research design and its theoretical background. Following that, the instruments utilised to collect data are described. Then, the pilot study and its major findings are highlighted. Finally, the main study, data collection procedures and data analysis are explained.

Chapter 5 and 6 address data analysis results and discussion. While chapter 5 focuses on the relationship between SLSE and SLTA and between SLWSE and SLWTA, chapter 6 is concerned with the changes that take place in SLWSE and SLWTA over time. Data analysis
and discussion proceed from the general towards domain-specific and from cross-sectional to longitudinal.

Chapter 7 brings together the findings from chapter 5 and 6 within the framework of research questions and its aims that were discussed in chapter 1 and 4. Then, it draws the main conclusions based on the research findings and outlines the study implications for both theory and practice. Subsequently, the chapter is concluded by considering the study’s limitations and outlining new directions for further research.
CHAPTER 2

LITERATURE REVIEW ON SELF-EFFICACY

Introduction

This chapter critically reviews the literature on self-efficacy in psychology, identifies its sources and its impact on behaviour through processes such as cognitive and motivational ones. Subsequently, an explanation of the theoretical framework supporting this study is provided. Following this, it reviews SE in L2 learning literature in general and L2 writing in particular. Finally, it examines its relationships with other variables such as motivation and anxiety.

Self-efficacy in psychological literature

Self-efficacy is grounded in a social cognitive theory developed by the Canadian psychologist Albert Bandura. The social cognitive theory proposes a model of reciprocal causation, in which human behaviour is believed to influence and be influenced by personal, cognitive and environmental factors. Thus, it can be argued that it presents a holistic perspective through which individual behaviour is examined as it affected by and affects how people feel, think and believe as well as their context (Bandura, 1989). It is worth mentioning that reciprocity here does not imply that all variables have the same strong influence. However, those variables interact in bidirectional ways, as people are both products and producers of their environment.

Self-efficacy is defined as “the conviction that one can successfully execute the behaviour required to produce the outcomes” (Bandura, 1977, p. 193). SE is, thus, a belief in one’s ability to accomplish a given task. There is a sufficient agreement upon the
aforementioned definition in the field of SE as “no significant challenges to Bandura’s original
definition have been made” (Rosen et al., 2010, p. 92).

Among several thoughts that can influence behaviour, people’s beliefs in their
capabilities to master desirable actions are the most significant and pervasive (Bandura, 1989).
This is due to the fact that individuals’ judgment determines the types of activities they engage
in, the amount of effort they invest in overcoming obstacles, and the level of persistence they
display in the face of difficulties (Bandura, 1977). Such claims have provoked the interest of
several researchers (e.g. Collins, 1982; Locke et al., 1984; Schunk, 1981; Schunk, 1982; Shell
et al., 1989; Wood & Bandura, 1989) to examine the impact of self-efficacy beliefs on various
types of behaviours. Results reported that individuals with a highly developed sense of SE,
typically are characterised by approaching challenging tasks with confidence, developing
intrinsic motivation and showing interest in their work. Moreover, they set their goals high and
commit to achieving them, persist longer in the face of difficulties and in case of failure recover
their SE rapidly. People with low SE, on the other hand, are not as confident of their abilities
to succeed. Therefore, they tend to avoid difficulties and challenges which are believed to be
beyond their capabilities. Such a belief fosters their anxiety, thus, they become easily stressed,
lose their motivation and abandon their goals.

Therefore, due to its significance in influencing an individual’s cognition, motivation
and behaviour, several researchers (e.g. Bandura, 1993; Pajares, Miller & Johnson, 1999;
Zimmerman & Cleary, 2006) have argued that people’s judgments of their capabilities, i.e.
their self-efficacy beliefs, can predict their performance more accurately than their actual
abilities. That is, people with the same level of skills and knowledge may perform differently
based on their SE beliefs. For instance, those who approach a task with a high level of self-
efficacy achieve greater results in comparison with low-level SE counterparts. This is
accomplished by exhibiting more persistence, executing more effort and working harder, particularly when difficulties are encountered (Schunk & Pajares, 2001).

**Distinctive features of self-efficacy**

Several distinctive features of self-efficacy that distinguish it from other psychological constructs are identified by Zimmerman and Cleary (2006). First, SE is neither a personality trait (e.g. extraversion) nor even a characteristic construct (e.g. ambition). Self-efficacy is a belief that is concerned with people’s judgments of their capabilities to perform a particular task. Secondly, these judgments are domain-specific, for instance, an individual can be efficacious in one domain (e.g. mathematics) but reports low SE in another one (e.g. language learning). Thirdly, SE is context-specific, as the performance of a task is believed to be influenced by its contextual factors such as the learning environment and the student-teacher interaction. Thus, an individual may express a different level of SE while learning L2 in online classrooms than face-to-face ones. Moreover, self-efficacy is task-specific; efficacy in writing a descriptive essay cannot be generalised to a narrative essay writing, as each task requires a different set of abilities.

Another distinctive feature of SE is that it gives a future indication of ability judgment. Therefore, SE is tested prior to task performance. This is due to “its proactive impact on performance and self-evaluative processes following performance” (Zimmerman & Cleary, 2006, p. 48). Finally, self-efficacy judgments are based on individual mastery criteria more than on normative ones that compare them to others. Self-efficacy measurements assess how well individuals believe they can successfully perform a specific task.

Despite the fact that certain terms such as self-concept, self-esteem and self-confidence have been used interchangeably with self-efficacy (Schunk & Pajares, 2001; Zimmerman, 2000), there is a significant disparity. To start with, while SE is known for its lack of
transferability across various domains, contexts and tasks, self-concept is a general belief or evaluation of self that incorporates a wide range of self-beliefs such as self-image, self-esteem and ideal self (Roger, 1959; Schunk & Pajares, 2001). The differences between the two constructs have been examined empirically by researchers such as Pajares and Miller (1994) and Pajares, Miller and Johnson (1999). Results show that at the domain-specific level, self-efficacy is a more powerful predictor of performance than self-concept.

Secondly, self-esteem is a general evaluation of self that is largely affective related and determines how individuals feel about themselves, whether positively or negatively (Zimmerman & Cleary, 2006). While SE is strongly correlated with achievement and goal setting (i.e. cognitive aspects) as well as anxiety, self-esteem is a powerful predictor of affective processes only, such as anxiety and avoidance (Chen, Gully & Eden, 2004). SE and self-esteem may be related; however, an individual can have one without automatically having the other. For example, a student may express low SE in regard to reading comprehension, but still feel good about themselves.

Finally, another term that has been used interchangeably with SE is self-confidence. SE is sometimes considered as a part of self-confidence which is perceived as being more general. The difference between the two constructs has been highlighted by Dörnyei (2001) who clarifies that “self-efficacy is always specific to a concrete task, whereas self-confidence is usually used to refer to a generalised perception of one's coping potentials, relevant to a range of tasks and subject domains" (p. 56, italics added). This distinction has been taken into account throughout the thesis therefore confidence refers to one’s general beliefs about their overall abilities whereas self-efficacy is specified to L2 learning and writing.

These aforementioned distinctive features of self-efficacy beliefs and the differences between self-efficacy and other related terms indicate that SE is a complex construct that has a dual nature. That is, self-efficacy contains both cognitive and affective components that are
influenced by their context. These two components “are both considered to be justifiable and complementary” (Gabillon, 2002, p. 240).

**Sources of self-efficacy**

Beliefs on SE stem from various sources. Bandura (1977) identifies the four key antecedents of SE as mastery experiences, vicarious experiences, verbal persuasion, emotional and physiological states. Each of these antecedents will be discussed in turn below.

**Mastery experiences.** Bandura (1989) identifies mastering experiences as the most efficient method of making one’s sense of SE robust, as success in accomplishing a designated task boosts an individual’s SE, while failure diminishes it. SE established by mastering certain situations will also influence individuals’ perceptions of their ability to perform in similar situations. After repeated success builds strong SE, infrequent failures may not influence beliefs in one’s capabilities (Bandura, 1977). Instead, recovering from such failures can foster an individual’s persistence and motivate that person to sustain effort to overcome setbacks.

In order for a success to be influential it has to meet two criteria (Bandura, 1977). First, an adequate level of challenge is required, that is, surviving challenging tasks enhances SE beliefs with a greater degree than mere success in easy ones does. Additionally, attribution of success should be made to self, as individuals who attribute their successes to their own abilities establish stronger senses of SE than those who contribute them to uncontrollable variables such as good luck. On the other hand, when failure or slow progress is attributed to lack of effort, and not to a personal ability, it has little impact on lowering SE (Schunk & Pajares, 2001). A further discussion of the relationship between SE and attribution will be presented later in this chapter.
**Vicarious experiences.** Observing peers’ successful performance has been found to enhance the observers’ belief in their ability to succeed in a similar task. Watching others overcome barriers encourages one to persist longer and to complete the task. However, in order for a vicarious experience to enhance SE, three elements have to be included. First, there should be an observation of clear successful consequences, since observing others’ struggling without accomplishing what they aim for, does not result in SE. Only experiences in which the models successfully produce their intended results strengthen an observer’s sense of SE (Bandura, 1977). In addition, there should be several commonalities between observers and models. The more similarities they share, the stronger the influence of experiences is on the observers. They can be alike in terms of age, cultural background, level of education, or even share a similar situation (Bandura, 1977). Finally, just like mastery experience, an adequate level of difficulty of the vicarious experiences is required. For an experience to be influential in boosting an observer’s sense of SE, it should show an overcoming of substantial barriers, given the fact that easy-to-accomplish tasks do not have an impact on observers’ SE. Models should be seen encountering difficulties and striving and still achieving their goals (Bandura, 1977).

Researchers such as Schunk (1995) and Schunk and Pajares (2001) have argued that in some cases of learning, students’ self-efficacy may benefit more from observing their peers than from their own personal mastery experiences. That is, a vicarious experience is most influential for students uncertain about their performance capabilities, such as those lacking task familiarity and information to use in judging self-efficacy or those who have experienced difficulties and hold doubts. (Schunk & Pajares, 2001, p. 19)
Therefore, in some instances, particularly when there is no sufficient experience, seeing a successful outcome achieved by others may boost the SE level required in order to accomplish a task.

**Verbal persuasion.** A third source of self-efficacy beliefs is through verbal persuasion. Individuals who obtain praise and positive feedback develop better senses of SE than those who receive negative feedback and criticism (Bandura, 1977). The more prestigious, knowledgeable, and expert the praise delivering, the greater the influence it has on SE. Individuals are persuaded through such comments to believe they have the necessary abilities to succeed.

Verbal persuasion alone may not be enough to build a strong sense of SE; what is more it can undermine it (Bandura, 1989). People are more easily persuaded verbally of their deficiencies than they are convinced of their abilities. Thus, when individuals are faced with criticism, they easily become victims of self-doubt and feel self-inefficacy. However, when they are praised, because such feelings are not supported with authentic experience, their impact is less than that of mastery experiences (Bandura, 1977).

**Emotional and physiological states.** Individuals have expectations of success only when they feel less anxious and stressed (Bandura, 1977). Fear, anxiety and depression can influence people’s perception of their ability to perform tasks. Some learning situations, for example, are anxiety provoking. Individuals may lose control and confidence in their abilities in such situations. Therefore, when their stress and anxiety escalate, individuals who doubt their capabilities may resign very quickly, sometimes at the first sign of difficulties.

People with a good sense of self-efficacy may perceive their anxiety or fear as an incentive to success (Piniel & Csizér, 2013). Those whose self-efficacy is very low, on the
contrary, may perceive such emotions as hindrances to their progress. As Bandura (1994) states, “It is not the sheer intensity of emotional and physical reactions that is important but rather how they are perceived and interpreted” (p. 75).

In summary, people form beliefs in regard to their ability based on four sources: mastery experiences, vicarious experiences, verbal persuasion, emotional as well as physiological states. Success that comes after hard work in overcoming obstacles and is attributed to ability is more likely to enhance SE. Beside direct experiences, SE can be formed through observing the performance of similar others. Additionally, praise and positive feedback encourage individuals to overcome self-doubt and to believe that they are capable of performing well. Finally, how people perceive and interpret their emotional states play a significant role in their evaluation of their ability in regard to a particular task.

**Self-efficacy activated processes**

As explained earlier, people’s judgments of their abilities to learn influence the way they think, perceive themselves and act. Such influences of SE beliefs are produced through four processes, namely: the cognitive, motivational, affective and selection processes (Bandura, 1994). Each of them will be further discussed below.

**Cognitive processes.** The effects of SE on people’s cognitive processes can be manifested in several ways (Bandura, 1994). One of them is to influence their goal-setting and their behaviour towards obtaining goals. That is because people who believe in themselves and their capabilities to perform well set higher goals for themselves. Such feelings motivate them to try harder for what they are planning to achieve and to sustain their attention and effort to accomplish their designated goals. Those who doubt their abilities, on the other hand, tend to underestimate themselves, therefore they do not take risks setting

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difficult goals. Their negative thoughts distract them from completing their tasks and cause them to waste their time and their energy (Bandura, 1994). Interestingly, Phillips and Gully (1997) differentiated between two types of goals associated with SE. Individuals with high levels of SE tend to endorse mastery-oriented goals that place emphasis on learning, mastering the tasks, developing new skills and competence and extending existing knowledge. Individuals with low levels of SE, on the other hand, are more likely to adopt performance-oriented goals that are concerned with demonstrating the abilities.

Another way in which SE beliefs influence people’s cognitive functioning is shown via their future anticipation (Bandura, 1994). SE beliefs can, in fact, shape people’s future visualisations of themselves. When thinking of their future performance, people with a high sense of SE visualise themselves mastering and controlling tasks. Hence, they are more likely to imagine themselves dealing with difficulties, overcoming obstacles and achieving their goals. This provides them with positive encouragement to turn every task into a success (Bandura, 1993). However, people with low SE visualise negative outcomes and thus perceive tasks to be harder than they are in reality thinking it is, because it is not possible to accomplish a great deal while fighting self-doubt (Bandura, 1993; 1994).

Therefore, success does not depend on skills only; it requires a belief in one’s ability to use such skills and knowledge. It is necessary to apply a wide range of factors such as previous knowledge, experiences and outcomes in the learning process as an individual has to remain focused on the task maintaining a strong sense of SE (Bandura, 1993).

**Motivational processes.** A great deal of motivation is cognitively based. That is, inner thoughts (e.g. self-efficacy beliefs) motivate, inspire and drive people to pursue their valued dreams (Bandura, 1993). Through premeditation, for example, people establish beliefs in what they are capable of and what the possible anticipated outcomes are. Based on such
evaluation of themselves, goals and skills are identified with the aim of being fulfilled. Individuals become motivated to follow certain courses of action believed to be possibly controlled, and avoid others believed to be beyond their ability to master.

High SE has been related to individual inner motivation to work and to sustain efforts to achieve goals. Such motivation is linked to the way people attribute the causes of their results. Weiner (1972) explains his attribution theory by indicating that those who attribute success to internal and controllable variables are more likely to approach challenging and difficult tasks, as they believe that success comes from inside and depends on ability which they have. Failure, on the other hand, may be attributed to external variables such as bad luck. Therefore, when they succeed they feel proud and confident. On the contrary, failure is perceived to be uncontrollable therefore it does not have a significant impact on their perceptions of their ability.

Bandura (1977) argues that people with high SE attribute their performance outcomes to controllable variables and tend to assume greater personal responsibility for their success and failure. That is, they ascribe success to their capabilities, so they are motivated to approach challenging tasks as success depends on them. In addition, they attribute failure to controllable factors such as lack of efforts, so they tend to persist longer in the face of difficulties. Moreover, they consider mistakes as a natural part of their learning and, therefore, they are more likely to learn from them. People with low SE, on the contrary, attribute failure to their deficiencies or to uncontrollable factors, thus, feel helpless and give up. Even when they succeed, they link their success to external factors such as luck or the easiness of the task, and this does not help to increase their SE. Demotivation may be noticed in terms of trying harder and developing themselves as failure depends on things beyond control (Zimmerman & Cleary, 2006).
Another way in which SE influences motivation is through expectations that certain outcomes will be fulfilled and the value individuals put on these. People with high SE expect themselves to be able to face challenges, to resist longer and to finally succeed. Such positive expectations motivate and encourage them to invest time and effort in their work. Challenging goals are believed to boost and maintain motivation. Low expectations, on the other hand, can influence individuals’ performance by discouraging them from doing their work as their actions are responses to their negative beliefs (Bandura, 1994).

**Affective processes.** Self-efficacy can also play a significant role in influencing individuals’ affective states, which are people’s beliefs in their capabilities having an impact on the level of stress and anxiety they experience in threatening situations. Thus, self-beliefs in the ability to master stressful situations are key elements in reducing anxiety. When individuals try to overcome challenges that they are not sure they can handle, certain anxiety symptoms emerge for instance irregular heart beats, high blood pressure and shortness of breath. However, this is not the case with self-efficacious individuals, as self-efficacy can minimise anxiety (Bandura, 1993). Additionally, SE is a vital construct of positive psychology (Bandura, 2008; Pajares, 2001). The impact of emotions on individuals’ psychological functioning is mediated largely by their self-efficacy beliefs. Therefore, emotions such as hope, optimism and positive thinking are rooted in individual sense of self-efficacy. Individuals may employ optimistic thinking and hopes as a coping strategy that decreases their anxiety and fears and quickens their recovery from difficulties. It also fosters their motivation and resilience.

**Selection processes.** Finally, SE beliefs can influence people’s choices of what they want to do and the way to do them (Bandura, 1994), that is approaching situations possible to
handle and succeed in and avoiding those beyond their control. This means that self-beliefs in capabilities determine, for example, learners’ choices of learning activities, learning strategies and learning goals.

To sum up, the cognitive, motivational, emotional and selective are four mediating processes through which individuals’ SE beliefs can take effect. SE beliefs determine how students perceive the task, as achievable or not, how willing they are to do the task, to what extent they feel anxious/comfortable and influence their choices of activities.

**Theoretical framework supporting this study**

Self-efficacy is at the centre of Bandura’s (1989) social cognitive theory which has guided the conceptualisations of this study and informed its research aims, design and data interpretation. Therefore, the current study has adopted Bandura’s definition of SE reviewed earlier in this chapter. Social cognitive theory is chosen for several reasons. Firstly, it corresponds to the aim of this study which among others is to obtain a holistic view of the currently investigated variables. This theory provides holistic lens through which researchers can examine the interactions among the contextual, cognitive and emotional factors that impact Saudi L2 learners’ development.

Another reason for deciding on social cognitive theory is for its powerful explanatory tools that have been proved useful in interpreting the current research findings. For example, this current study aims not only to measure the level of SE of Saudi L2 learners but also to examine, through questionnaires and written journals, its relation to their ability to tolerate ambiguous situations (cognitive), how they attribute their success/ failure (motivation), the emotions provoked by ambiguity, difficulty and achievement (affective) and how they choose to face them or not be involved (selection).
Additionally, social cognitive theory informed the research design by selecting appropriate data collection timing based on SE sources. To start with mastering experiences, data collection takes place both at the beginning and the end of the term, as to highlight the variable perceptions research participants hold with regard to their writing experiences and how they relate to their views of self-efficacy. The same purpose applies to collecting data prior to and after mid-term exam. Secondly, verbal persuasion self-efficacy is examined after receiving results and feedback on their mid-term exam performance. The more positive evaluation, the greater self-efficacy may be generated and vice versa. Thirdly, in order to research the impact of anxiety on their self-efficacy perceptions, data is collected at an anxiety-provoking situation, i.e. prior to their mid-term exam, and then compared with their post exam results. Finally, vicarious experiences’ influence on SE is examined throughout the term as there is not a specific time to observe such an impact.

Moreover, social cognitive theory provides basis for general guidelines to develop SE scales. Although Bandura has designed several self-efficacy instruments, none of them was developed to measure SE beliefs in a L2 context. However, Bandura (2006) specifies broad outlines for designing SE instruments which include, for example, certain requirements for participants not to compare themselves to others or to evaluate their abilities in comparison to their peers. Instead, they should be future-oriented and goal-referenced assessments. In addition, self-efficacy is best perceived as task-specified, thus, scales should be tailored to measure specific ones. Additionally, participants judge their abilities without reflecting on their emotions associated with these judgments by answering questions such as “How sure are you that you can…” and “How confident are you that you will…”. All these aforementioned guidelines were taken into account when editing QESE and when developing the newly designed SLWSES for the purpose of this current study, further discussion on research instruments is provided in chapter 4.
Self-efficacy in L2 research

Interests in studying SE beliefs in L2 learning have echoed a change in theories that explain the nature of L2 motivation towards a more cognitive approach (Mills, 2014). Initial interest in L2 motivation was influenced by social psychology based on the assumption that “students’ attitudes toward the specific language group are bound to influence how successful they will be in incorporating aspects of that language” (Gardner, 1985, p. 6). Hence, two types of motivational orientation were identified by Gardner and his associates (Gardner, 1985; Gardner & MacIntyre, 1993; Gardner & Lambert, 1972; Tremblay & Gardner, 1995), namely: integrative and instrumental. That is, L2 learners who are integratively motivated have positive attitude towards L2 learning and L2 culture, are willing to integrate into L2 community and to communicate with its native speakers. Those who have instrumental motivation, on the other hand, learn a language for its pragmatic potential such as to get a job or to pass a test (Dörnyei, 2005).

Recently, there has been a shift towards a more cognitive approach to L2 motivation and, hence, self-related aspects have become more significant (Dörnyei, 2005). Cognitive theories such as expectancy theory that explains why learners choose to perform certain tasks over others (Atkinson, 1964), and attribution theory (Ushioda, 1996), have acknowledged the role of students’ beliefs in determining their motivation. One such belief that has received considerable attention in L2 learning research is self-efficacy (Mills, 2014).

In the context of L2 learning, SE is defined as the “belief that one has the resources (a) in general, to learn a foreign language and reach a desired level of foreign language proficiency, and (b) more specifically, to perform foreign language related tasks successfully” (Piniel & Csizér, 2013, p. 526). L2 researchers have examined SE in relation to different variables such as achievement (e.g. Abdel-Latif, 2015; Al-Mekhlafi, 2011; Hetthong
& Teo, 2013; Jalaluddin, 2013), L2 motivation (e.g. Graham, 2006; Hsieh, 2008; Hsieh & Kang, 2010; Hsieh & Schallert, 2008; Piniel & Csizér, 2013; Ueki & Takeuchi, 2013), L2 anxiety (e.g. Cheng, 2001; Kirmizi & Kirmizi, 2015; Piniel & Csizér, 2013; Salem & Al Dyari, 2014; Öztürk & Saydam, 2014) and self-regulation (e.g. Aidinlou & Far, 2014; Heidari, Izadi & Ahmadian, 2012; Li & Wang, 2010; Magogwe & Oliver, 2007;). Most of these studies were correlational and their results were based on questionnaires only (e.g. Al-Mekhlafi, 2011; Hsieh, 2008; Hsieh & Kang, 2010; Jalaluddin, 2013; Kirmizi & Kirmizi, 2015; Li & Wang, 2010; Magogwe & Oliver, 2007; Salem & Al Dyiar, 2014) which prompted the urge to include a qualitative perspective to give voice to these statistical findings. Therefore, one of the current research objectives is to fill in the gap in the literature by using mixed research methods to investigate SE beliefs and their interactions with other aspects of learning among Saudi L2 learners over a period of one academic term.

Although there is a considerable body of literature on L1 writing self-efficacy (e.g. Pajares et al., 1999; Pajares & Johnson, 1996; Pajares & Valient, 1997), little has been evident in the field of L2 learning. Having reviewed relevant literature, L2 writing self-efficacy is defined within this study as students’ perception of their L2 writing skills and their ability to perform certain L2 writing tasks. Hetthong and Teo (2013) investigated the relationship between SE and writing performance at both paragraph and sub-skill (e.g. grammar, spelling, punctuation and vocabulary) levels. Results revealed that L2 writing self-efficacy can predict the overall writing performance. Moreover, students’ senses of their L2 writing self-efficacy are positively associated with their writing performances at both levels.

Sources of writing self-efficacy of 57 English majors at an Egyptian university were researched using a mixed methods design (Abdel-Latif, 2015). Results indicated that writing accomplishment, previous writing experience and feedback from others are found to be the prime factors determining L2 learners’ writing self-efficacy. Self-efficacious students are
reported to have high grades in writing and tend to reflect on their writing development as improving through their learning experience. Less efficacious learners receive low grades and show little, if any, improvement in their writing skills. In addition, students tend to evaluate their capabilities based on the feedback they receive from others, especially their teachers and peers.

However, results from other studies are inconclusive. Al-Mekhlafi (2011), for example, examined the relationship between writing self-efficacy and writing achievement among 44 EFL trainee-teachers. To measure participants’ writing achievement, their final grades in writing course were obtained. The final grade was equal to 100 which was made up from the following: 20 for portfolio, 20 for mid semester test, 10 for participation and 50 for final examination. Participants specified their degrees of agreement on 38 statements adapted from Bottomley, Henk and Melnick’s (1998) that covered 6 dimensions such as social feedback and physiological states. Results suggested that no significant relationship is found between participants’ writing achievement and their writing self-efficacy. Similarly, Jalaluddin (2013) conducted a study of 33 English L2 learner majors in applied linguistics and literature in Malaysia using writing self-efficacy questionnaire adapted from Bottomley et al. (1998) and written essays. Results revealed that there is no significant correlation between them. Such outcomes may be due to the lack of specification as far as the questionnaire is concerned.

The findings from the studies on L2 writing self-efficacy are inconclusive for two main reasons. Firstly, the focus of the research may be either too broad, i.e. overall grade (e.g. Al-Mekhlafi, 2011), or too specific, i.e. performance on a specific task (e.g. Abdel-Latif, 2015). Secondly, there are discrepancies in questionnaire scope ranging from measuring solely writing skills (e.g. Abdel-Latif, 2015), to a very broad one that includes several other
components (e.g. Al-Mekhlafi, 2011). This makes it difficult to compare results and arrive at an overall conclusion about grouped findings.

**Self-efficacy relationships with learners’ variables in L2 literature**

This section aims at showing the relationship between SE and key psychological constructs and factors within the L2 learning process. The factors specifically related to this research will be discussed below.

**L2 motivation.** Self-efficacy is an important construct which has been documented as being significantly correlated with students’ motivation (Mills, 2014). Hsieh (2008) investigated the relationship between SE beliefs and motivation of 249 undergraduate students learning a L2 (French, German or Spanish). Results indicated that L2 learners who score highly in SE are more likely to be interested in learning the language, express a more positive attitude towards learning, have a higher integrative orientation and are less anxious than their low SE counterparts. These findings support Bandura’s (1977) that SE beliefs can determine individuals’ motivation, effort and perseverance.

In a more recent quantitative study conducted by Ueki and Takeuchi (2013), self-efficacy is found to directly influence the motivation of 302 Japanese English L2 learners. Results revealed that self-efficacy exerts significant impact on participants’ motivation of both English and non-English majors. Therefore, participants who believe in their capabilities to learn English are more likely to be inclined to increase their efforts to learn, which in turn promote their motivated learning behaviour.

Interestingly, Piniel and Csizér (2013) referred to the interconnectedness between motivation and SE, as the relationship between them is best perceived as cyclic. Results indicated that motivation enhances students’ learning experiences which in turn lead to
higher perceptions of SE. High levels of SE influence the way students approach learning as well as their motivation. Authors conclude that SE and other learning variables are best investigated as parts of a bigger system rather than studying them in isolation. Adopting a more holistic approach to investigate L2 variables can provide the literature with new insights that may enhance understanding of these variables and therefore benefit language teachers and learners. For these reasons, this current study adapted a holistic perspective in order to ensure more valid results.

Among several motivational constructs, attribution has been documented as being linked to SE beliefs, therefore, the relationship between them has been investigated in L2 research. In a study carried out by Hsieh and Kang (2010), 192 Korean ESL learners were asked, upon obtaining their exam results, to evaluate their confidence in their ability to get 10 possible scores in their upcoming exams. Results indicated the interrelationship between SE and attribution, particularly participants’ belief in their capability to control their learning outcomes. Self efficacious participants ascribe their exam results to personal ability and perceive their outcomes as controllable and thus report high level of confidence in their ability to perform well in the future. Low SE participants, on the contrary, attribute their exam results to uncontrollable factors and view their learning outcomes as unmanageable, thus, they question their ability to perform well in the next exam. In addition, unlike their low-level SE counterparts, participants with high SE assert control over their low scores in the previous exam by linking it to personal factors such as lack of efforts, therefore, taking responsibility for their learning and learning outcomes. Thus, SE and attribution can predict learners’ persistence, effort and engagement in learning.

Using qualitative research method, Graham (2006) interviewed 10 French L2 learners to examine the impact of self-beliefs on their learning. 5 of the participants are identified as having high self-efficacy beliefs and attribute their success to high ability. Additionally, they
show relative control over their outcomes as they ascribe success to effort and failure to ineffective use of learning strategies or lack of effort. Interestingly, no one in the high SE group attributes their lack of success to low ability. On the other hand, the low SE participants are more likely to believe that they have no control over their learning as they identify low ability as a cause of their failure. The main difference between high and low self-efficacious students is their perceptions of their learning outcomes as controllable or not. However, due to the small size of the research participants, the author called for more large-scale studies to validate the obtained results.

Therefore, Hsieh and Schallert (2008) examined further the relationship between self-efficacy and attribution among 500 participants learning different languages (French, Spanish or German). Upon receiving their exam results, participants were asked whether they perceived the result as successful or not and, subsequently, asked to complete self-efficacy and attribution questionnaires. Participants were given a list of seven possible grades and asked to circle the ones they believed they were capable of achieving on their next exam. They were also told to specify the degree of their certainty in terms of achieving that grade on a scale of 0 to 100. Results confirmed Graham’s (2006) findings that students who believe that they can control their learning, express high levels of SE and attribute their outcomes to manageable variables.

In summary, self-efficacy and attribution are closely related constructs as they are both concerned with the interpretations of previous experiences’ outcomes and their effect on future performance. They can predict learners’ efforts expanded, their persistence in dealing with difficulties, and ultimately their achievements. This connection can be explained cognitively, as the underlying beliefs under both of them is the belief in the controllability of learning outcomes. Those who believe in their capability to control their learning are more likely to be self-efficacious and attribute success to factors under their control. It will be
interesting to examine if such connectedness among SE, motivation and attribution exists in Saudi L2 writing context and consider the nature of the relationship and its evolvement over time.

**L2 anxiety.** A close relationship has been reported between students’ SE in learning a L2 and their L2 learning anxiety, which can be both a result and a cause of SE supporting Bandura’s (1977) earlier proposal of such a reciprocal relationship. On one hand, Cheng (2001) found that students with low SE experience more anxiety in learning than those who are self-efficacious and SE can be a major source of their anxiety. In fact, researchers indicate that students’ beliefs in their capabilities to perform in L2 classrooms may be more important to language learning anxiety than their actual abilities (Cheng, 2001; Cheng, Horwitz & Schallert, 1999).

On the other hand, Salem and Al Dyiar (2014) studied the link between L2 writing anxiety and L2 writing self-efficacy using questionnaires and statistical analysis and found that L2 writing anxiety has a statistical influence on L2 writing self efficacy; thus it is able to predict it. Additionally, findings revealed that there is a significant negative relationship between the two variables, as the more anxious the students become, the less efficacious they feel. Furthermore, Sanders-Reio, Alexander and Newman (2014) showed that students with high self-efficacy enjoy writing more, have low writing apprehension and outperform their low self-efficacy counterparts. Although there is more consensus in regard to the relationship between anxiety and SE, research is far from conclusive when it comes to its direction. Despite Bandura’s (1977) argument in regard to the mutual relationship between them, researchers tend to advocate a one directional relationship between anxiety and self-efficacy.

Factors that shape L2 writing SE and anxiety were investigated in Öztürk and Saydam (2014). Results showed that students’ L2 writing SE correlates negatively with their L2
writing anxiety. Additionally, they identified three factors that contribute to influence students’ evaluations of their writing SE and anxiety, namely: linguistic knowledge, writing competence and teachers. To begin with, those who perceive their L2 vocabulary and grammar knowledge to be high, tend to express higher levels of SE and lower levels of anxiety. Secondly, those who have high levels of confidence in their ability to generate ideas and organise sentences, are more likely to be self-efficacious and less anxious in L2 writing. Finally, teachers can influence their students’ SE as well as their anxiety. This particular finding is in line with Ruegg (2014) who highlights the immense influence of the teacher on students’ perceptions of their abilities particularly in a teacher-centered classroom context. He conducted a longitudinal study of 67 Japanese English majors who were divided into two groups. The first one received only teacher feedback, while the remaining one received peer feedback. Only the first group was reported to develop their writing self-efficacy level compared with the others.

Interestingly, different aspects of L2 writing may trigger different levels of SE and anxiety as shown in a study conducted by Kirmizi and Kirmizi (2015). Results showed that participants have high SE in their ability to punctuate and moderate SE in their abilities in relation to content, design, unity and accuracy. They have an overall moderate level of writing self-efficacy and a medium level of anxiety. The highest negative correlations between SE and anxiety is recorded with regard to design and unity. These findings may indicate that SLWSE is best viewed as skill-specific as students’ self-efficaciousness may vary across different skills.

Time of measurement may influence the significance of the relationship between SE and anxiety. Barrows, Dunn and Lloyd (2013) found that students’ SE and anxiety are significantly correlated when tested before the exam. Additionally, they both contribute to the exam performance. That is, high levels of anxiety lower students’ exam grades while high
levels of SE result in a better performance. Similarly, Qudsyi and Putri (2016) reported that students who are self-efficacious before the exam are also less anxious. Low levels of self-efficacy, on the contrary, are associated with high anxiety among students prior to their exam.

As seen from the previous reviewed studies, anxiety and SE seem to be mutually dependent, where the occurrence of one may entail another. The relationship between them may be influenced by the time of measurement and different levels and aspects of writing investigated. However, whether the relation is casual or correlational, the research is not conclusive. This current study may contribute to the existing literature by exploring the interaction between them over time via analysing participants’ written journals.

**Self-regulation.** As Oxford (2016) states self-efficacy is associated with self-regulation, as they are both crucial components of successful L2 learning. Students’ self-efficacy, for example, impacts the number of learning strategies used as well as their types. Magogwe and Oliver (2007) indicated that the higher the students’ self-efficacy, the more strategies they employ in learning a L2. Similarly, Li and Wang (2010) found that students with high SE are reported to apply more strategies than others. Additionally, they use metacognitive, cognitive, social and affective strategies more frequently than their low SE counterparts. They plan their learning, manage their time, set their goals and take notes. Even if inadequate strategies are implemented, efforts are still sustained by finding alternative ways. Furthermore, they continuously assess their learning abilities and discuss difficulties with their teachers and peers.

SE levels may determine the number and type of strategies utilised by L2 learners. Heidari et al., (2012) found that students with higher self-efficacy use more strategies than their counterparts with low SE. Additionally, they employ memory strategies the most and social or affective strategies the least. This may be due to the fact that when students employ
memory strategies, they rely on their cognitive ability which is believed to be within their control. Social and affective strategies, on the contrary, rely on external variables that are beyond the students’ control, such as seeking help from teachers or peers. These results imply that self-efficacy is related more often to controllable aspects of learning.

As far as learning writing is concerned, Aidinlou and Far (2014) examined the link between L2 writing self-efficacy and the usage of writing strategies among 67 participants who studied English at an English Institute in Iran. They completed a questionnaire on general self-efficacy and another one on writing strategies. Participants also took a writing completion test in which the blank was filled with a correct form of conjunctions. Findings revealed that participants who perceive themselves as good English writers are also high frequency users of writing strategies. Similarly, Khosravi, Ghoorchaei and Arabmofrad (2017) indicated that a positive correlation exists between SE and writing strategy use among L2 learners.

Therefore, self-efficacy appears to influence the quality and quantity of strategies implemented by L2 students and prompt the use of a great deal of cognitive ones. This is in line with Yang’s finding (1999) that L2 learners’ beliefs may govern the range of their strategy application. In the current study, qualitative data may reveal the nature of the relationship between them in regard to L2 writing.

Mindsets. Stanford University psychology professor Carol Dweck and her associates conducted several studies of learners from different ethnical and educational backgrounds and concluded that students’ mindsets play a crucial role in their learning motivation and achievement. Mindsets are a set of beliefs that determines people’s perception of their ability as being malleable and learnable or not (Dweck, 2006). For example, students who believe that the intelligence is a developing ability (growth mindsets) that can be enhanced through
efforts are more likely to invest more time in learning and persist longer when facing challenges than those who believe that intelligence is innate (fixed mindsets) and therefore cannot be changed. Growth mindsets are shown to be related to high motivation, setting challenging goals and internal locus of causality in relation to learning outcomes. In order to develop students’ growth mindsets, praise should be given to effort and not on ability. When students are praised on the basis of their ability solely, they tend to approach manageable tasks and avoid the ones that are found challenging. In this way, they exhibit their ability and refrain from taking risk showing their weaknesses. Additionally, when faced with performing challenging tasks that required numerous attempts and efforts, students regard themselves as not intelligent. Moreover, they tend to be concerned with others’ view of their intelligence, therefore, mistakes are perceived as signs of their lack of competence (Dweck, 2006).

Self-efficacy and mindset are two closely related theories (Wood & Bandura, 1989). High levels of self-efficacy are associated with an increase in the beliefs of the malleability of ability as it is based on efforts. Bandura (1997) indicated that individuals with fixed mindset who perceive ability as an innate talent, tend to view their performance results as signs of the levels of their inherent capability and intelligence. Therefore, they avoid challenging tasks and seek easier ones to demonstrate their ability and conceal their weaknesses even at the expense of learning development.

In an academic context, mindset beliefs were examined in Robins and Pals’ work (2002). Results revealed that fixed mindset students are more performance-goal oriented, for instance when they encounter challenges, the focus is on demonstrating their ability to themselves and to others. However, they attribute their learning outcomes to factors beyond their control, such as good luck or low ability. Such negative behaviour in explaining their success and failure make them more likely to experience stress and anxiety when facing difficulties and even when their results are similar to other students. Furthermore, they are
reported to be less determined and less inspired, thus, a great deal of avoidance behaviour, such as dropping classes and quitting learning is noticed.

Growth mindsets, on the other hand, are more learning-goal oriented. They strive to learn by exerting more efforts and hard working. They attribute their learning outcomes to internal and controllable factors such as hard work and ability. In case of a lack of success, they believe they should have adjusted their learning strategies and exerted more effort (Robins & Pals, 2002).

In the field of L2, mindset is defined as “the extent to which a person believes that language learning ability is dependent on some immutable, innate talent or is the result of controllable factors such as effort and conscious hard work.” (Mercer, 2012, p. 22). Lou and Noels (2017) reported evidence that mindset is domain specific as language learning mindset differs from others such as math’s and sport’s mindsets.

Cheng (2001) investigated the link between L2 anxiety, self-efficacy and students’ beliefs in the innateness of language learning. Results indicated that students who perceive the ability to learn a L2 as innate are more likely to experience higher levels of anxiety and low levels of self-efficacy. The author argues that the effect of beliefs in the innateness may be moderated by students’ goal orientations. That is, growth mindsets tend to endorse mastery-oriented goals while fixed mindsets are more likely to have performance-oriented goals. Such various goal-orientation have their influences on students’ cognitive as well as their affective states. The current study may shed light on the relationship between SE and mindsets by analysing participants’ written journals that reveal their beliefs in regard to L2 writing at different time of the academic term.

In summary, reviewing L2 literature reveals that the absence of a developmental perspective of writing self-efficacy is noticeable in these studies. SE was conceptualised in
all the above reviewed studies as a static trait that remains unchangeable across time. Although Bandura (1977) states very clearly that SE is context dependent and varies from one situation to another, researchers have tended to approach self-efficacy as stable (e.g. Abdel-Latif, 2015; Aidinlou & Far, 2014; Al-Mekhlafi, 2011; Jalaluddin, 2013). Additionally, SE correlation was established between separate isolated variables. However, we hypothesise that SE is best perceived as a complex construct that has a close connection with variables such as attribution, goal orientation and mindsets. They share a common underlying belief in learning controllability, or lack of it. On one hand, high self-efficacious students are more likely to attribute their performance outcomes to controllable variables, have mastery-oriented goals which can be achieved and controlled through efforts and display a growth mindset. On the other hand, low self-efficacious learners tend to attribute their performance results to external variables and show learned helplessness, have performance-oriented goals and show a fixed mindset, where the ability to learn is perceived as innate and thus uncontrollable. In response to this misconception of SE and lack of holistic perspective, this research aims to apply a longitudinal perspective to examine SLWSE as a developing system that evolves as it interacts with other subsystems, thus further enriching our understanding of the topic.

Summary

The chapter reviewed the studies on SE in psychology and L2 literature. Given the fact that several limitations and gaps in current knowledge were noted above, an urgent need arose for a thorough investigation of this phenomenon that takes into consideration its complexity and interconnectedness with a great deal of variables. To that end, this current study aims to examine SE in Saudi L2 context using longitudinal mixed methods approach to gain insights into its complexity, dynamicity and interactions with other related factors.
CHAPTER 3

LITERATURE REVIEW ON TOLERANCE OF AMBIGUITY

Introduction

This main purpose of this chapter is to review the concept of tolerance of ambiguity in psychology and L2 literature. It begins with defining TA in psychology and then referring to various perceptions held about it. Subsequently, it examines the topic in L2 literature and outlines the multiple conceptualisations of the concept, ranging from a stable personality trait to a learning strategy that is employed by particular students in order to complete their learning tasks. The relationship between TA and other variables will be then thoroughly reviewed. The chapter concludes with a concise summary that identifies the gap in the literature which the current study aims to address.

Tolerance of ambiguity in psychological literature

TA is a significantly predictive variable whose literature has extended across various psychological sub-disciplines. It has been perceived, for example, as a stable variable in differential psychology, a cultural dimension in cross-cultural psychology, an organisational characteristic in organisational psychology, and a measure of health function in clinical psychology (Furnham & Ribchester, 1995). It correlates with cognitive, affective, and behavioral variables, ranging from dogmatism and anxiety to painting preference (e.g. Chabassol & Thomas, 1975; Dewaele & Ip, 2013; Wiersema, Schalk & Klee, 2012).

The term TA was first articulated in the work of social psychologist Frenkel-Brunswik (1949). She defines it as an emotional and perceptual personality variable, stressing
both its emotional and cognitive aspects. Emotional ambiguity tolerance is developed from the psychoanalytical concept of “ambivalence,” which refers to the coexistence of contradictory feelings towards an object or a person. It is the ability, for example, to love and hate the same person. The capacity to acknowledge and recognise the existence of such ambivalence constructs cognitive ambiguity tolerance. Low ambiguity tolerance is related to ethnocentrism, rigid commitment to the norm, unwillingness to think in probabilities, and a tendency to develop a simplified and inadequate view of reality that includes only black or white (Frenkel-Brunswik, 1949).

Later on, a more comprehensive and commonly quoted definition of tolerance of ambiguity in literature was proposed by Furnham and Ribchester (1995) who define it as “the way an individual (or group) perceives and processes information about ambiguous situations or stimuli when confronted by an array of unfamiliar, complex, or incongruent clues” (p. 179). Generally speaking, ambiguous situations are those characterised by a lack of explicit clear-cut features. Budner (1962), in turn, pinpoints three types of ambiguous stimuli. First, a novel situation that is completely new and unfamiliar to individuals. Second, a complex situation, where several factors must be taken into consideration. Third, a situation involving contradictory factors that can be interpreted in many ways. Individuals characterised as having a low tolerance for ambiguity perceive such situations as threatening, while people with high tolerance for ambiguity enjoy them and perceive them as challenging (Budner, 1962).

Three typical reactions to ambiguous situations have been identified by Grenier, Barrette, and Ladouceur (2005) as symptoms of lack of tolerance of ambiguity:

1- **Cognitive reaction.** People with low levels of tolerance of ambiguity respond to ambiguous situations by using black or white thinking, i.e. straightforward,
clear and specific answers. Therefore, they display a high tendency to value clarity and unwillingness to recognise any vagueness.

2- Emotional reaction. In dealing with ambiguity, emotions such as worry, anxiety, and discomfort may be elevated.

3- Behavioral reaction. This explains the tendency to escape from ambiguity to avoid facing it. Smock (1955) stresses this by referring to lack of tolerance as “a reflection of an increased striving for a ‘stable’ or a ‘familiar’ environment” (p. 177).

As far as conceptualisations of TA are concerned, it has been perceived as a personality trait; thus several studies have been conducted using personality tests in addition to intelligence type instruments (Grenier et al., 2005). For example, in her pioneering work, Frenkel-Brunswik (1949) utilised a test to identify children with certain tolerance of ambiguity biases. A picture of a dog was shown to the children, followed by a series of other pictures presenting transitional phases of representation and ending with a picture of a cat. Children were asked to name what was in each picture. Children with low TA persisted longer with their first answer, a dog, despite noticing the gradual changes in the images, since the probabilities lowered their degree of certainty and, thus, their comfort.

However, the dominant view of ambiguity tolerance as a stable personality trait has been challenged by the view that “within a single individual, high level[s] of ambiguity tolerance within one content domain may be associated with low levels in another domain, and may be unrelated to ambiguity tolerance in a third” (Durrheim & Foster, 1997, p. 748). It has been argued that TA is domain dependent and varies from one domain to another. For example, L2 students may express high level of tolerance of ambiguity in a certain domain, such as when they listen to native speakers, but cannot tolerate it when they speak themselves.
Thus, the nature of tolerance of ambiguity has been recently the focal point of attention among researchers. In reviewing literature on TA, for example, Furnham and Marks (2013) called for an in-depth investigation to determine whether it is context dependent (e.g. Durrheim & Foster, 1997), or a genetic and stable personality trait (e.g. Budner, 1962; Frenkel-Brunswick, 1949). Nevertheless, until today, no studies appear to have aimed to answer such questions thoroughly.

However, literature has offered a thorough explanation that can be applied in order to differentiate between the two approaches to conceptualisation of tolerance of ambiguity (e.g. Epstein, Saelens & O’Brien, 1995; Mischel 1968). The personality trait approach predicts people’s future reactions based on their general characteristics (e.g. Budner, 1962). When tolerance of ambiguity is perceived as a personality trait, it is stable and can be generalised to predict future behaviour. Situationists, on the other hand, studied people’s reactions in a specific situation in order to predict their behaviour in similar future circumstances (e.g. Durrheim & Foster, 1997). The former focuses on internal and static traits, while the latter investigates the external environment.

A recent attempt to design a new instrument that measures tolerance of ambiguity as context-specific was carried out by Herman, Stevens, Bird, Mendenhall, and Oddou in 2010. They suggested that the inconclusive nature of tolerance of ambiguity in literature is due to a lack of contextual perspective; therefore, the concept should be interpreted in relation to its context. The instrument is expected to lead the revolution in tolerance of ambiguity measurement, due to its pioneering focus on context specific features (Furnham & Marks, 2013). An example of a specific context that can influence individuals’ tolerance of ambiguity is L2 learning context.
Tolerance of ambiguity in L2 research

This section will define second language tolerance of ambiguity (SLTA) in addition to reviewing literature on its various conceptualisations. Subsequently, its correlations with variables found in literature of L2 will be presented, with the aim of identifying the gap in the existing literature.

SLTA definition

Ely (1989) was among the first to conceptualise TA as being a context-specific construct and to study it in relation to L2 learning. In a L2 classroom context, lack of SLTA is manifested in an emotional reaction and the uneasiness students experience when encountering doubts. Ely (1989) interprets this as

the relative degree of discomfort associated with thinking: that one does not know or understand exact meaning; that one is not able to express one’s ideas accurately or exactly; that one is dealing with overly-complex language; that there is a lack of correspondence between the L1 and L2. (p. 439)

Since knowing the “exact” meaning of a word, expressing one’s self “accurately and exactly”, and transferring language skills from L1 to L2 are not achievable most of the time, L2 learners may face a great deal of uncertainty when learning and communicating in L2 that may cognitively and affectively impede their learning (Dewaele & Ip, 2013). Being a tolerant L2 learner, on the other hand, involves having

the ability to take in new information, the ability to hold contradictory or incomplete information without either rejecting one of the contradictory elements or coming to premature closure on an incomplete schema, [and] the ability to adapt one’s existing cognitive, affective, and social schemata in the light of new information or experience. (Ehrman, 1993, p. 331)
This definition of SLTA was further developed into a proposed construct that has three levels of functioning in relation to L2 learning: intake, process and accommodation (Ehrman, 1999). To begin with, some L2 learners may have a difficulty taking in new, complex, or contradictory information, which inhibits them from building up an internal understanding of L2. Secondly, some may succeed in absorbing information, but fail to process ambiguity properly. Finally, those who take in information, process it successfully but fail to amend their existing knowledge. Therefore, Ehrman argues that those who tolerate ambiguity can go through all these steps such as integrating the new information into their existing language repertoire, rearranging their knowledge hierarchy and setting their priorities, are more likely to be able to reach a high competence in L2 learning (Ehrman, 1999).

Similar to Budner’s (1962) classifications of ambiguous situations previously mentioned, L2 learners are faced with three kinds of ambiguous situations: novel, complex, and contradictory. Interestingly, Chapelle and Roberts (1986) elaborated on each type of these.

An L2 situation is considered ‘novel’ by learners because the grammatical, lexical, phonological and cultural cues are unfamiliar and therefore insufficient for them to construct a meaningful interpretation. On the other hand, these cues may be perceived as being too numerous to interpret, resulting in a ‘complex’ situation. Similarly, a learner may interpret these multiple language cues as contradicting each other, rendering the situation ‘insoluble’. (p. 31)

Thus, SLTA may be considered a prerequisite for learning a L2, since L2 learning “requires the learner to cope with information gaps, unexpected language and situations, new
cultural norms, and substantial uncertainty. It is highly interpersonal, which is in itself fraught with ambiguity and unpredictability” (Ehrman, 1999; p. 74). Therefore, a certain level of SLTA is of the utmost importance for a successful L2 learning experience.

Levels of SLTA

Since learners encounter new information every day, L2 learning requires a certain level of SLTA that enables learners to, for example, understand subtleties, to risk guessing the word meaning from the contexts, and to pick up grammar implicitly. However, the exact amount of SLTA that can facilitate language learning is still controversial. While some authors, such as Atef-Vahid, Kashani, and Haddadi (2011), claim that a high level of SLTA is a predictor of L2 outcomes, Oxford (1999) points out that only an appropriate level of tolerance of ambiguity is beneficial to L2 learning. This level is specified by Ely (1995) as

the student who is aware of, but not threatened by, linguistic differentiation, and who treats it as an occasion for introspection, experimentation and, ultimately, learning, is the one for whom tolerance of ambiguity will be a help, not a hindrance. (p. 93)

Oxford argues that having high tolerance of ambiguity is as impeding to L2 learning achievement as having a very low level, because a high SLTA “leads to unquestioning acceptance and cognitive passivity” (1992, pp. 37-38). Thus, too much SLTA can cause early pidginisation or fossilisation. In the same vein, El-Koumy (2000) found that L2 students with moderate levels of tolerance of ambiguity outperform those with high and low levels of tolerance of ambiguity. Based on the results of students’ reading comprehension tests, he concludes that both high and low tolerance of ambiguity hinder language learning. Simply stated, students with extreme levels of SLTA may not be able to improve their proficiency regardless of the amount of exposure to L2 input (Ely, 1995).
Conceptualisations of SLTA

Although L2 researchers seem to agree that SLTA can predict language learning (e.g. Chapelle & Roberts, 1986; Dewaele & Ip, 2013; Ehrman, 1999) they vary in their conceptualisations of it. Their perspectives have ranged from seeing it as a stable personality trait to it being a temporary variable that is influenced by the situation and the context or a learning style that in turn affects their use of learning strategies.

SLTA as a personality trait. In L2 research, there has been a tendency to conceive SLTA as a personality variable, which follows the mainstream ideas found in psychology literature. Applied linguists, such as Ellis (2004) and Oxford (1992), view SLTA as a personality trait, therefore, it is perceived to be stable over time and across situations, as it is constructed largely by genetic factors. Hence, they have studied SLTA mainly in relation to other personality traits, such as risk-taking and openness. For example, in referring to the link between SLTA and risk-taking, Oxford (1992) noted how students who are tolerant of ambiguity tend to risk guessing the meaning and speaking without sufficient information. Unfortunately, according to this view, L2 teachers can do little, if anything, to enhance their students’ SLTA to ensure better language achievement, since such personality variables are largely genetically determined and thus unchangeable (Grace, 1998).

SLTA as a situation-specific factor. Ely (1989) classifies SLTA as being situation-specific. He argues that a specific situation, such as L2 learning, provokes and triggers certain degree of TA. Therefore, students who are intolerant of ambiguity in learning a L2 may tolerate a great deal of ambiguity in learning other subjects. In their study of the relationship between openness and TA in regard to undergraduates’ experience of university life, Bardi,
Guerra, and Ramdeny (2009) reach the same conclusion. SLTA and openness do not refer to the same phenomena. Openness is broader than SLTA as it is affected by external threats and challenges as well as by a person’s intellect. Tolerance of ambiguity is best understood as being a context-specific factor that in the case of this research is found to influence students’ well-being only at the beginning of their university life; on the other hand, openness is a stable factor that continues to predict the students’ well-being, even later in their advanced university studies. Taking into account this view, teachers may manipulate the learning context in order to maximise the levels of SLTA by reducing students’ anxiety and increasing the familiarity and clarity of the learning topic, instructions as well as managing effectively the classroom.

**SLTA as a learning style.** Language learning style is referred to as one of the general and preferred methods that students use to acquire a new language (Oxford, 2003). Brown (2000) classified TA as a learning style that describes how L2 learners perceive and process information and how they respond to learning situations. A learning style is believed to have cognitive, affective, and physiological aspects that are stable predictors of the learner’s behaviour in a L2 context. Oxford (1992) relates SLTA to a particular aspect of the students’ learning style, namely in their orientation towards closure. Students that possess this are described as being hard workers who prefer to be organised and prepared; in general, they have a strong need for preciseness in grammar rules and classroom instructions. However, due to the increased influence that personality research has on conceptualisations of learning styles, the boundaries between learning styles and personality types have become vague and undetermined (Dörnyei, 2005; Ehrman, Leaver & Oxford, 2003). Researchers, such as Ehrman, claim that language learning style is merely a personality form that manifests itself
in the language learning context. Following these perceptions, little can be done to influence students’ TA learning style.

**SLTA as a learning strategy.** Language learning strategies are the specific preference actions, behaviours, and procedures used by learners to facilitate their language acquisition (Oxford, 2003). Student language learning styles and learning strategies are intimately related since learners employ strategies that fit their learning styles (Oxford, 2003). SLTA is believed to predict the learning strategies used in reading, writing, listening, and speaking a L2. According to Ely (1989), learners who are tolerant of ambiguity are more likely to engage more in spontaneous conversations, learn the new language without relying on their L1, and to be concerned about effectively communicating and understanding the overall message without paying attention to small details. In contrast, students who are intolerant of ambiguity refer to a dictionary when they encounter new words, plan what they want to say ahead of time, consider their grammar and spelling when writing, and are more likely to have their work proofread. From such a perspective, SLTA may be increased by teaching explicitly some useful learning strategies that help L2 students when they face ambiguous situations, such as pre-teaching new vocabulary and encouraging learners to guess words from contextual clues.

**Theoretical framework supporting this study**

This study adopts the conceptualisation of SLTA as a situation-specific construct (Ely, 1995), for several reasons. Firstly, such conceptualisation of it as being specific to some contexts is in line with the dynamic view of language learning that underlines this research, as opposed to the traditional view of it as a static personality trait. Secondly, it provides a significant explanation for the difficulties students struggled with when leaning L2. For
instance, three aspects of language learning have been identified as being more likely to correlate significantly with SLTA (Ely, 1995). Firstly, mastering specific language aspects such as syntactic and semantic. Secondly, practising language skills and, finally, incorporating these skills in the learning process. This is especially applicable in L2 contexts where students come from a cultural background totally different from the target language culture, as the case of Saudi students learning English. Alptekin (2006) states various specifications of the target culture that are perceived by students as being different from theirs may be cognitively challenging and in turn can lead to a great deal of confusion. Therefore, students’ willingness to deal with challenging and complex learning situations, to accept contradictions and differences in grammar rules and vocabulary, to take enough risks, to make mistakes and to guess answers can facilitate their learning process.

Thirdly, Ely’s perception of SLTA is formed considering the special features of L2 learning which serves the current research purpose. L2 learning for example is linked to beliefs students have of themselves and it fully required engagement in this process; as Cohen and Norst (1989) indicate: “language and self are so closely bound, if indeed they are not one and the same thing, that a perceived attack on one is an attack on the other.” (p. 76). Therefore, students’ confidence in their abilities to learn L2 may play a crucial role in their capabilities to tolerate L2 learning ambiguities.

Additionally, Ely’s work offers a valid instrument for measuring TA in L2 context. Although several instruments were found in the psychological literature, to the best of my knowledge, Ely’s (1995) is the only scale that is designed to measure TA in relation to L2 context. Several recent studies (e.g. Almutlaq, 2013; Atef-Vahid et al., 2011; Dewaele & Ip, 2013; Erten & Topkaya, 2009) have successfully implemented Ely’s Second Language Tolerance of Ambiguity Scale (SLTAS) in examining the impact of SLTA on language learning. Hence, Ely’s theoretical framework was applied in conducting this research. Data
collection and interpretation were conducted following Ely’s (1995) guidelines and conceptions of SLTA.

**SLTA in L2 writing research**

SLTA is also domain-specific. A L2 learner may experience various levels of TA depending on language domains. Kazamia (1999) found that Greek L2 learners of English are tolerant of ambiguity when learning reading and listening, but less tolerant when they write or speak English. L2 students do not tolerate their failure to express their ideas and thoughts adequately in English. Such failures trigger a great deal of intolerance of ambiguity which, according to the study, impedes students’ learning progress in L2 writing and listening.

How well L2 learners perform on task-based writing may be influenced by their L2 TA. Lee (1999) conducted a study that investigated the impact of various degrees of TA on the task-based writing performance of 93 undergraduate participants in a Korean university using a TA questionnaire adapted from the University of Houston (1999). The results showed that students with high TA score higher than students with low TA. How the students organised their writing, paragraphs, and ideas was investigated as well. Students with high TA are more organised, use topic sentences, and summarise their paragraphs. They express their ideas more coherently than their intolerant counterparts.

It appears that Lee (1999) is, to date, the only study to explore the influence of TA on L2 writing. Despite its significant outcomes that highlight the importance of TA in relation to L2 writing processes as well as its final product, no attempt has been made to thoroughly investigate the link. Therefore, there is an urgent need for further studies of this phenomenon that can be guided by previous research on tolerance of ambiguity and its relationships with other variables in different domains of L2 learning. To meet this demand, this research employed a mixed methods design to investigate SLWTA in Saudi context at five different
times of the academic term to allow for more valid, vivid and dynamic results that can be both beneficial to L2 teachers and learners.

**SLTA relationships with learners’ variables in L2 literature**

In reviewing L2 literature, SLTA is found to be a predictor of language performance and outcomes. Additionally, it has been studied in relation to other variables such as L2 anxiety and perfectionism. Studies that investigated such relationships will be reviewed in the following sections.

**Language achievement.** Atef-Vahid, Kashani, and Haddadi (2011) identify SLTA as being a predictor of L2 learning outcomes. They investigated the link between SLTA and students’ performance in a cloze reading test among 38 English L2 learners in Iran. Participants were asked to fill in SLTAS and to complete a passage by writing down the deleted words. This measured their ability to perceive unfinished sentences as complete and comprehended. The correlation test results showed that students with SLTA outscore their intolerant peers. Implications of this finding suggest that higher SLTA learners are likely to be more fluent readers and therefore get more exposure to language through reading.

In the same line, the reading comprehension of L2 learners is studied in relation to their level of tolerance of ambiguity (El-Koumy, 2000). 150 English majors at four universities in Egypt completed a measurement of ambiguity tolerance (MAT-50) developed by Norton (1975), and a reading comprehension test. Results showed that only a moderate level of tolerance of ambiguity facilitates L2 reading comprehension. Low and high tolerance of ambiguity do not predict high scores on reading comprehension tests. The author argues that other variables such as anxiety and risk taking may interact in a complex way with students’ tolerance of ambiguity and lead to such conclusions.
In addition, learning L2 grammar rules entails dealing with uncertainty and contradictions. L2 grammar rules may differ completely from students’ L1, so learners have to confront new and complex information. Add to this, that English grammar rules are internally inconsistent. Exceptions and irregularities can be ambiguous to some students and therefore not tolerated (Brown, 2000).

Interestingly, others suggest that SLTA results from higher levels of language, rather than the other way round. Erten and Topkaya (2009), for example, investigated SLTA among 188 PYP learners at a university in Turkey. Participants completed SLTAS developed by Ely (1995) and results showed that the more fluent students are in a L2, the more they report being tolerant of ambiguity. “As students improve their language proficiency, their level of tolerance also improves. This is to be expected as students becoming more equipped may feel safer in dealing with new information.” (p. 38). Another explanation is that as L2 learners expand their linguistic repertoires, controlling every detail of language learning will not be possible, which in turn develops their skills to tolerate ambiguities.

In summary, SLTA seems to play a significant role in language learning achievement and be linked to language proficiency. However, all the above research presents only a snapshot perspective on SLTA, using quantitative data to link it to achievement without fully addressing causes and factors that may increase or decrease its level. Hence, this research aims to add to the current literature by addressing this concept from a dynamic longitudinal perspective in order to shed more light on changes in SLTA and triggers for these changes. This is in line with Oxford (1992) who argues that SLTA should be perceived as a part of complex system, therefore, researched from a holistic perspective.

Tolerance of ambiguity and risk-taking do not, by themselves, always create consistent results for all language learners; these factors interact in a complex way.
with other factors—such as anxiety, self-esteem, motivation, and learning styles—to produce certain effects in language learning. (Oxford, 1992, p. 30)

**L2 anxiety.** Anxiety is considered a vital component of lack of TA by some researchers (e.g. Bochner, 1965; Smock, 1955) and an emotional reaction to it by others (e.g. Grenier et al., 2005). Yet still others such as Thompson and Lee (2013) identified lack of TA as a constituent of anxiety. They conducted a study to investigate the underlying construct of anxiety in L2 learning classroom in Korea. 123 L2 learners in two universities completed an online questionnaire on L2 anxiety. The findings showed that four underlying factors shape L2 anxiety: lack of confidence in English, low confidence with native speakers of English, English class performance anxiety and fear of ambiguity in English. In that research TA was measured by “11 items indicating a panicked feeling when not everything is understood in English as well as a general dislike and nervousness about English and English courses” (p. 739).

Causes of L2 anxiety have been identified by researchers such as Horwitz et al (1986) and Young (1991). These included communication apprehension, test anxiety and fear of negative evaluation among others. For instance, learners who tend to have high levels of speech anxiety when publicly speaking, found L2 speaking more anxious since they need to express their thoughts in a language in which their proficiency is restricted. Moreover, students are usually expected to take written tests and quizzes in their L2. Therefore, fear of making mistakes may cause their test anxiety to arise and hence their L2 anxiety.

Teachers may have a role in changing students’ L2 anxiety (Young, 1991). Excessive correction and exaggerated control over the classroom experience as opposed to motivating learners to actively take part in learning may trigger the feeling of anxiety. Additionally, teachers who demonstrate certain preferences towards a group of learners and use a difficult
language when explaining new aspects are viewed by Saudi learners as anxiety provoking in L2 classroom (Al-Saraj, 2011). It is also worth mentioning that L2 anxiety is best perceived as skill-dependent since Pae (2012) established that the four skills anxieties contributed independently to the general anxiety and each of these constituted a separate construct.

The relationship between SLTA and anxiety is studied in a L2 context, Hong Kong, by Dewaele and Ip (2013). In that study, 73 students completed the foreign language classroom anxiety scale (FLCAS) and SLTAS. Correlation analysis revealed that L2 tolerance of ambiguity is correlated significantly with L2 anxiety. The students that are anxious are also found to be intolerant of ambiguity in learning a L2. The authors explained the study’s results by referring to the relationship between anxiety and ambiguity, noting that the latter provokes stress and discomfort. However, the authors acknowledged the limitations in their data analysis that prevented them from deciding on the nature of the relationship between the two variables. Thus, a study that looks at SLTA from a more complex and dynamic perspective is needed.

Although it is rational to propose a connection between anxiety and SLTA, little is known in the field of L2 literature in regard to the nature of such relationship, its causes and effects using more longitudinal and mixed method approaches. For this reason, this study aims to address this gap in existing knowledge by tracing SLWTA over five points of time and analysing participants’ written journals to shed light on the relationship between the two variables.

**Perfectionism.** Lack of tolerance of ambiguity shares common features with perfectionism. Almutlaq (2013) found a negative correlation between perfectionism and SLTA among Saudi English majors, as perfectionists do not tolerate ambiguity in L2 learning. In analysing her data, Almutlaq identifies two subscales of perfectionism, as having
significant correlations with SLTA: parental criticism and students’ concern over making mistakes. Students who experience high parental criticism and who strive to avoid making mistakes do not take risks by making guesses or assumptions when they are learning their L2. Additionally, they do not speak either without having previously practised, as they do not tolerate errors. Such symptoms are experienced by low TA in L2 contexts.

Perfectionism is tested in relation to test anxiety, goal orientation and performance in a study conducted by Eum and Rice (2011). Results indicated that mastery goal orientation is more likely to be associated with adaptive perfectionism. Maladaptive perfectionists, on the other hand, are more likely to exhibit a tendency towards performance-orientation. Additionally, highly test anxious students tend to be performance-oriented, maladaptive perfectionists and underperformed their counterparts with low levels of test anxiety.

As can be seen, perfectionism is a variable that may influence or be influenced by L2 learners SLTA particularly for those who concern over their grades and are afraid of making mistakes. It will be interesting to examine whether setting high standards and high concern over mistakes and criticism will be related to SLWTA among Saudi L2 learners in this study.

**Willingness to communicate.** Willingness to communicate has been defined as "a readiness to enter into discourse at a particular time with a specific person or persons, using a L2" (MacIntyre, Dörnyei, Clément & Noels, 1998, p. 547). Vahedi and Fatemi (2015) investigated the link between tolerance of ambiguity and participants’ willingness to communicate among 64 Iranian undergraduates. Results revealed that there is a significant correlation between the two variables, as the participants’ tolerance increases, their willingness to participate voluntarily inside the classroom increases. The authors justified the result on the following ground “that individuals with higher tolerance of ambiguity seem to be more successful in meeting and coping with environmental demands and pressures,
especially during communication and interpersonal relations and hence, they may be more willing to initiate and/or participate in communications” (p. 181). Naderifar and Esfandiari (2016), on the other hand, found no significant correlation between TA and willingness to communicate among L2 learners.

As shown from the review above, there is a possible relationship between SLTA and willingness to communicate. In this current study, students’ SLWTA may be linked to students’ ability to initiate conversation, to answer teachers’ questions and to voluntarily participate in classroom interaction.

Summary

This chapter provided an overview on TA in psychology and L2 literature and referred to its various conceptualisations, either as a stable personality trait or a situation-specific construct. Correlations with other factors such as anxiety and perfectionism were thoroughly discussed. Such investigation of tolerance of ambiguity in L2 literature in particular showed the scarcity of studies that addressed this topic, despite its reported significant influence on students learning, affective and behavioural performance. In addition, the inconclusive results may indicate the need for a new approach to SLTA that takes into consideration the holistic nature and interconnectedness of L2 learners variables. Therefore, this study aims not only to examine SLTA in relation to students’ perceptions of their capabilities to learn English in general and L2 writing in particular, but also to include all other factors that may influence SLTA, SLSE or their mutual relationship at different times of the academic term.
CHAPTER 4

RESEARCH METHODOLOGY

Introduction

This chapter sheds light on the processes that are carried out to collect data to answer the research questions stated in chapter 1. It begins with a discussion of the research design and the rationale for using a mixed-method approach to investigate self-efficacy and tolerance of ambiguity among Saudi English L2 learners. Next, it thoroughly explains the theoretical framework of the study that is used to interpret data and to draw research conclusions. After that, data gathering tools, which consist of four questionnaires and written journals, are discussed and followed by a presentation of the pilot study and its main findings. Then, a comprehensive description of the research sample and the context of the study is given. Finally, data collection procedures are described and followed by an explanation of the techniques used in analysing the data.

Research design

As explained in chapter 1, the current study sought to examine both the change and the interaction between participants’ SE and TA at two different levels. Findings from this research will extend L2 teachers’ and students’ knowledge, as far as the affective factors are concerned, and therefore will, ultimately, enhance their L2 learning experiences. Saying so, this research aims to contribute to L2 literature by identifying the factors that influence SE and TA and understanding their developmental trajectories. To achieve this end, this study adopts a pragmatic paradigm where there is a “concern with applications -what works- and
solutions to problems” (Creswell, 2012, p. 10). Pragmatism is not in favour of a single method but rather implements what works best to answer the research questions. Since in this study the focus is mainly on answering the research questions by exploring the nature of SE and TA and the relationship between them, both qualitative and quantitative approaches to data collection and analysis are used.

Pragmatism that underpins this study is reflected in different principles, the study’s ontology, epistemology and methodology, which are discussed thoroughly in the following sections.

**Ontological framework**

Ontology is the study of the nature of being (i.e. what exists) (Crookes, 2012). For pragmatists, such as Dewey, James, Mead and Peirce, reality emerges out of our actions and hence it is multiple and changeable, therefore, researchers should choose whatever is best to answer the research question (Creswell, 2012). Considering the pragmatic nature of this research, more attention is paid to enhance L2 learning experiences taking into account what facilitates or hinders students’ learning development. To be more specific, this study is concerned with investigating SE and TA among Saudi English L2 learners, the change that happens over time and what triggers it. Therefore, it adopts a multifaceted ontology that changes over times from one student to another and from one context to another.

On one hand, SE and TA are well-defined constructs in psychology and L2 literature (e.g. Bandura, 1989; Ely, 1989; Furnham & Ribchester, 1995). Therefore, it can be argued that the reality of TA and SE is independent and can be generalised across cultures and over time (i.e. positivistic perspective). On the other hand, researching SE and TA at a specific cultural context, among Saudi L2 learners in a public university in Saudi Arabia, shows the vital role of contextual factors in constructing the reality of SE and TA (i.e. constructive
perspective). Therefore, and in order to serve the purpose of this study, both perspectives are applied.

**Epistemological framework**

Epistemology concerns the study of knowledge and the relationship between researcher and knowledge (Crookes, 2012). It identifies the role of a researcher, at its two ends there are objectivism and subjectivism. Taking a pragmatic standpoint in this research entails accepting and implementing various opinions and methods as they serve the study purpose. First, in this study data are collected via questionnaires and are analysed statistically with the minimum interference from the researcher’s part to ensure the objectivity is maintained. Yet, written journals are used to gain useful insights from the study participants that advise the research theory and practice. Qualitative data are analysed using grounded theory techniques that require the researcher’s closer involvement in data analyses and interpretation. By taking these two steps, the current study presents two different but complementary perspectives on SE and TA.

**Methodological framework**

Since the pragmatic paradigm combines multiple ontological and epistemological perspectives, it advocates mixed methods by its nature. A mixed method approach takes into account different views, opinions, and standpoints (Creswell, 2012; Dörnyei, 2007; Richards, Ross & Seedhouse, 2012). Researchers who employ mixed method approaches commonly believe in the usefulness of both quantitative and qualitative techniques, and agree that mixed method studies provide investigators with valid findings. Results that come from two different and at times complementary methods may serve to validate one another, thus giving
researchers greater confidence in their results, as they will not be mere methodological artefacts (Dörnyei, 2007).

Mixed methods research design is advantageous for several reasons (Dörnyei, 2007). Firstly, using mixed methods promotes strengths and overpowers weaknesses of the two methods. By combining the qualitative and quantitative, researchers use the strengths of one method to compensate for the weaknesses of the other method. While using numerical data, for example, can provide scientific and generalisable findings about L2 development, it pays no attention to variations among/within individuals which are very crucial in understanding their learning development. Adding a qualitative method, such as written journals, overcomes the aforementioned weaknesses. Such methodological and analytical triangulation, as depicted in figure 1 below, aims at providing a viable method to produce complementary and comprehensive outcomes (Creswell, 1999; Dörnyei, 2007; Hanson et al., 2005; Mockey & Gass, 2015; Morse, 2003).

![Figure 1. Triangulation of Research Data.](image-url)
Secondly, mixed methods approach allows the researchers to develop a more complete understanding of the researched topic as “words can be used to add meaning to numbers and numbers can be used to add precision to words” (Dörnyei, 2007, p. 45). Therefore, it is very appropriate for researching complex systems through its multi-level analysis. Finally, it enhances validity in the research findings. When qualitative and quantitative results mutually confirm and support each other, the quality of the research increases and its findings validity improve, which makes them of greater use to L2 teachers and students.

Nonetheless, using mixed methods is not without its weaknesses. First, it is time-consuming, as it requires more time than needed for either qualitative or quantitative research alone. Second, results obtained from using mixed methods are sometimes complex and hard to explain, particularly if there is a discrepancy between qualitative and quantitative outcomes. Finally, data collection and analysis require training on using multiple methods and mixing them effectively. However, the advantages of using mixed methods outweigh its limitations. Therefore, this current study considers triangulating quantitative data, obtained from four questionnaires, and qualitative data, obtained from participants’ written journals, as an appropriate method to investigate the change and interactions between self-efficacy and tolerance of ambiguity among Saudi L2 learners. It is worth mentioning that reviewing literature on SLSE and SLTA in chapters 2 and 3 revealed that mixed method studies are scarce in both fields, which adds to the significance of the current study. In the next sections, the main quantitative (i.e. survey) and qualitative (i.e. grounded theory) approaches implemented in this study are discussed.

**Survey research.** The survey design implemented in this study is considered very appropriate to best serve the research purposes. First, the self-report questionnaire is argued
to be the most appropriate and popular methodological tool to investigate personality and psychological traits (Dörnyei, 2007; Paulhus & Vazire, 2007). Some researchers even go further to claim that it is the only effective way to understand people’s perceptions, beliefs and attitudes as people provide rich information on themselves (Paulhus & Vazire, 2007). Therefore, data concerning participants’ SLSE, SLTA, SLWSE and SLWTA were collected via questionnaires. Second, questionnaire is an ideal tool for its ability to allow researchers to collect a relatively large amount of data from a large number of participants in a relatively short time. Results of data, for example, gathered from 184 participants via QESE and SLTAS questionnaires, can be possibly generalised to a larger population of Saudi L2 learners and researcher can draw conclusions about Saudi L2 learners’ self-efficacy and their tolerance of ambiguity when learning English. However, social desirability bias may distort the data gathered form self-reports, as people tend to under-report undesirable behaviours and beliefs, and over-report behaviours and beliefs that make them appear good in the eyes of others (Donaldson & Grant-Vallone, 2002). So, to enhance the validity of the study, complementary sources of data were used, namely written journals.

**Grounded theory.** As mentioned in chapter 1, this study grew out of my concern about Saudi L2 leaners’ SE and TA and the relationship between them which was encountered by a scarcity in the related literature of L2 in general and Saudi L2 learners in particular. Therefore, this current study was not able to build on much published previous research. Thus, from the beginning of this research, explanation for relationships was sought. The exploratory nature of this study is reflected in its research questions, particularly open ended ones, that are best approached by grounded theory. Grounded theory (Strauss & Corbin, 1998) as its name suggests, entails “developing theory based on, or grounded in, data that have been systematically gathered and analyzed. Grounded theory attempts to avoid
placing preconceived notions on the data, with researchers preferring to let the data guide the analysis” (Mackey & Gass, 2015, p. 179). Thus, it encourages starting analysing participants’ written journals with open coding for all the sentences, then consider the themes that are related to the current research (more discussion on coding will be presented later on this chapter). By doing so a theory that explains the research findings may be built and can be illustrated with examples.

**Theoretical framework of the study**

Although using a mixed-method research design may allow the researcher to thoroughly investigate self-efficacy and tolerance of ambiguity from two different but yet complementary perspectives, it falls short in providing theoretical explanations for the research outcomes. The overall aims of the research, the research questions addressing the studied variables interactions and change, and the amplified data collected longitudinally through multiple instruments call for more integrated understanding of the complexity of L2 learning development. Therefore, a dynamic systems theory (DST) is chosen as it can provide a theoretical framework with an enormous explanatory potential. The following section will define, explain and justify the chosen theoretical framework, DST.

**Dynamic systems theory**

A DST approach has been introduced recently by applied linguists and L2 researchers, such as Dörnyei, MacIntyre and Henry (2015); Larsen-Freeman and Cameron (2008), as a potentially propitious theoretical framework for researching and understanding language learning and language development. It studies language, learners and context as complex dynamic systems. Such systems are complex because they consist of multiple subsystems that are in fact complex systems themselves. It is helpful to think of them as a network with multiple
nodes and their child nodes. Those nodes are connected by either unidirectional or bidirectional links with no control nodes to direct the interactions. This network has soft boundaries which enable external and internal interactions to flow into and out of the network. The system is also dynamic, i.e. “one that changes with time, and whose future state depends in some way on its present state” (Larsen-Freeman & Cameron, 2008, p. 29). The present states may influence the system development but cannot predict it.

For a better understanding, we take a language learner as an example of a complex system. The system consists of a handful of subsystems such as the learner’s social, affective and cognitive systems. The affective system, for example, is a complex one that includes subsystems such as language anxiety, motivation, confidence and tolerance of ambiguity. All of these subsystems, e.g. tolerance of ambiguity, are complex systems built from several other subsystems, e.g. openness and risk taking. The interactions between these various systems and their subsystems are dynamic, as their strength and directions change over time. Such complexity and dynamicity make it hard to predict L2 learner’s affective states, e.g. tolerance of ambiguity, at a particular time.

Complex dynamic systems are not deterministic. There are no fixed underlying rules or laws that determine the future of the complex system. They are also open and flowing systems: influences can come from both inside and outside the system, with no end point known for the system. However, and regardless of its dynamicity, the system attempts to settle down into an attractor state (Hiver, 2015). It then stays there and does not move unless a disruptor forces it to. Then, it usually comes back to the same attractor state. For example, L2 motivated learners can become unmotivated after a difficult test but usually build their motivation back shortly. In addition, complex dynamic systems are sensitive to initial conditions. Any change in a subsystem may have an impact on the overall outcomes. This is known as the “butterfly effect”, i.e. a butterfly flapping her tiny wings in Brazil can cause a
tornado in Texas (Larsen-Freeman & Cameron, 2008). In L2 development, for example, individuals who start learning a language with close association to their L1 may progress differently from those learning unassociated languages.

In researching L2 development from a DST perspective, focus is on the change, and when, how and what triggers that change. However, applying a DST approach to L2 research is at its early stages (Dörnyei et al., 2015; Mahmoodzadeh & Gkonou, 2015). There is a lack of defined research tools and clear research methodology which has left novice researchers with only general guidelines on how to adapt and implement the DST methods to L2 research, such as those in Larsen-Freeman and Cameron (2008). This may be due to the fact that applied linguists spend a great deal more time on theorising DST, its relevance to SLA and its promising offers than they do on testing it empirically (Dörnyei et al., 2015). This study aims to contribute to the as yet limited literature that uses the DST to research L2 development.

**Rationale for choosing the dynamic systems theory approach as a theoretical framework**

The DST is chosen to provide a theoretical framework to interpret the research findings for its explanatory power that can account for the complexity of the interactions between self-efficacy and tolerance of ambiguity that take place in a complex and dynamic context. Furthermore, it can account for the change that occurs in an individual learner developmental trajectory and rationalise it. This section sets out more specifically the reasons for using DST as a framework for this research study.

First, unlike more traditional theories, the DST does not aim for generalisation. Rather, it values individual variations, as no two learners are likely to develop in the exact same way (Verspoor & Dijk, 2012). The DST research traces the individual trajectories and explains the ups and downs in the learning journey. The ultimate result of a complex system is not
predictable, even when its elements and their interactions are known. New behaviours, structures or patterns are likely to emerge in a complex system. By focusing on within individual variations, a more comprehensive understanding of SE and TA and their developmental trajectories might be gained.

Secondly, the DST is a theory of wholeness. Studying a variable by isolating it, rather than considering the whole system, may only simplify the reality rather than help to understand its interconnectedness. In addition, a system is more than the sum of its components. In L2 development, for instance, the output is disproportionate to the language input. Continuous exposure to L2 does not necessarily entail language acquisition. Other factors such as the learner’s aptitude or motivation could influence the learning development. Therefore, the DST encourages applying more holistic thinking, over linear cause-and-effect, in understanding systems’ interactions and change. This current study has integrated both qualitative and quantitative perspectives as well as cross-sectional and longitudinal to achieve a fuller understanding of the researched topic.

Third, the DST is about change and thus is compatible with the longitudinal nature of the current study. In fact, Dörnyei (2009) points out that “it is difficult to imagine a dynamic systems study that does not have a prominent longitudinal aspect” (p. 242). L2 learning and L2 learners are complex dynamic systems that evolve continuously over time and across different levels. Looking at L2 development on only one timescale may result in spurious conclusions. However, including all possible timescales is not feasible. The solution is to take into consideration those of primary relevance to the researcher’s questions (de Bot, 2015). Therefore, based on the literature review in chapter 2, this current study identified 5 time points as appropriate to investigate SE and TA, namely: the beginning of the term, before the mid-term exam, after the mid-term exam, after receiving exam’s results and at the end of the term.
Fourth, DST puts great emphasis on the role of context. Language development influences and is influenced by learning contexts. Thus, language development cannot be studied independently of its context and the context cannot be regarded as a mere background to the development (Larsen-Freeman, 2014). Studies that are carried out in artificial or manipulative contexts miss valuable insights gained from studying a phenomenon in its natural context. Understanding the role of the classroom teacher or classroom interactions, for example, is crucial for understanding students’ behaviour. Just as is the case with timescales, however, including all the contextual factors in a research study is not possible. Ushioda (2015) recommends that researchers make pragmatic decisions about the contextual elements that are of primary interest to their research. In this study, SE and TA are investigated in relation to a particular context, i.e. a Saudi L2 writing classroom.

**A dynamic systems theory approach to L2 development**

Although dynamic systems theory, sometimes refers to as nonlinear dynamics, has its roots in mathematics (Larsen-Freeman & Cameron, 2008), its implications for social science in general and psychology of the L2 learner in particular (e.g. Chan, Dörnyei & Henry, 2015; MacIntyre & Serroul, 2015; Mercer 2015; Waninge, 2015; Yashima & Arano, 2015; You & Chan, 2015) open up a new perspective on how to understand language learning processes, how to assess L2 change and development and how to interpret the interactions between various existing variables, such as learner’s variables and contextual factors. The focus has shifted from investigating the variations among L2 learners, to consider variations within a particular learner (e.g. Irie & Ryan, 2015; MacIntyre & Serroul, 2015). Generalisation is not as vital a part of research as previously thought, since the L2 learner represents himself/herself only and is not a representative of the whole population, class, race or other learners having the same language proficiency level (Lasagabaster, 2015).
It is argued by dynamic systems theory researchers that investigating a phenomenon to establish a simple cause and effect relationship between predetermined and chosen variables would only present a blurred and hazy picture of reality (Dörnyei et al., 2015). Dynamic systems theory encourages utilising a holistic approach and considering the multiple, interrelated and complex interactions between various components of a system (Mercer, 2015). Learner development is not always gradual, rather it can be nonlinear. Fluctuations result from interaction between different but relevant components of a system (e.g. MacIntyre & Serroul, 2015; Piniel & Csizér, 2015)

However, there is still a paucity in dynamic systems studies in SLA and particularly in L2 writing literature. Such a lack of interest in applying the dynamic systems theory approach may be due to the three challenges it poses to researchers (Dörnyei et al., 2015). First, if the change is nonlinear, researchers cannot predict development. Unpredictable development cannot be generalised which is an ultimate goal for many researchers. Second, by adapting a holistic perspective, researchers cannot focus only on particular variables as systems are interconnected. Variables do not operate in isolation, rather, they are components of systems that are embedded in other systems (Henry, 2015). This makes it hard for researchers to design and carry out a study without knowing what to expect and thus what to look for. Third, there is an absence of clear guidelines for dynamic systems data collection and analysis. Unlike qualitative and quantitative methods, novice researchers applying dynamic systems theory approach find themselves lost with limited, if any, resources that provide them with practical procedural knowledge that guide their research.

Fortunately, such barriers can be overcome. First, making predictions is not a goal for dynamic systems researchers. Change and emergence are central to understanding system dynamicity and complexity. Nonlinearity is a characteristic of the system as “the reliability of a prediction is always subject to one of myriad factors unaccounted for” (Larsen-Freeman,
This research investigates the changes in L2 learners’ confidence in their writing capabilities and their tolerance of ambiguity. Both variables are conceived as processes that continue to change and not states that are stable over time and thus can be predictable.

As for the second challenge, Henry (2015) advises researchers to limit their attentions to specific interactions but acknowledge their interconnectedness with others. He states although necessary, not least for practical reasons, to limit the focal scope by foregrounding particular elements and dynamic relationship, it is important not to lose sight of the fact that there is always a background of other systems, system components and relationships that are likely to impact on the chosen objects of study. (p. 84)

This research, focuses on writing self-efficacy and tolerance of ambiguity but not as isolated variables, but rather components of larger systems such as self-beliefs and anxiety that is also in relation to other systems such as cognitive and environmental ones. Eyes and minds will be open to detect any possible influences and interactions that can enrich our understanding of the topic in hand.

Dörnyei and his associates (2015) introduced a dynamic systems theory approach to the study of L2 learning motivation. They provided interested researchers with conceptual framework in which they related the general themes of complex dynamic systems to the study of L2. Then empirical studies that tested dynamic systems approach in relation to L2 learning were presented. Data collection procedures and data analysis techniques were discussed extensively which makes it easier for other researchers to apply them to their studies. This study aims to follow a similar pattern with a focus on TA and SE in L2 writing.
Empirical studies in L2 literature. This section will highlight the similarities shared between studies that investigate L2 variables and development from a holistic perspective utilising a DST approach, after a brief review of each of them. To begin with, MacIntyre and Serroul (2015) utilised an idiodynamic methodology to trace changes in L2 learner’s motivation on a second by second timescale. Results showed that motivation varies within some individuals and is stable for others. Participants refer to vocabulary and grammar as the main two factors that shape their motivation when they communicate in a L2. Participants feel less motivated and cannot proceed a conversation without a proper vocabulary storage and grammatical knowledge. Additionally, the researchers were able to distinguish between four typical motivational trajectories found in the data. The first pattern is always positive, the second is always negative, the third is flat and the fourth one shows a great deal of variation. Authors conclude that dynamic fluctuations in learners’ ability to communicate in L2 result from a dynamic interaction among motivation, anxiety, perception of competence and willingness to communicate.

Irie and Ryan (2015) examined the influence of a studying abroad experience on L2 self-concept. Results indicated that all participants start very optimistic and even have unrealistic expectations about their language achievements. After around six months, participants’ behaviour seems to settle in one of three attractor states. The writers emphasise that they do not imply any simple cause and effect relationship between starting optimistic and one of the three attractors, rather they state very clearly that these attractor states exist and some students may come under their influence for a short period of time, others may settle there for a long period, while others may avoid them altogether. The authors encourage L2 researchers to investigate all possible developmental trajectories of L2 learners and do not focus only on a linear one.
Mercer (2011) carried out 21 interviews over a period of two years with a female learner of English as a L2 to investigate the complex nature of learner agency. Learner agency is found to be a complex system that consists of subsystems, such as language learning beliefs, which are complex systems on their own. Unlike the traditional conceptualisation of agency as a static monolithic factor, the findings reveal that learner agency does continuously evolve and adapt to changes in other components of the system. Three factors are found to have an influence on interactions of the learner’s agentic system and guide its trajectory, namely: motivation, affect and self-regulation. The author stresses that researching learner agency as a dynamic system provides a new way at looking at this important variable which in turn benefits both L2 teachers and learners.

Wind (2013) researched the dynamic development of L2 writing from a dynamic systems theory perspective. Written essays and interviews were used to collect data from 2 Hungarian English as foreign language learners on 4 different occasions. Results stress that each student follows a different developmental path of L2 writing. Additionally, these developments are not linear, rather they show moments of progress and regression. Researcher indicates that the dynamic systems theory approach allows him to make sense of intra-individual variations which were ignored at all traditionally or considered a form of measurement error.

Piniel and Csizér (2015) conducted research to trace fluctuations in L2 students’ anxiety, self-efficacy and motivation, to examine the interactions among these variables, and to identify the typical student trajectories. Analysing data shows that participants’ self-efficacy decreases towards the end of the term which may be due to the increased difficulties of the written tasks assigned to them. Anxiety, language learning experience and the ought to L2 self develop in a nonlinear pattern. Examining the data at the inter-individual level, Piniel and Csizér’s (2015) show that participants can be clustered into two groups. In one group,
there is a stability in regard to motivation and writing anxiety. In the other group, on the contrary, there are variations and instabilities in participants’ motivation and anxiety levels. The first group is thought to be in an attractor state, whereas the group is not stabilised yet and thus is vulnerable to changes. One of the important conclusions drawn from this research is that change is related to the level of internalization of various dispositions and selves, that is, more internalized notions tend to withstand change, while issues that are less internalized might fluctuate more easily. (p. 185)

There are certain common characteristics in the design of all these reviewed studies. Firstly, they are all longitudinal. The length of the studies ranged from 14 weeks, as in Piniel and Csizér’s (2015), to two years, as in the study of Mercer (2011). Secondly, data are collected on multiple timescales. In some studies, such as in Irie and Ryan’s (2015), data are collected at 2 different points, however, in other studies up to 21 different timescales are used, such as Mercer’s study (2011). Another similarity is shown in the design of all the above reviewed studies. They are all case studies that use small sample sizes. Mercer (2011) studies the learner agency of one female student, Wind (2013) investigates the development of writing of 2 learners, and MacIntyre and Serroul (2015) trace fluctuations of motivation of 21 undergraduates. Finally, all these studies are conducted to achieve two main goals. Firstly, to trace changes in L2 learner’s behaviour (MacIntyre & Serroul 2015; Piniel & Csizér, 2015), and secondly, to understand the developmental trajectories of L2 learners (Mercer 2011; Wind, 2013). Therefore, this current study takes a further step by combining both these aims as explained earlier in chapter 1.
Research instruments

As explained earlier in chapter 1, the current study was conducted to investigate self-efficacy and tolerance of ambiguity at two levels of specificity, general and domain-specific. To fulfill this research goal, data were first collected from participants at the general level of their learning of English as a L2 via questionnaires. Then, L2 writing related data were collected via questionnaires and written journals. The following sections present a detailed description of all instruments used in this study.

General instruments

Two questionnaires were used to collect data at this level; Questionnaire of English Self-Efficacy (Wang & Pape, 2005) and Second Language Tolerance of Ambiguity Scale (Ely, 1989). Both questionnaires are well-known and well-established in the L2 literature and maintain high reliability across various research contexts. Questionnaires’ items of the two scales cover the same major areas of language learning; speaking, listening, writing and reading. Further discussion of each questionnaire, its response options and its scoring producer is provided below.

Questionnaire of English Self-Efficacy (QESE). Wang and Pape (2005) developed a QESE based on a series of interviews, observation and verbal protocol of Chinese English L2 learners in the USA. This questionnaire consists of 32 items designed to measure participants’ beliefs in their ability to perform in four areas of English: writing, reading, speaking and listening. Participants are asked to make judgments on their abilities to accomplish tasks, with responses ranging from 1 “I cannot do it at all” to 7 “I can do it very well”. However, Bandura (2006) suggested using a 0-100 scale rather than a 4- or 5-point Likert scale because using very limited options narrows down the variations among
individuals. By contrast, adding more steps, such as a 0-100 scale, enables the collection of more differentiating data and thus proves more reliable as it reflects reality more precisely (Bandura, 1997). This is empirically supported by Pajares, Hartley and Valiante (2001), who reported that a self-efficacy scale of 0-100 is psychometrically stronger and more predictive than the traditional Likert scale. Pajares et al. (2001) summarise their results by noting that the fine-grained discrimination of the 0-100 scale provided an assessment of self-efficacy that was not only more strongly related to the achievement indexes with which it was compared but also predictive of achievement in a regression model, whereas the less discriminating scale using the Likert format was not. (p. 219)

It is also easier for Saudi participants in this study to evaluate themselves on a scale from 0 to 100, which is similar to their school grading system, than to use vague expressions such as “I can possibly do it” and “I can basically and in principle do it”. For these two reasons, the response option 0-100, where 0 is “Not confident at all” and 100 is “Completely confident”, has been used in all self-efficacy related questionnaires used in this study. The higher scores correspond to high levels of SLSE.

The internal consistency of the scale as reported by Wang, Wang and Li (2007) is .96. The test-retest reliability is .82 and the concurrent validity is .55. The scale has proved its validity and reliability in different contexts, such as American, Chinese and German (Wang et al., 2007; Wang, Schwab & Fenn, 2011). Wang, Kim, Bong and Ahn (2013) refer to the changes they made in the original questionnaire to fit the research contexts. For example, items used with the Korean and Chinese versions, such as “Can you understand English-language TV programs made in Korea/China?”, were omitted from the German version of the questionnaire because they did not fit the context. In China and Korea, there are TV and radio channels that present their local news, social topics and drama in the English language; in
Germany, however, such channels do not exist because Germans have access to British channels.

In order to fit the Saudi context, a single change has been made by replacing every word “Chinese” with “Saudi” (see appendix A). This is due to great similarities between the two FL contexts. For example, as in China, there are many Saudi radio and TV channels that broadcast in English. Saudi Channel Two is an official Saudi channel that used English in its media. The majority of reporters, presenters and guests are Arabic speakers, and English is their additional language. Such channels present the Saudi culture, local news, international news and drama in English.

**Second Language Tolerance of Ambiguity Scale (SLTAS).** Although there are several tolerance of ambiguity measurements in the psychological literature, such as Frenkel-Brunswik (1949) and Budner (1962), only SLTAS (Ely, 1989) was tailored to measure tolerance of ambiguity in L2 contexts. It is a context-specific tool that is designed with attention to L2 speaking, listening, writing and reading. It aims to measure participants’ tolerance of ambiguity by assessing their degree of agreement with sentences describing certain situations, such as “when I am reading something in English, I feel impatient when I do not totally understand the meaning” and “when I am speaking in English, I feel uncomfortable if I cannot communicate my idea clearly”. The only modification made to the scale was replacing the contracted forms (e.g. don’t and I’m) with their full length forms (e.g. do not and I am) to maintain the same level of formality throughout the questionnaire.

The questionnaire consists of a total of 12 items answered on a 4-point Likert scale ranging from “Strongly agree” to “Strongly disagree”. In order to ensure that participants are not forced to choose an inaccurate response, “Neither agree nor disagree” was added (see Appendix B). It is hoped that this will also reduce the number of uncompleted questionnaires,
as participants tend to not respond to questions that are not applicable to them (Dörnyei & Taguchi, 2010).

As for the scoring producer, “Strongly agree” is assigned 1, “Agree” is 2, “Neither agree nor disagree” is 3, “Disagree” is 4 and “Strongly disagree” is 5. Thus, total scores on the scale can range from 12 to 60; the higher the score, the more tolerant of ambiguity the participant is.

SLTAS is a well-known and reliable questionnaire that has a reliability of .82, as declared by Ely (1989). Since its introduction, the scale has been widely used by researchers such as Dewaele and Ip (2013), Dewaele and Wei (2013), Erten and Topkaya (2009), Kazamia (1999) and Kissau (2006) and has been translated into Greek (Kazamia, 1999), Turkish (Erten & Topkaya, 2009), Persian (Kamran & Maftoon, 2012) and Chinese (Dewaele & Ip, 2013), among other languages.

SLTAS is very suitable to provide answers to the current research questions by assessing participants’ tolerance of ambiguity in relation to their L2 learning. It is a reliable and well-designed scale that covers all domains of English learning.

**Domain-specific instruments**

A lack of research in L2 writing self-efficacy and tolerance of ambiguity literature, as discussed in chapters 2 and 3, was accompanied by a scarcity in the scales that provide sufficient coverage of L2 writing aspects and skills that this study aims to investigate. This motivated me to develop a L2 writing self-efficacy scale (SLWSES) and a L2 writing tolerance of ambiguity scale (SLWTAS) following Dörnyei’s (2003) guidelines. Drawing on extensive reading in related literature, on my knowledge about the Saudi English L2 writing context, my experience with ESL learners and as a teacher and discussions with L2 writing teachers and adult learners, I developed most of these questionnaires’ items. Some other
items were borrowed from other well-known questionnaires. A thorough discussion of each questionnaire is provided in the next sections.

**L2 writing self-efficacy scale.** The SLWSES consists of 14 items: 5 of them (items 1, 2, 3, 4, 5) were adapted from the Writing Skills Self-Efficacy Scale initially designed by Shell et al., (1989). 9 More items (items 6, 7, 8, 9, 10, 11, 12, 13, 14) were developed to represent more specific skills and tasks related to L2 writing (see Appendix C). The newly added items were developed drawing on personal experience in L2 learning and teaching, extensive review of related literature and on insights gained from initial discussions with Saudi L2 learners and teachers. Examples for these items include, “I can write across different genres with good expressions and accuracy”, “I can edit drafts written by my classmates”, “When editing my writing drafts, I can identify my mistakes” and “I can get an excellent grade in this assignment”.

The items in SLWSES are designed following Bandura’s (2006) guidelines. First, the auxiliary verb “can” was used to assess participants’ capabilities. “Will” was avoided as it assesses students’ intentions (Pajares, 2003). Bandura (1997, 2006) stresses that self-efficacy measurements should assess students’ beliefs in their capabilities rather than anything else. Second, SLWSES was tailored as a domain-specific scale that assesses participants’ beliefs in their ability in their writing skills and their capability to perform writing tasks. Bandura (2006) recommends implementing a domain-specific scale when investigating self-efficacy beliefs, as the more general self-efficacy scales predict only general academic performance.

As in the QESE, the questionnaire items were answered on a scale from 0 to 100, where 0 is “Not confident at all” and 100 is “Completely confident” and higher scores correspond to high levels of SLWSE. The Writing Skills Self-Efficacy Scale had a reliability score of .95 with undergraduate students (Shell et al., 1989), while Pajares and Johnson
(1996) reported a reliability score of .91 with high-school learners, and Pajares and Valiants (2001) reported a coefficient alpha reliability of .90.

The SLWSES was later piloted using a think aloud method to examine its effectiveness as a data gathering tool in eliciting relevant information from the research participants. More discussion of the pilot study and its findings will be presented in a later section in this chapter.

**L2 writing tolerance of ambiguity scale.** The SLWTAS is intended to measure participants’ reactions to ambiguities in L2 writing. The scale consists of a total of 12 items and covers most areas of L2 writing learning, such as grammar, vocabulary, ability to express ideas and writing processes. Four items (items 1, 2, 3, 4) were adapted from SLTAS by Ely (1989). These were: “When I write English compositions, I do not like it when I cannot express my ideas exactly”, “It bothers me that even though I study English grammar, some of it is hard to use in writing” “When I am writing in English, I do not like the fact that I cannot say exactly what I want” and “I do not like the fact that sometimes I cannot find English words that means the same as some words in my own language”. The only modification made was replacing the contracted forms of words with the full length forms, replacing ‘don’t’ and ‘can’t’ with ‘do not’ and ‘cannot’, to maintain the same level of language formality throughout the questionnaire. Eight additional items were developed using comprehensive review of related literature and insights acquired from initial consultations and discussions with Saudi adult L2 students and L2 writing teachers (items 5, 6, 7, 8, 9, 10, 11, 12). Examples of these items are “I got overwhelmed when I have to write in a new genre” and “it is frustrating when teachers do not give detailed instructions on the assignments such as the number of words and paragraphs”.

Items are written using both negative (e.g. items 4 and 9) and positive wording (e.g. items 8 and 12) to eliminate any bias in responses (see Appendix D). It is hoped this will minimise any acquiescent bias or response sets and force students to consider questions carefully before marking them all as “Agree” or “Disagree”. This will contribute to the validity of the questionnaire (Dörnyei & Taguchi, 2010).

As in the SLTAS, participants responded by stating the degree of their agreement with a specific item. They were allowed to choose from five options ranging from “Strongly agree” to “Strongly disagree”. As for the scoring producer, “Strongly agree” is assigned 1, “Agree” is 2, “Neither agree nor disagree” is 3, “Disagree” is 4 and “Strongly disagree” is 5. It is worth mentioning that the score is reversed with negative items. Therefore, total scores on the scale can range from 12 to 60; the higher the score, the more SLWTA participant has.

SLWTAS was later piloted and a think aloud method was conducted to examine its effectiveness, as a data gathering tool, in eliciting relevant information from the research participants. More discussion of the pilot study and its findings will be presented in a later section in this chapter.

**Keeping a journal.** Journal-writing in L2 literature is defined as “an account of a second language experience as recorded in a first-person journal” (Bailey & Ochsner, 1983, p. 189). It provides an opportunity for participants to thoroughly express their insights, attitudes and beliefs about their L2 learning experiences. Dörnyei (2007) regards those participants who keep journals as “co-researchers”, as they record frequent data that play a crucial role in explaining the ambiguity that might emerge from the statistical results and the causal relationship between the studied variables. Matsumoto (1987) compiled a comprehensive list of the advantages and disadvantages of using written journals. To begin with, written journals can provide a holistic account of L2 learning experiences as
participants tend to give detailed descriptions of all aspects affecting their L2 learning. This is in line with the current research theoretical framework that applies a holistic perspective to understand L2 learning development. Additionally, they can provide a possible route to learners’ variables, such as their motivation, anxiety and confidence. Hatch (2002) agrees that written journals can yield insights into participants’ unobservable variables, intuitions and feelings, which best serve the purpose of this current study in investigating the psychological variables related to L2 writing. Moreover, their exploratory nature can assist in generating new hypotheses about L2 learning that can pave the way for further research.

A further advantage to add for using journal-writing in this current study is that it is very likely to be highly appropriate for researching change as frequent writings can capture fluctuations. Journal-writing is a suitable method to show participants’ development in emotions, attitudes, beliefs and behaviour over time. Dörnyei (2007) explains how diary studies, a term that is used interchangeably with journal-writing, provide a potential way to capture naturally occurring contextual variations;

Diary methods enable the researcher to study time-related evolution of fluctuation within individuals by collecting data on many occasions from the same individuals. Thus, diary studies are appropriate for looking at temporal variation in dynamic processes, investigating for example how people change or respond to certain stimuli. Diary studies are more sensitive to such questions than many other longitudinal designs because they typically involve more frequent data recording that can capture changes with increased fidelity. (p.157)

However, using written journals can have some limitations. First, results obtained from written journals cannot be generalised to other populations or other situations, which is not a concern in this current study. This is because the main purpose of researchers who use
written journals is to reveal the personal factors influencing L2 learning. Additionally, compared to several other data gathering tools, they are relatively time consuming in relation to data collection and data analysis.

The ultimate aim of adding journal-keeping, as an additional means for data collection in this current study, is that it enables the researcher not only to capture the complexity of L2 writing learning and development but also to identify the various, hidden, variables that can affect SLWSE and SLWTA developmental trajectories. To achieve this goal, participants were asked to write a short descriptive essay of 150 words explaining how confident they were in their ability to write and what made them comfortable or uncomfortable when they were writing in English. They were asked to refer to factors that made them feel secure when writing and others that made them panic when writing in English. They were encouraged to give examples to explain their answers (see Appendix E). Participants were given the option to write either in English or in their mother tongue, Arabic, to ensure that they expressed themselves fully and that their English writing skills would not stand as barriers to communicating their ideas.

**Instruments translation**

Although the quality of instruments translation can dramatically impact the research results, only little is said about the criteria, procedures and guidelines to be followed in translating questionnaires or interview questions from one language to another (Beaton, Bombardier, Guillemin & Ferraz, 2000; Dörnyei & Csizér, 2012; Khalaila, 2013). To acknowledge the importance of and emphasise the need for translated instruments in L2 research, Dörnyei and Taguchi (2010) added a translation section to the second edition of their book, *Questionnaires in second language research: Construction, administration, and processing*. They argued that the translation is an integral part of most research
methodologies, especially in cross-cultural studies, as most questionnaires were tailored and developed in English. Furthermore, a translation may be required when researchers from different ethnolinguistic origins, such as in supervisor-student research, cooperate to collect data from the participants.

Since this current study targets English L2 learners from different levels of proficiency, at a local university in Saudi Arabia, a translation of the instruments from English to Arabic, the participants’ mother tongue, is preferred for three reasons. First, translation is used to ensure that participants respond based on full understanding and they give reliable answers. Second, not only the quality of the participants’ responses is promoted when using a translated instrument (Dörnyei & Csizér, 2012), but also it increases the quantity of the responses. Questionnaires, for example, translated into participants’ native language have higher response rates compared to non-translated versions (Moradi, Sidorchuk & Hallqvist, 2010). That is, language deficiency and language complexity do not hinder L2 learners from participating. Finally, providing translation does not conflict with the current research purpose as the study investigates participants’ self-efficacy and their tolerance of ambiguity and does not evaluate their English competency.

Before discussing the processes of translating the research’s instruments, an important concept in translation, equivalence, will be thoroughly explained and how it is maintained in translation from English to Arabic in this study.

**Equivalence in translation.** One of the goals of translators is to provide a literal translation so the two versions are linguistically equivalent. However, the naturalness of the produced text is crucially important. Thus, translated version should meet two criteria, to be content equivalent to the original version and to sound natural in the target language (Dörnyei & Csizér, 2012).
Equivalence may be understood by many as referring only to vocabulary equivalence. That is word to word or literal translation. However, Cha, Kim and Erlen (2007) identified four other equivalences that should be achieved in translation. These are conceptual, idiomatid, grammatical–syntactical and experiential equivalences. In translating the current research’s instruments from English to Arabic, only two of these equivalences were considered, idiomatid and grammatical–syntactical, while the other two, conceptual and experiential, were not applicable. Each type is discussed below with reference to its relevance to the current research.

Conceptual equivalence occurs when the same word has a different meaning in each language. Thus, it does not apply when we translate between Arabic and English, as the two languages do not share similar vocabulary (Khalaila, 2013).

The experiential equivalence emphasises that items of a questionnaire must have the same cultural meaning in both Arabic and English. That is an item should be experienced similarly in both cultures. The design of the current study instruments seeks to understand participants’ learning process and paying special attention to writing which makes investigating it a universal experience and not a cultural specific one. Thus, maintaining experiential equivalence between the two versions of instruments was not an issue in this study.

Idiomatic equivalence, on the contrary, was a concern when translating the research’s instruments. The instruments mostly include simple and direct words and no idioms or colloquialism were found in the original instruments. However, complex words such as the words idiom and topic sentence were found in the original scales. In order to reach a good idiomatic equivalence between the two versions, the researcher wrote the most proper translation to the complex words and then wrote the word in English between parentheses to
ensure full understanding, as suggested by some participants when they thought aloud. (a further discussion of think aloud will be presented later in this section.)

Maintaining a grammatical–syntactical equivalence between Arabic and English languages was another problematic issue as the two languages differ in their syntax and grammar rules. Word order, verb tenses and verb conjugation are some examples. However, well translated sentences do not require using the same grammatical structure as the original text, their only requirement is to fulfill the same referential function (Mughazy, 2016). Thus, when translating the current research instruments less attention was paid to maintain the same grammatical structures and more attention was paid to ensure equivalence in reference and meaning between the two versions.

Finally, in order to reach equivalence, clarity and naturalness of the language, the process of translation was carried out by a group of bilingual speakers and went through different stages of editing before the final version. The processes of translation that took place at this stage of research are described in the following sections.

**The processes of translation.** Direct translation is not sufficient to obtain content equivalence. Instruments should be comprehensible and adapted culturally and at the same time preserve the same ideas and meaning of the original ones. Such a difficult and multi-stage task should be approached by a group of bilingual speakers who have sufficient understanding and knowledge of the topic of interest. Thus the translation was carried out by a group of five people who are fluent in both Arabic and English. The translation went through five stages as suggested by Dörnyei and Taguchi (2010); translation, review, adjudication, pretesting and finally documentation.

Khalaila (2013) recommends using a skilled and experienced translator especially when the translation is to Arabic language. Arabic is a diglossic language where two
varieties, standard and dialects, are used and function differently in everyday life. Khalalila (2013) advises using only Standard Arabic which is understood by people from all different regions and all levels of education. Failing to translate properly can threaten both the validity and reliability of the study. Thus the researcher and another translator certified by Saudi Ministry of Education, firstly, translated the instruments separately into Standard Arabic. Then the two versions were compared and differences were discussed. Based on the discussion, we agreed on a final version. Secondly, two of the researcher’s colleagues, one holding MA in translation and the other having just graduated from an English Language and Translation college, were invited to review the instruments and to pay special attention to the naturalness of the Arabic text and the equivalence of content between the two versions. Only a few areas were identified as ambiguous or vague. So as a third stage and in order to validate the instruments, the instruments were sent to Dr. Orieb Massadeh-Tate, a lecturer in Translation and Interpreting Studies in University of Salford, who made the final decisions regarding the ambiguous and vague statements. Finally, the instruments were ready (see Appendices F-J) and then piloted to a population who were very similar to the study target sample. Discussion of pilot study and its results are provided in the next section.

The pilot study

To pilot an instrument is to test it empirically in the field on a group of participants who share similar characteristics to the intended target sample (Dörnyei & Csizér, 2012). Feedback received from such test help in identifying drawbacks in the construction, administration and later on the analysis of the instruments data. Dörnyei (2003) compiles a list of advantages of piloting research instruments in all research phases. Firstly, in the phase of constructing instruments, piloting helps to highlight items that are too difficult to answer, items that are ambiguous or vague and items that are left unanswered. Secondly, in the phase
of administration, conducting a pilot test enables the researcher to do a trial performance for the study. It helps in estimating time needed to finish the questionnaires, for example, and evaluating the clarity and accuracy of the instructions and whether participants were able to follow the instructions easily. Finally, and in the phase of data analysis, piloting the study gives very useful insights to the data analyses process by highlighting the items that measure something irrelevant, items that do not display a full range of responses and response choices that are not used. It also provides the researcher with preliminary data and opportunity to check the scoring system. Following Dörnyei’s (2003) guidelines, the piloting test was planned at two stages; initial piloting and final piloting.

**The initial piloting**

As a first step to ensure the instruments are clear, proper and accurate, think aloud protocols are implemented. Dörnyei and Csizér (2012) encourage researchers at this stage to carry out think-aloud interviews with three or four friends, colleagues or family members. Their feedback will draw researcher attention to limitations in intelligibility, readability and suitability of the research items (Johnstone, Bottsford-Miller & Thompson, 2006). Thus, three people, a friend, a family member and a colleague, from different backgrounds, TESOL, education and psychology, were asked to go over the instruments, answer questions and verbalise what they think and understand.

Prior to their participation, they were informed that the purposes of the interview were to test the instruments, highlight ambiguities and difficulties and to get intensive feedback prior to use these instruments to collect the main data. Respondents were encouraged to share any problems or matters they had encountered in completing the instruments.

Participants provided valuable feedback regarding the clarity of the instructions, naturalness of the language and the comprehensibility of questionnaire items. All three
participants found that items of SLTAS, SLWSES, SLWTAS and journal’s instructions were clear, easy to read and comprehend. In addition, they all agreed that QESE’s items were vague and could have multiple interpretations. Questions such as “can you understand stories told in English?” or “can you understand American English TV programs?” were found to be difficult to answer. Dörnyei and Taguchi (2010) recommend using specific terms and avoiding general and abstract ones as “American English TV programs”. Participants found the language of some TV programs such as children programs is simpler, clearer and easier to understand than other programs such as news and reality shows. So, to avoid this ambiguity several solutions were provided. First, specific examples were added to orientate the participants, such as in item 3 “can you fully understand American English TV programs such as news, business reports and weather broadcast?”. Here the examples will hopefully specify the level of language difficulty asked in such questions. Second, in some items the vague words were replaced by more specific ones to narrow down the scope of the questions as in item 7 “can you write English compositions assigned by your teacher?” to be “can you write an English essay made of three paragraphs assigned by your teacher?"

Another vagueness was found in items such as item 25 “can you read English newspapers?”. Was it a question of their ability to read correctly or whether it is about their ability to make sense of what they have read? L2 students may be able to read an article accurately but they may not be able to comprehend it properly (Jeon & Yamashita, 2014). So, to solve this dilemma, the questions were rewritten using “comprehend”. The rewritten version is “can you comprehend English newspaper’s articles?”. Moreover, adverbs, such as fully and correctly, were added when necessarily to specify the certainty and the degree of questions, such as item 16 “can you fully understand the English news on the Internet?” and item 12 “when you read English articles, can you guess correctly the meaning of unknown
words?”. Finally, two items (2 and 32) were rewritten to make them more understandable and thus improve the response quality.

Table 1 below shows the questionnaire items before and after the initial piloting of the study. Italics are used to highlight words or phrases that are edited, inserted or re-written.

Table 1

*The items of QESE before and after initial piloting of the questionnaire*

<table>
<thead>
<tr>
<th>Original items</th>
<th>Items after initial piloting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Can you understand stories told in English?</td>
<td>1. Can you <em>fully</em> understand <em>long</em> stories told in English?</td>
</tr>
<tr>
<td>2. Can you finish your homework of English reading independently?</td>
<td>2. <em>Can you do homework alone when they include reading new English texts?</em></td>
</tr>
<tr>
<td>3. Can you understand American English TV programs?</td>
<td>3. Can you <em>fully</em> understand American English TV programs <em>such as news, business reports and weather broadcast?</em></td>
</tr>
<tr>
<td>4. Can you introduce your school in English?</td>
<td>4. <em>Can you describe your university’s campus to other people</em> in English?</td>
</tr>
<tr>
<td>5. Can you compose messages in English on the internet (face book, twitter, etc.)?</td>
<td>5. Can you compose <em>short</em> messages in English on the internet (face book, twitter, etc.)?</td>
</tr>
<tr>
<td>6. Can you give directions from your classroom to your home in English?</td>
<td>6. Can you give directions from your classroom to your home in English?</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>7. Can you write English compositions assigned by your teacher?</td>
<td>7. Can you write an English essay made of three paragraphs assigned by your teacher?</td>
</tr>
<tr>
<td>8. Can you tell a story in English?</td>
<td>8. Can you tell a short story in English?</td>
</tr>
<tr>
<td>9. Can you understand radio programs in English speaking countries?</td>
<td>9. Can you fully understand radio programs in English speaking countries, such as political talk shows?</td>
</tr>
<tr>
<td>10. Can you understand English TV programs made in Saudi?</td>
<td>10. Can you fully understand English TV programs made in Saudi, such as Saudi Channel 2 programs?</td>
</tr>
<tr>
<td>11. Can you leave a message to your classmate in English?</td>
<td>11. Can you leave a note to your classmate in English?</td>
</tr>
<tr>
<td>12. When you read English articles, can you guess the meaning of unknown words?</td>
<td>12. When you read English articles, can you guess correctly the meaning of unknown words?</td>
</tr>
<tr>
<td>13. Can you make new sentences with the words just learned?</td>
<td>13. Can you make new sentences with the words just learned?</td>
</tr>
<tr>
<td>14. Can you write email messages in English?</td>
<td>14. Can you write a formal email message to your teacher in English, to ask for feedback on your performance?</td>
</tr>
<tr>
<td>15. If your teacher gives you a tape-recorded English dialogue about school life, can you understand it?</td>
<td>15. If your teacher gives you a tape-recorded English dialogue about school life, can you fully understand it?</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>17. Can you ask questions to your teacher in English?</td>
<td>17. Can you ask questions to your teacher in English?</td>
</tr>
<tr>
<td>19. Can you introduce your English teacher in English?</td>
<td>19. Can you introduce your English teacher to <em>someone else</em> in English, <em>referring to his/her interests, achievements and educational background</em>?</td>
</tr>
<tr>
<td>20. Can you discuss in English with your classmates some topics in which all of you are interested?</td>
<td>20. Can you discuss in English with your classmates some topics in which all of you are interested?</td>
</tr>
<tr>
<td>22. Can you understand English movies without Arabic subtitles?</td>
<td>22. Can you <em>fully</em> understand English movies without Arabic subtitles?</td>
</tr>
<tr>
<td>23. Can you answer your teachers’ questions in English?</td>
<td>23. Can you answer your teachers’ questions in English?</td>
</tr>
<tr>
<td>27. Can you understand numbers spoken in English?</td>
<td>27. Can you understand telephone numbers spoken in English?</td>
</tr>
</tbody>
</table>
28. Can you write diaries in English?  
28. Can you write *one-page diary entries* in English?

29. Can you understand English articles about Saudi culture?  
29. Can you *fully* understand English articles about Saudi culture?

30. Can you introduce yourself in English?  
30. Can you introduce yourself in English, *your hobbies, educational background and your goals*?

31. Can you write an article about your English teacher in English?  
31. Can you write *an essay in two pages* about your English teacher in English?

32. Can you understand new lessons in your English book?  
32. Can you understand new *English reading materials* (e.g. *news from the Time magazine*) selected by your teacher?

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After amending the instruments based on the aforementioned feedback, the final piloting was conducted.

**The final piloting**

**General instruments.** At this stage, 106 Saudi English language learners from different Saudi universities completed the general questionnaires, QESE and SLTAS. Those participants shared similarities with the main study target sample. They were both Saudi English majors at a university level. Dörnyei and Taguchi (2010) suggest that in L2 research, 80 to 120 participants should participate in the piloted questionnaires in order to give clear indications about the validity of using some statistical tests. A comment box was added at the end of the survey and participants were asked to leave their comments, opinions or questions.
to the researcher. Additionally, participants were encouraged to report any difficulties they faced completing the questionnaire questions.

Prior to filling in the questionnaires, participants were provided with an information sheet (see Appendix K) and required to sign a consent form (see Appendix L). It took them between 20 to 25 minutes to finish and no major issues were reported. The reliability of these two scales has been tested and the results revealed that both scales were highly reliable (see Appendix M).

**Domain-specific instruments.** In this phase of study piloting, data were collected from 3 Saudi English learners at the English institution in London at three different times using SLWSES and SLWTAS. Although this was a small number of participants it was felt to be appropriate at this point in the research, allowing the researcher to focus fully on the responses provided (Dörnyei, 2007). These participants shared several similar characteristics with the main study target sample, as they were both Saudi female in their twenties, English was their medium of instructions and they were using English on everyday bases for their study and for communications with peers and teachers. Informed consent (see Appendix L) was obtained from each student prior to her participation. Subjects were given an information sheet (see Appendix P) and assured that their participation was voluntary and that they can drop out at any time without consequences. They were also assured that all information collected for this study will be kept private and in confidence.

Questionnaires were administered personally by the researcher before participants’ writing classes. After that, participants were asked to keep a written journal which they sent later to the researcher via an email. I found it useful to send participants emails to remind them to write their journals on time. I also reminded them of the instructions each time they wrote to ensure their entries were focused and related to the research topic. These instructions
included a 150 word limit providing the examples and specifying their entries related to factors and variables that made them feel more confident in relation to their writing ability. Additionally, they were asked to address any issues impacting their feeling of being comfortable in writing classes. I thanked the participants after sending each entry, letting them know that I valued their contributions. Participants did not report any difficulty in completing the questionnaires and in writing their journal entries.

After that, data for each participant were analysed and a graph was drawn to show the rise and fall of each student’s SLWSE and SLWTA over time (see Appendix N for an example). This provided the researcher with the opportunity to analyse this preliminary data in order to decide on the most appropriate data analysis techniques and to check the questionnaires’ scoring systems. After conducting the final piloting, the research instruments were finalised to be utilised for the main study. The main research sample and setting will be described in detail in the next sections.

The main study

This section sheds light on the main characteristics of research samples who completed the general and domain-specific instruments. In addition, it describes the setting where the study took place. It also draws attention to the ethical issues that had been considered before, during and after data collection.

General instruments sample and setting

The current study targets Saudi English majors at a public university in Riyadh, Saudi Arabia. Prior to their enrolment at the English department, all participants had studied English for at least 6 years in their intermediate and high school stages, according to the Saudi national curriculum. Students’ placement at the English department is dependent on
their results on a written test that is developed by the English department in that university. Students who score below 70 enroll in a full year of intensive English course, pre-sessional, while those who score below 80 are put in a one semester course of intensive English before joining the department. Those who score above 80 join the English department, at level 1, immediately.

The participants were 184 undergraduate students. Due to the gender-segregated culture in Saudi Arabia, and the challenge of accessing male students, the research sample included only female participants. Their ages ranged from 18 to 27. They were from different academic levels, from level 1 to level 8. 17 of them lived in an English-speaking country for a period that ranged from 5 months to 6 years. Table 2 illustrates the general characteristics for the research sample.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>Age</td>
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<td></td>
</tr>
<tr>
<td>18</td>
<td>8</td>
<td>4.3</td>
</tr>
<tr>
<td>19</td>
<td>36</td>
<td>19.6</td>
</tr>
<tr>
<td>20</td>
<td>61</td>
<td>33.2</td>
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<tr>
<td>21</td>
<td>32</td>
<td>17.4</td>
</tr>
<tr>
<td>22</td>
<td>17</td>
<td>9.2</td>
</tr>
<tr>
<td>23</td>
<td>17</td>
<td>9.2</td>
</tr>
<tr>
<td>24</td>
<td>6</td>
<td>3.3</td>
</tr>
<tr>
<td>25</td>
<td>4</td>
<td>2.2</td>
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<td>---</td>
<td>---</td>
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</tr>
<tr>
<td>27</td>
<td>2</td>
<td>1.1</td>
</tr>
</tbody>
</table>

**Academic levels**

<p>| | | |</p>
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<th></th>
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<tbody>
<tr>
<td>1</td>
<td>44</td>
<td>23.9</td>
</tr>
<tr>
<td>2</td>
<td>85</td>
<td>46.2</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>3.3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
<td>9.2</td>
</tr>
<tr>
<td>7</td>
<td>26</td>
<td>14.1</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>.5</td>
</tr>
</tbody>
</table>

**Live abroad in English-speaking country**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17</td>
<td>9.2</td>
</tr>
<tr>
<td>No</td>
<td>167</td>
<td>90.8</td>
</tr>
</tbody>
</table>

**Length of stay (in months)**

<p>| | | |</p>
<table>
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<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>1.6</td>
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<tr>
<td>18</td>
<td>1</td>
<td>.5</td>
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<td>24</td>
<td>1</td>
<td>.5</td>
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<tr>
<td>36</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td>48</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td>72</td>
<td>1</td>
<td>.5</td>
</tr>
</tbody>
</table>
As shown in table 2 above, the majority of the participants aged 20 (n= 61, 33.2%) and were at level two in the university (n= 85, 46.2%). More than 90% of the participants had not lived outside Saudi Arabia in an English-speaking country.

**Domain-specific instruments sample and setting**

Since the majority of students who participated in the general phase of the current research were from level 2, one class of level 2 students was chosen to take part in the domain-specific phase. They were recruited as they were more likely to participate and showed interest in the study. They were 30 participants attending the same class, taught by the same instructors and were assigned the same homework. This aimed at eliminating the contextual influences on participants’ learning development, as suggested by Piniel and Csizér (2015), and thus made researching person-in context more feasible. The number of participants was believed to be sufficient as data was collected at five different times of the academic term which resulted in a total of 300 questionnaires and 150 written journals. Such a number provides sufficient grounds to perform statistical tests and to yield a wide scope of data.

**Ethical considerations**

Ethics are the standards for carrying out a research in order to prevent the occurrence of any physical or psychological harm to the research participants as a result of taking part in the study. Creswell (2009) encourages researchers to take into consideration the ethical issues in order “to protect their research participants; develop a trust with them; promote the integrity of research; guard against misconduct and impropriety that may reflect on their organizations or institutions; and cope with new, challenging problems” (p. 92). Thus, prior to commencing the study, ethical approval was sought from the College Ethics Panel at the University of Salford by completing an Ethical Approval Form for Post-Graduate
Researchers. After the approval was obtained (see Appendix O), a proposal, summarising the intended study, outlining the research methodology and data collecting procedures, and providing a copy of the questionnaires, and the guidelines for writing a journal, was sent to the English department at a Saudi university, where the study took place, to ask for permission to conduct the study. Some days later, the permission was granted.

Before administering the general instruments, QESE and SLTAS, participants were provided with an information sheet (see Appendix K) that invited them to participate in the study and explained the research purpose, the time commitment and participant’s right. It also assured them that their responses were anonymous and confidential. All participants who agreed to take part in the study were requested to sign the informed consent form (see Appendix L). Information sheet and consent form were translated into Arabic to make certain that participants totally understand what is required from them and to avoid any misunderstanding that may arise from using English.

In addition, it was made clear to all the participants, in information sheet and consent form, that their participation is voluntary and they have the right to withdraw from participation at any time without giving any reasons. Furthermore, it was clarified that data were collected for research purposes only. All data were kept in a locked cabinet and online on a password protected device.

In the same way, before conducting domain-specific research, participants were provided with information sheet (see Appendix P) and required to sign a consent form (see Appendix L). The same ethical considerations were applied. Participation was voluntary and made clear that refusing to take part in the study will not have a consequence and will not affect their writing grades. To protect their identity, their names and the name of the university where the study took place were kept anonymous. All data collected from the
participants at this stage are kept in a locked cabinet and online on a password protected device.

**Data collection procedure**

As mentioned earlier, the purpose of the current study is to examine SE and TA at two levels of specificity. Thus, data were collected at two phases; general and domain-specific. For the general research, QESE and SLTAS were administered to 184 female Saudi English learners. Then, 30 participants were invited to take part in the second phase of the study and to fill in the SLWSES and SLWTAS and write journals during five different times of the academic term. The procedures followed in collecting data are explained in the sections below.

**General instruments**

As soon as the permission was received from the Saudi university to conduct the research, a visit was made to meet with the teachers there. Research purposes were explained to them and they were asked to help collect the data. The researcher was provided with the opportunity to distribute the questionnaires during the lesson time without the presence of the instructor. This was done with the aim of ensuring a high response rate as well as obtaining reliable and objective answers.

The researcher entered the classroom and introduced herself to the students. Furthermore, the purpose of the visit was explained. Then, the students were handed both the information sheet and the consent form to sign. Subsequently, the instructions were given in Arabic in order to ensure the procedure is clear to everyone. Moreover, they were encouraged to ask questions or raise any issues if there was the need to do so. It is also worth mentioning
that the students were assured that their answers will be confidential and used for research purposes only. The researcher also guaranteed their responses will be anonymous.

The average time to fill in the questionnaires was approximately 20 to 25 minutes. Having accomplished the procedure, the researcher expressed her gratitude to the students and asked whether they would be interested in obtaining the results. If so, they had the opportunity to provide their email addresses.

**Domain-specific instruments**

As mentioned above, the general questionnaires were conducting among students from level 1 to 8 with the majority of level 2 participants. Therefore, it had been decided to meet level 2 writing lecturers to carry out the domain-specific research using SLWSES, SLWTAS and written journals. Having explained the procedure and the researcher’s expectations from the class, the researcher was introduced to the syllabus and the important term dates. Then an established class of 30 students was chosen for several reasons. First, to have a research sample that is relatively homogeneous which “allows us to conduct an in-depth analysis to identify common patterns in a group with similar characteristics” (Dörnyei, 2007, p. 127). Second, to eliminate the contextual influences on participants’ learning development, as suggested by Piniel and Csizér (2015).

Afterwards, my four visits were arranged with the class instructor in advance; at the beginning of the term, at their mid-term exam date, at the date they receive the exam results and at the end of the term. I was able to participate in the first two visits. However, taking into account my studies overseas, I asked my colleague, who has the same qualifications, to pay the remaining two visits on my behalf.

Collecting data at the beginning of the term may help to gain insight into the initial conditions of the students as well as their goals and expectations. Furthermore, it may provide
useful information regarding their previous learning experience. Therefore, I was allocated the last 20 minutes of their class during their second week. The procedure followed the same patterns as the general instruments are concerned.

At their mid-term exam date, data were collected twice: before and after it. The class lasted for two hours; one of each was devoted to the exam. I was given the first 25 minutes of the lesson before exam and 25 minutes after it. This time was deliberately selected with the aim of investigating the influence of exams on participants’ judgments of their L2 writing self-efficacy and tolerance of ambiguity, particularly in the Saudi exam-oriented educational setting. The pressure of taking exam may have an effect on their responses as far as their SE and TA are concerned. However, their actual performance during the exam and their perception of it may determine their after-exam judgments of L2 writing self-efficacy and tolerance of ambiguity.

Having received both the mid-term exam results and the feedback from their teachers, the participants answered another set of questions and they also wrote another journal entry. Having obtained their mid-term grades and feedback, participants’ perceptions of their ability to write in L2 and to tolerate ambiguity may be changed.

By the end of the term, during their last class before the final exam, participants completed the last round of data collection. This data was chosen considering the comparison of participants’ development throughout the term taking into account their starting point and their final outcomes. Therefore, this data may enable to evaluate the progress made over the period. It is worth stressing that the whole procedures were done in a similar manner throughout the five data collection points.
**Data analysis**

Both quantitative and qualitative data were collected. The latter can explain the numerical results and give voice for the participants to illustrate and elaborate on their answers. Data analysis follows the pattern of gaining general results in order to establish their overall SLSE and SLTA from a relatively large sample of Saudi English L2 female learners. Gaining insights into their general psychological background in relation to SLSE and SLTA, I sought to extensively investigate their SLWSE and SLWTA through the collection of 300 questionnaires in total and 150 journal entries from 30 participants. The sections below illustrate the analytical techniques used to analyse the research data.

**Quantitative data analysis**

Data gained from QESE, SLTAS, SLWSES and SLWTAS were coded and then entered into the Statistical Package for Social Sciences (SPSS, version 21) for analysis. Subsequently, a series of statistical tests were run to analyse the data. First, descriptive statistics; means, standard deviations, minimum and maximum, were used to provide general characteristics related to research participants and their SE and TA. These techniques provide an overall summary of the data and its general tendencies (Larson-Hall, 2010).

After that, a correlation test was used. Its purpose is to “look at two variables and evaluate the strength and direction of their relationship or association with each other” (Dörnyei, 2007, p. 223). Therefore, it is used in this study to determine the relationship between SLSE and SLTA and between SLWSE and SLWTA (research questions 1 and 2). Finally, one-way analysis of variance (ANOVA) was incorporated to test the significance of differences between participants’ scores in their SLWSE and SLWTA during five various periods of time (research question 4) following Dörnyei’s (2007) recommendation.
Qualitative data analysis

The analysis of qualitative data went through two phases; translation and coding. First, participants’ journals were translated into English due to the following reasons: being able to provide quotations when discussing data and using NVivo which only supported English language. Then, coding was done to provide significance to the gathered data. The former and the latter will be discussed in depth in the following sections.

Written journals’ translation. To analyse participants’ journals, they were first translated from Arabic, the participants’ mother language, to English. Participants were told that they could write their journals’ entries in Arabic, as in this study measuring participants’ proficiency in English or their ability to write in English are not looked over. Giving them this choice ensures that language is not a barrier to their writing and to their communication of thought, feeling, opinions and experiences. Participants might be able to write in English at some level, but their English proficiency may have an impact upon the information they provide, which results in improvised entities and questions the value of written accounts. The study aims to shed some light on participants’ affective factors towards English writing and how they report and reflect on their writing experiences. Writing in their mother tongue is thought to enable them to fully express themselves, specially when discussing sensitive or emotional topics such as confidence in ones’ capability and TA (Murray & Wynne, 2001).

After completing almost 45 hours in translating participants’ entries from Arabic to English, they were sent to a colleague, who is proficient in both languages, to back translate them into Arabic. Four weeks later, an online meeting was held to discuss the translation and to point out the differences between her translation and the original version. We talked through these and agreed upon some minor changes. Adjustments, then, were made where needed until both copies reached an equivalence of meaning. One of the difficulties
encountered was distinguishing between *Twtur* and *Qalaq*. These terms are used interchangeably in Arabic to refer to both stress and anxiety. We agreed to use *Twtur* to refer to a stress that is evoked by a temporary experience such as the unpleasant feeling before the exam and use *Qalaq* to refer to anxiety that is more general feeling than stress and can cause it. Another example is the usage of words such as *Akhlaj* and *Astahi*. Such words are used interchangeably in Arabic, however, in this study *Akhlaj* is translated as feeling ashamed and *Astahi* is translated as being shy (see Appendix Q for examples of written journals’ translation).

**Coding.** To code the data is to give significance to a particular set of information (Dörnyei, 2007). By doing so, data are gathered under a particular theme, topic or a keyword. Data were then entered into NVivo, version 10.1.1., for analysis. The total number of words entered was 23100. Firstly, a folder was created for each participant which included all their five entries. Then, another folder was prepared for each data collection time point, which included all participants’ entries at one particular time of their academic term. Participants’ journals were read and openly coded line by line following the procedures of grounded theory coding. Coding each line has the advantage of maximising the researcher opportunities to notice the emergence of new themes and document them. It also ensures that the researcher does not leave any important information unread or uncoded (Holton, 2007; Richards, 2003). Coding is carried out while taking participants’ perspective of their social learning and their interpretation of their experiences into account to establish a socially based approach where the context in which they learn and write is an integral part of the system (Dörnyei et al., 2015; Lasagabaster, 2015).

A coding journal was kept to document the coding and to define each theme and the relationship between different entries at different times of data analysis. A journal was also
used to record any upcoming ideas, summarise understanding and interpretation so far, which enables the researcher to trace the progress and emergence of themes and ideas. The development of themes was shown in the following instance. Initially, I coded for general themes such as exam, teacher, and homework. For example, each time I saw the word homework, I coded it under the node homework. Then, I came back for each node and coded it either in relation to self-efficacy, tolerance of ambiguity or null. So they were three nodes; homework, homework in relation to self-efficacy and homework in relation to tolerance of ambiguity. Subsequently, I re-read all my themes and defined them specifically to ensure that they all stood for themselves and there were clear boundaries between them.

By completing this phase of data analysis, research results were ready to be discussed and interpreted. Results on reliability of the research instruments will be discussed in the following sections, as they are relevant to the research methodology discussed in this chapter, and the remaining other study results will be reported in the subsequent chapter.

**Reliability of the questionnaires**

Reliability of a questionnaire can be evaluated by examining its internal consistency (i.e. are the items’ responses consistent across constructs?) and test-retest correlations (i.e. are scores stable over time when the instrument is administered a second time?)” (Creswell, 2012, p. 159). Test-retest correlations are not applicable to the general instruments as they were administered only once. Hence, to assess the internal consistency of the general research questionnaires, a Cronbach's alpha reliability test was applied. It estimates the extent at which items of a particular questionnaire correlate with each other or with the total score of the questionnaire and hence these items measure the same or closely related variables in a reliable approach. Results can range from 0 to +1 with any questionnaire’s result above .70 is considered strongly reliable in the field of Applied Linguistics and SLA research (Dörnyei,
The reliability of the current research questionnaires, QESE, SLTAS, SLWSES, SLWTAS, were examined in the following sections.

**General instruments**

Cronbach’s alpha test was performed to estimate the internal consistency of the translated versions of general questionnaires, Questionnaire of English Self-Efficacy (QESE) and Second Language Tolerance of Ambiguity Scale (SLTAS).

Wang and his associates have carried out several studies to test the reliability of QESE. Within different contexts such as USA, Korea, Germany and China, findings have reinforced the high reliability of the scale (Wang et al., 2013). Results from the current study reveal that items in the QESE have a positively high internal consistency, with a Cronbach’s alpha coefficient of .97, see table 3. This value has been shown to match that found in Wang et al.’s study (2007) and Wang et al.’s (2013). Thus, it is concluded that QESE used in this study was highly reliable.

**Table 3**

<table>
<thead>
<tr>
<th>Internal consistency reliability of QESE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability Statistics</td>
<td></td>
</tr>
<tr>
<td>Cronbach's Alpha</td>
<td>N of Items</td>
</tr>
<tr>
<td>.973</td>
<td>32</td>
</tr>
</tbody>
</table>

Data yielded by Ely’s (1989) indicates that SLTAS had a high internal consistency of .82. Comparably, in their investigation into SLTA, Dewaele and Ip (2013) indicate that SLTAS had demonstrated a high internal consistency with a Cronbach’s alpha coefficient of .88. In this current research, the test reveals that SLTAS’s items had proven to have a high internal consistency as its alpha coefficient was .85, see table 4. Such value is hardly
distinguishable from those reported in the literature. Thus, it is concluded that SLTAS used in this study was highly reliable.

Table 4

*Internal consistency reliability of SLTAS*

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.856</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Domain-specific instruments**

Dörnyei (2007) stresses that reliability is not a characteristic of a scale itself, but an attribute of the scale’s scores, so needs to be reported every time the scale is used. Therefore, the internal consistency of SLWSES and SLWTAS are examined, by calculating Cronbach’s alpha coefficients, each time they have been used in this current study; at the beginning of the term, before mid-term exam, after mid-term exam, after receiving mid-term exam results and at the end of the term. The results are presented in table 5 below.

Table 5

*Internal consistency reliability of SLWSES and SLWTAS at five points of data collection*

<table>
<thead>
<tr>
<th>Time of questionnaire Administration</th>
<th>Cronbach's Alpha (SLWSES)</th>
<th>Alpha (SLWSES)</th>
<th>Cronbach's Alpha (SLWTAS)</th>
<th>Alpha (SLWTAS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the beginning of the term</td>
<td>.900</td>
<td>.703</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before mid-term exam</td>
<td>.915</td>
<td>.813</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After mid-term exam</td>
<td>.934</td>
<td>.783</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After receiving mid-term exam’s results</td>
<td>.964</td>
<td>.767</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At the end of the term</td>
<td>.977</td>
<td>.938</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As shown from table 5 above, items in the SLWSES and SLWTAS had a good internal consistency with Cronbach’s alpha coefficients ranged from a minimum of .703 for SLWTAS at the beginning of the term to a maximum of .977 for SLWSES at the end of the term. Thus, it can be concluded that SLWSES and SLWTAS had good internal consistency, and therefore were highly reliable.

After that, the test-retest reliability of SLWSES and SLWTAS were evaluated by calculating the interclass correlation coefficient (ICC). It assesses the questionnaires’ results consistency over time, wherein a value of over 0.70 is considered reliable. The results are presented in table 6 below.

Table 6

<table>
<thead>
<tr>
<th>Scale</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWSES</td>
<td>.836</td>
</tr>
<tr>
<td>SLWTAS</td>
<td>.627</td>
</tr>
</tbody>
</table>

As shown from table 6 above, Saudi L2 English learners’ writing self-efficacy exhibited more stability over time than their writing tolerance of ambiguity. Low ICC of SLWTAS indicates that change may have taken place in participants’ learning development in relation to their SLWTA, a claim that will be tested thoroughly in the next chapters, (Fulcher & Davidson, 2007). Therefore, it is concluded that SLWSES had high test-retest reliability while SLWTAS had not.
Summary

This chapter described the research methodology. It begun with a discussion of the research design that illustrated the blueprint for conducting this study. Then, the theoretical framework that was adopted to interpret research findings and outcomes was discussed. After that, a thorough description of research instruments was provided followed by an explanation of the pilot study and its main outcomes. The main study research sample and setting were, then, illustrated. Subsequently, the procedures that were followed in data collection and the techniques used in analysing data were thoroughly discussed. Finally, the chapter concluded with an assessment of the reliability of the study instruments.
CHAPTER 5

RESULTS AND DISCUSSION OF THE RELATIONSHIP BETWEEN L2 SELF-EFFICACY AND TOLERANCE OF AMBIGUITY

Introduction

The relatively large amount of data, collected through four questionnaires and written journals at several timescales, lent itself to numerous types of analyses and interpretations. In order to create a clear data presentation, data analyses and the results discussion proceed from the general to the task-specific to first set up the overall SLSE and SLTA background for the study and then to delve deeper in investigating SLWSE and SLWTA. Additionally, they proceed from discussing cross-sectional data to longitudinal to highlight the dynamicity and changes that may have taken place in SLWSE, SLWTA and the relationship between them. Guided by the study research questions, the analyses address two main themes; the relationship between the studied variables (chapter 5) and the change that may have taken place over the academic term (chapter 6).

This chapter presents and discusses the results of data analyses carried out to answer the first three research questions exploring the relationship between SE and TA among Saudi learners of English as L2 at two different levels of specificity;

1- At the general level of analysis, is there a relationship between SLSE and SLTA among Saudi L2 learners?

2- At the specific level of analysis, is there a relationship between SLWSE and SLWTA among Saudi L2 learners?

3- How does the relationship between SLWSE and SLWTA evolve over time?
The first part of this chapter investigates SLSE and SLTA. After analysing the general questionnaires’ data, QESE and SLTAS, results are reported to initially identify the general SLSE and SLTA levels of the research participants and then to explore the connections between the two variables. Then, literature and previous studies are revisited to discuss the current findings.

For the second part of the chapter, the focus has been narrowed to study domain-specific SE and TA, namely SLWSE and SLWTA. Applying a longitudinal research approach, the relationship between SLWSE and SLWTA has been traced over a period of one academic term which resulted in five sets of data. For each set, descriptive statistics are performed in order to identify the means and standard deviations which are afterwards followed by correlation tests to examine the relationship between the two variables at that time of data collection. Subsequently, participants’ written journals are analysed to identify the main components of SLWSE and SLWTA at different times of the academic term. Finally, the findings are discussed in relation to previous literature on psychology and L2 learning and explained in light of the theoretical framework discussed in the previous chapter.

**Part one: General SLSE and SLTA**

**Second language self-efficacy**

Data collected from 184 respondents for the general questionnaires were entered into SPSS for analysis. General descriptive tests were run to first explore the general characteristics of the research participants in regard to the investigated variables and then to inform the researcher’s choice of further statistical tests, as they provide an ideal foundation for selecting subsequent measurements. For example, descriptive statistics allow the researcher to check if certain assumptions, such as normality, are met before conducting
further tests, such as correlation. The results of descriptive statistics tests are presented in table 7 below.

Table 7

Descriptive statistics for SLSE for Saudi English L2 learners

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLSE</td>
<td>184</td>
<td>320</td>
<td>3150</td>
<td>2056.98</td>
<td>675.754</td>
</tr>
</tbody>
</table>

Given that there were 32 questionnaire’s items, and the measurement scale of the questionnaire was from 0 to 100, the range of possible total score was from 0 to 3200. However, the observed results ranged from 320 to 3150, the mean was 2056 and the standard deviation was 675. In order to group participants under three categories of high, moderate and low levels of SLSE, the maximum score was divided into three to define the cut-off points (Kirmizi & Kirmizi, 2015). Scores from 0 to 1066 implied low SLSE; scores from 1067 to 2133 implied a moderate level; and total scores of 2134 and above signified high SLSE as shown in table 8 below.

Table 8

Classifications of levels of SLSE based on questionnaire results

<table>
<thead>
<tr>
<th>Levels of SLSE</th>
<th>Total scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2134-3200</td>
</tr>
<tr>
<td>Moderate</td>
<td>1067-2133</td>
</tr>
<tr>
<td>Low</td>
<td>0-1066</td>
</tr>
</tbody>
</table>
Results revealed that the majority of these Saudi students, 48% of them, were highly self-efficacious. 42% had shown a moderate level of self-efficacy for learning English as a L2. Only 10% of the research participants were reported to have a low level, see figure 2 below.

![Pie chart showing percentages of Saudi English L2 Majors with High, Moderate, and Low SLSE](image)

Figure 2. The Percentage of Saudi English L2 Majors with High, Moderate and Low SLSE.

**Second language tolerance of ambiguity**

As discussed in chapter 4, SLTAS consisted of 12 questions with answers ranged from 1 (strongly agree) to 5 (strongly disagree). Based on that, the range of possible total score was from 12 to 60, with higher values indicating higher levels of tolerance of ambiguity and vice versa. However, after analysing the data it appeared that the observed range of SLTAS score was from 12 to 50, as illustrated in table 9 below.
Total scores from 12 to 28 signified a low level of SLTA and from 29 to 44 implied a moderate level, while scores ranging from 45 to 60 indicated a high level of SLTA, see table 10 below.

10% of participants were reported to have a high level of SLTA, 54% had a moderate level and 36% of the participants had a low level of SLTA, see figure 3 below.
Relationship between SLSE and SLTA

A correlation test was performed to answer the first research question by investigating the relationship between the two variables; SLSE and SLTA. It is important to stress that such test gives indication on whether or not a relation exists between the two variables and says nothing about the causation of the relationship. Since the data was not normally distributed (see Appendix R), Spearman’s correlation was run.

Q1: At the general level of analysis, is there a relationship between SLSE and SLTA among Saudi L2 learners?

The results of the correlation test revealed that there was a statistically significant positive relationship (r = .445, p = .00) between participants’ senses of SLSE and their levels of tolerance for ambiguity that faced them when learning their L2, as shown in table 11 below.
**Table 11**

*Correlation between SLSE and SLTA among Saudi English L2 learners*

<table>
<thead>
<tr>
<th></th>
<th>SLSE</th>
<th>SLTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho Correlation Coefficient</td>
<td>1</td>
<td>.445**</td>
</tr>
<tr>
<td>SLSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>184</td>
<td>184</td>
</tr>
<tr>
<td>Spearman's rho Correlation Coefficient</td>
<td>.445**</td>
<td>1</td>
</tr>
<tr>
<td>SLTA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>184</td>
<td>184</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

The effect size of such correlation, .445, was moderate based on Cohen's (1988) guidelines to interpret effect size. Around 20% of the variation in results could be explained by the relationship between SLSE and SLTA. The scatterplot figure below shows graphically the significant positive relationship found between L2 tolerance of ambiguity and self-efficacy among Saudi English majors.
Results discussion. Three main findings were obtained from analysing the general questionnaires’ data. First, the result indicated that Saudi learners of English held positive self-efficacy beliefs towards learning and using English. This finding is in complete agreement with those reported by Aljuaid (2010) where the majority of her Saudi participants, who were English majors at a university too, were self-efficacious and only 3% reported low self-efficacy. It is also in line with Piniel and Csizér’s (2015) which reported that Hungarian English majors were self-efficacious. Such a result is a promising finding as self-efficacy is found to be associated with high motivation, positive attitude towards learning (Hsieh, 2008), low anxiety (Öztürk & Saydam, 2014), persistence in face of difficulties and effort expended in learning (Woodrow, 2011).

Secondly, the mean score of SLTAS, as shown in table 9 above, was 31.68 indicating that Saudi L2 learners were tolerant of ambiguity at a moderate level. This finding is in line with Almutlaq (2013) who indicated that the majority of her Saudi participants, who were
also English majors, were moderately tolerant of ambiguity when learning English. Those students seemed to take advantage of the appropriate level of TA that is fundamental for L2 learning (Dewaele & Ip, 2013, Ehrman, 1999). There is a consensus among researchers that either low or high levels of TA may hinder students’ learning development (El-Koumy, 2000; Ely, 1995; Oxford, 1999).

Finally, the correlation tests confirmed that there was a significant positive relationship between participants’ sense of their SLSE and their SLTA. In other words, the more self-efficacious participants felt in their capabilities to learn and use English as a L2, the higher their tolerance of ambiguity when encountering new, complex or contradictory learning situations were likely to be. Although a cause and effect relationship could not be confirmed, due to the inherent limitations of the statistical procedures, prior research in the fields of psycholinguistics and educational psychology have suggested that both directions of relationship were possible (e.g. Bandura, 1977, 1993, 1989; Dewaele & Wei, 2013; Mills, Pajares & Herron, 2006; Zimmerman, 2000).

In the first possibility, lack of confidence in one’s capability, low persistence, low levels of efforts and high apprehension are behavioural characteristics of people with low self-efficacy, especially in situations where obstacles are encountered (Bandura, 1993; Pajares et al., 1999; Zimmerman, 2000). Self-efficacious people, on the contrary, approach such situations with confidence in their ability to perform well, persistence and low apprehension. Since ambiguities and difficulties are inherent to many L2 learning situations (Dewaele & Ip, 2013), self-efficacy can play a vital role in facilitating learning by increasing individuals’ persistence, efforts and lowering their anxieties during ambiguous times. Bandura and Locke (2003) explain that

In managing challenges in performance situations, people need a resilient sense of efficacy that they can achieve desired results by their efforts and try to remain unfazed
by setbacks or failure. One cannot execute well-established skills while beset with self-doubt. In applying what one knows, a strong belief in one’s performance efficacy is essential to mobilise and sustain the effort necessary to succeed. (p. 97)

Thus, it can be argued that SLSE could have contributed crucially in predicting tolerance of ambiguity in L2 contexts.

Intolerance of ambiguity, on the other hand, is defined by Ely (1995) as a feeling of discomfort and anxiety, and Bandura (1989) identifies anxiety as a source that forms self-efficacy beliefs. Furthermore, anxiety is found to have a statistical influence on self efficacy; thus it is able to predict it (Salem & Al Dyiar, 2014). Thus, it is possible to think that in a L2 situation when those intolerant of ambiguity feel threatened by unfamiliarity and get anxious (Dewaele & Wei, 2013; Sugawua, 2010), their judgments of their L2 abilities are affected (Mills et al., 2006). Additionally, from a cognitive perspective, anxiety works as a filter that can block some information from being cognitively processed which can affect both the rate and speed of learning (Sellers, 2000). Hence, high levels of anxiety are associated with low achievement in L2 (e.g. Dewaele & Ip, 2013; Dewaele, Petrides & Furnham, 2008; Horwitz, 2001; Liu, 2006) which can in turn affect their perception of their future judgments of SE. Having mentioned that, it can be argued that SLTA could have influenced how individuals perceived their self-efficacy in L2 contexts.

Another possibility regarding the direction of the relationship between SLSE and SLTA was inspired by the new movement in L2 research (e.g. de Bot, Lowie & Verspoor, 2007; Dörnyei et al., 2015; Larsen-Freeman & Cameron, 2008; Mercer, 2011) where causality is believed to be multidimensional. Therefore, it is possible to perceive SLSE as a dynamic system that can affect and be affected by SLTA, which is a dynamic system itself. In addition, it is implied, based on DST, that the relationship between the two variables is best perceived
as dynamic and not static, as multiple factors may come to play various roles at different times. This topic will be addressed thoroughly in part 2 of this chapter.

To gain better understanding of SE, TA and the relationship between them, the focus of research has been narrowed down to domain-specific constructs which were traced across a longer period of time. The following section presents the major findings related to SLWSE, SLWTA and the relationship between them.

**Part two: Domain-specific SLWSE and SLWTA**

This section discusses another level of analysis that focuses on SLSE and SLTA in relation to L2 writing utilising longitudinal data to answer the following research questions:

**Q2: At the specific level of analysis, is there a relationship between SLWSE and SLWTA among Saudi L2 learners?**

**Q3: How does the relationship between SLWSE and SLWTA evolve over time?**

Both quantitative and qualitative data were analysed to obtain a clearer picture of the two constructs and the relationship between them. Initially, statistical results of SLWSES and SLWTAS were presented following the same sequence as the data collection times. These were at the beginning of the term, before the mid-term exam, after the mid-term exam, after receiving the mid-term exam’s results and at the end of the term. Subsequently, participants’ written journals were analysed in order to define the main components of both SLWSE and SLWTA at these specific times. This might have given the researcher some insights into the variables that shaped the two variables and those that triggered the changes concerning the relationship between them.
Quantitative data analysis

Generally speaking, the data were normally distributed and no outliers or extreme values were found (see Appendix S), therefore Pearson’s correlation was used to examine the correlation between SLWSE and SLWTA at different times of the academic term.

At the beginning of the term. Results of descriptive statistics indicated that the majority of the participants at that time felt self-efficacious as L2 writers, but with low tolerance of ambiguity, as reported in table 12 below.

Table 12

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWSE</td>
<td>1010.00</td>
<td>191.622</td>
</tr>
<tr>
<td>SLWTA</td>
<td>28.40</td>
<td>6.311</td>
</tr>
</tbody>
</table>

At the outset of the academic term, no significant correlation (r = .33, p = .07) was depicted between participants’ perceptions of their SLWSE and their SLWTA, as shown in table 13 below.
Correlation between SLWSE and SLWTA at the beginning of the academic term

<table>
<thead>
<tr>
<th></th>
<th>SLWSE</th>
<th>SLWTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.334</td>
</tr>
<tr>
<td>SLWSE</td>
<td>Sig. (2-tailed)</td>
<td>.072</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.334</td>
<td>1</td>
</tr>
<tr>
<td>SLWTA</td>
<td>Sig. (2-tailed)</td>
<td>.072</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Before mid-term exam. Generally speaking, SLWSE and SLWTA showed stability as participants continued to report high SLWSE and low SLWTA before their mid-term exam, as indicated by the mean values below.

Descriptive statistics for participants’ SLWSE and SLWTA before their mid-term exam

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWSE</td>
<td>996.30</td>
<td>198.026</td>
</tr>
<tr>
<td>SLWTA</td>
<td>28.57</td>
<td>5.090</td>
</tr>
</tbody>
</table>

Interestingly, a significantly positive correlation ($r = .52$, $p = .003$) was found between the two variables when measured before participants commencing their mid-term exams, as
demonstrated in table 15 below. The more self-efficacious participants felt on their ability to write before the exam, the more they were likely to tolerate writing-related ambiguities. The more tolerant of ambiguity they were prior to the exam, the more efficacious they were likely to feel.

Table 15

*Correlation between SLWSE and SLWTA before mid-term exam*

<table>
<thead>
<tr>
<th></th>
<th>SLWSE</th>
<th>SLWTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.519**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

The effect size of such correlation, .52, was moderate based on Cohen's guidelines (1988). It indicated that around 27% of the variance in the score could have been explained by the relationship between SLWSE and SLWTA. Such a significant relationship is presented in figure 5 below.
Figure 5. Scatterplot for the Relationship between SLWSE and SLWTA Before the Mid-Term Exam.

**After mid-term exam.** After the exam, on average most of the participants reported feeling self-efficacious and intolerant of ambiguity in regard to L2 writing as illustrated by the mean values in table 16 below.

Table 16

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWSE</td>
<td>1031.17</td>
<td>210.704</td>
</tr>
<tr>
<td>SLWTA</td>
<td>28.97</td>
<td>7.194</td>
</tr>
</tbody>
</table>

In addition, no significant correlation (r = .19, p = .31) was depicted between participants’ SLWSE and their SLWTA after completing their mid-term exam, as reported in table 17 below.
Participants’ perception of their writing ability had no relationship with their SLWTA at this specific time of the term.

Table 17

*Correlation between SLWSE and SLWTA after mid-term exam*

<table>
<thead>
<tr>
<th></th>
<th>SLWSE</th>
<th>SLWTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.191</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.313</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.191</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.313</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

**After receiving mid-term exam’s results.** After running descriptive statistics, results had confirmed the earlier findings that Saudi English language learners were on average self-efficacious but intolerant of ambiguity in regard to L2 writing, as shown in table 18 below.

Table 18

*Descriptive statistics for participants’ SLWSE and SLWTA after receiving mid-term exam’s results*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWSE</td>
<td>1049.43</td>
<td>251.997</td>
</tr>
<tr>
<td>SLWTA</td>
<td>28.60</td>
<td>5.751</td>
</tr>
</tbody>
</table>
After participants received their marks and feedback on their performance in the mid-term exam, no significant correlation was found between SLWSE and SLWTA ($r = .35, p = .06$), as illustrated in table 19 below.

Table 19

<table>
<thead>
<tr>
<th>Correlation between SLWSE and SLWTA after receiving mid-term exam’s results</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWSE</td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SLWSE</td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SLWTA</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

At the end of the term. As the term came to an end, Saudi L2 learners reported high level of SLWSE, with a mean of 1016.67, and their SLWTA had increased to reach a mean value of 34.73, as demonstrated in table 20 below.

Table 20

<table>
<thead>
<tr>
<th>Descriptive statistics for participants’ SLWSE and SLWTA at the end of the academic term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SLWSE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SLWTA</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Towards the end of the term, a significantly strong positive correlation ($r = .80, p = .00$) was found between the two variables, as shown in table 21 below.

Table 21

<table>
<thead>
<tr>
<th></th>
<th>SLWSE</th>
<th>SLWTA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlation</strong></td>
<td><strong>.802</strong></td>
<td><strong>.802</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The effect size of the correlation, .80, was very large based on Cohen's (1988). It indicated that around 64% of the variance in the scores could have been explained by the relationship between SLWSE and SLWTA. Such a significant relationship is presented in figure 6 below.
Summary. Quantitative data analysis revealed that the relationship between SLWSE and SLWTA was dynamic as it fluctuated from being significant to non-significant. In order to gain better understanding of the main factors that determined such a change, participants’ written journals were analysed to identify the main components as well as factors that shaped SLWSE and SLWTA at different times of the academic term.

Qualitative data analysis

Second language writing self-efficacy. SLWSE is defined in this study as students’ perception of their L2 writing skills and their abilities to perform certain L2 writing tasks. Such a conceptualisation, that considers both skills and tasks, substantiates writing self-efficacy’s multifaceted nature. In fact, the most marked observation to emerge from the data was that
unlike traditional conceptualisation of self-efficacy as a static monolithic construct, SLWSE evolved as it adapted to change in other components of the system, including the contextual ones. In addition, it appeared that SLWSE was complex, as no solo variable constituted it.

The following sections will analyse these various aspects that shaped Saudi SLWSE during 5 different times: at the beginning of the term, before the mid-term exam, after the mid-term exam, after receiving their exam’s results and at the end of the term.

**At the beginning of the term.** Previous writing experiences, expectations students had in regard to the new teachers, classes and learning materials, motivation and beliefs they held had been combined together to shape participants’ perceptions of their SLWSE at the beginning of the term. Each of these factors constituted either a positive or negative influence which in turn affected participants’ overall SLWSE judgments.

**Previous writing experiences.** Results from analysing participants’ written journals showed that their first entries heavily relied on their past experiences. A wide range of experiences was reported from being positive to the more negative and devastating ones. Findings from this study were in line with Bandura’s (1989) indication that students’ self-efficacy beliefs could stem from their previous learning experiences, and such a source was the most influential one in determining their confidence in their abilities to perform subsequent tasks. Participant 2 for instance was efficacious in her writing ability at the outset of the course and scored 1160 out of 1400 that was attributed to her previous successful competition experience:

Spelling is my strongest point. When I was a kid, I won “spelling Bee” competition at the town level and I represented my town at the state level. I did great but I misspelt the word “Glitz”.

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As suggested by Bandura (1977), a success that came after overcoming challenges and resulted from hard work, had built confidence in one’s ability to accomplish similar tasks, which was the case of participant 17 who scored very high at 1180. Additionally, it encouraged her to take part in writing an article for a university magazine as well as motivated her to write a new one:

I overcame my fear of writing by practising. I can now write smoothly. I tried and tried and I am still trying, and every time my ideas become deeper and my argument clearer. I wrote several successful essays and I am proud of them. Then, I participated in the university magazine. I wrote an article and I got amazing comments. I wrote tips to survive freshman year. Now I am thinking of writing another one about how to make the best of your academic year.

Apart from these positive and encouraging experiences, some students expressed rather negative evaluation of their SLWSE which was affected by their unsuccessful previous experiences. Participant 4 referred to her struggle with passing last term exam which might affect her grade this term as well as her willingness to write. At this time her SLWSE was 840 out of 1400:

I do not believe that I am a good English writer, I barely passed my final exam last term. This had an effect on my overall GPA, so I am under significant pressure to work hard this term to improve my GPA. I am afraid that such unpleasant experience will affect me and will make me unwilling to write.

A similar concern over GPA was mentioned by participant 28 who went through a difficult learning experience last term, which resulted in her obtaining low grades that disappointed her parents and lowered her SLWSE, she scored 715:
I have difficulties in writing, I have difficulties in expressing my ideas and thoughts. My confidence in my writing is extremely low. I have fears. I fear that my writing is not correct. Mistakes make me nervous and damage my picture in front of others. I used to be an excellent student in high school and my parents used to be so proud of me. I received many certificates. It is upsetting now that I do not do well. I feel this is not me. Last term my GPA was very low. My parents got very upset because I had let them down. They lectured me till I hated myself.

This instance led support to LoCicero and Ashby’s (2000) findings of maladaptive perfectionists who did not tolerate mistakes and experienced parental pressure. They were found to focus more on their limitations, exaggerated their weaknesses which was manifested in lower self-efficacy.

As shown above and in line with previous research (e.g. Abdel-Latif, 2015; Bandura, 1989; 1977) both positive and negative experiences affected students’ SLWSE judgments. This study took a further step in showing that lack of experiences might also have played a role. Participant 8, for example, despite reporting high SLWSE, was not sure about the evaluation due to no sufficient previous engagement in writing:

If you ask me to evaluate my confidence in my writing ability, I think I do not have a clear answer. I do not have much writing experience. I do not write often. Teachers do not ask students to write except in final exams maybe. We read and listen most of the time but rarely write or speak. Even last term writing was not serious. We wrote sentences and learned about full stops and commas. So far I think I have been able to write. I am fine. I actually passed last term writing with a B+.
Similarly, participant 20 indicated that her moderately evaluated self-efficacy judgment, was totally influenced by lack of previous solid writing experiences, as she had written only twice last term:

I am realistic. I am a beginner so I do not expect much from myself. I know a good vocabulary size but my spelling and expressions are not good. I face a real problem when writing because I am not sure if the sentence is ok or not, if it is suitable or not or it even makes sense in English. I wrote only two paragraphs throughout the whole last term.

To sum up, at the beginning of the term Saudi L2 learners’ evaluations of their SLWSE were largely affected by either their positive/negative previous experiences or lack of them. Successful experiences contributed to high SLWSE scores and confidence in their ability to do well in the future. Failure, on the other hand, was linked to low evaluation of ability, unwillingness to write, fear of mistakes and pressure when writing. Furthermore, lack of proper writing experiences led to students being unsure of their ability as they had not felt the need to use their writing capabilities before.

Students’ expectations. Students’ perception of their SLWSE at the beginning of the term was also determined by their expectations placed on their teachers and on the course itself. L2 learners started their course with hope and optimism and tend to have good expectations in regard to their learning achievement (Irie & Ryan, 2015). Although participant 29, for example, felt she had very low level abilities in writing, she scored moderate at SLWSES mainly by indicating her expectations to learn grammar, spelling, vocabulary and writing in general this term from the teacher:
I am not very good at writing. I cannot write complicated or long sentences because I lack knowledge of a lot of words. Teacher this term will hopefully focus on teaching me how to write with good spelling and to teach me new vocabulary and its meaning and how to use it in sentences. I do not learn writing by only writing but also by learning about grammar, spelling and vocabulary.

Another example was illustrated by participant 15. She started the term worried due to lack of previous proper training in writing and blamed teachers for the limited practice. However, she scored high in SLWSES which could be linked to her expectations that the teacher this term would be different:

I do not write often. Sometimes I do not write for weeks. Teachers were not serious when it came to writing. Last term was not different. I had few chances to write. Most of the time I worked on grammar or reading instead of writing my own paragraphs. I hope this term will be different and teacher will help me to write.

Such dependence upon teachers on their learning made some participants hesitate to evaluate their SLWSE accurately as they lacked sufficient knowledge about the teacher and her teaching styles. Participant 21 commented:

It depends on the teacher. If she is excellent, I will easily learn writing but if she is not, I do not think my writing will change. My writing grades have been going up and down throughout the last years depending on teachers. Sometimes teachers encouraged writing and guided students to master writing skills, but other teachers only made students hate writing and felt not good enough to write.
Apart from expecting a great deal from the teachers, students also expected a high quality course that would help them enhance their writing skills. Participant 3, for example, expressed a moderate level of SLWSE despite her acknowledgment of low writing abilities as she believed that the course would facilitate her writing development:

Writing in another language necessitates practices and experiences. As a beginner, I do not have such a requirement so I believe my writing is not that good. But I hope this course will enable me to write perfect articles and essays with no grammar and spelling mistakes at all.

At the beginning of the term and before real engagement in the course, students’ positive expectations and hopes in relation to their new teachers or the course quality could have boosted their confidence in their writing ability, regardless of their awareness of their low ability. These results argued against the claim that negative previous experiences exclusively follow low levels of SE, as they demonstrated another possibility of having its high levels. In such cases, optimism and positive psychology may have buffered the influence of negative experiences on SE. These findings concurred with those obtained in previous studies that link self-efficacy to optimism and positive psychology (Lake, 2013; MacIntyre & Gregersen, 2012; Pajares, 2001). That is, students employ optimistic thinking and hopes as a coping strategy that decreases their anxiety and fears and quickens their recovery from difficulties. They also foster motivation and resilience. Bandura (2008) suggests that self-efficacy is a vital construct of positive psychology, as the impact of emotions on individuals’ psychological functioning is mediated largely by their self-efficacy beliefs. Therefore, emotions such as hope, optimism and positive thinking are rooted in individual sense of self-efficacy. In this study students’ optimistic and positive expectations reduced the impact of negative previous experiences and promoted participants’ resilience and confidence in their future accomplishment.
Motivation. Several types of motivation; internal, external, integrative, instrumental and ideal self were referred to by participants in their first judgments of their SLWSE. These motives were manifested in positive attitudes towards L2 in general and L2 writing in particular as well as an increase in the participants’ efforts to learn. Participant 6, for example, reported high SLWSE and revealed her inner interest in writing and sharing ideas with others. She enjoyed dedicating time and efforts daily to it, as writing in a L2 gave her the opportunity to distance herself from her L1 identity and to express her ideas and feelings more freely:

I like writing and I work hard to improve my writing skills. I enjoy sharing my ideas with others, getting feedback and listening to other different opinions. I write daily. Sometimes I just write my diary but at other times I write something more “serious” such as a blog, or a comment on Facebook or Twitter. I like to write my diary in English, I found that when I use English, I can be more honest with myself, I mean I can say whatever I want without feeling weird. It is just like speaking about different person, not me, the real me. It is also the same with writing in social media, you know, I write to be the person I want to be. It is fun.

Similarly, a vision of self as a story writer was expressed by participant 5. She showed high level of SLWSE that stemmed from her future vision of being a story writer that was encouraged by her parents:

I decided that I want to study English and become a story writer. My family encourage me and sometimes push me a little harder to write on new topics or to use new genres. I have tried writing poems, but found it so difficult and almost impossible for me. I think I am good at short stories though.
The interaction between SLWSE and ideal self was suggested to be bi-directional. It is believed that having a clear future image of ideal self and experiencing hope linked positively to participants’ perception of what they were capable to exert and achieve (Ueki & Takeuchi, 2013). Participant 10 presented an example in which her future self image and her dreams to be a writer of a best seller book influenced her SLWSE at the beginning of the term:

For me, writing is a daily habit. I write every day. I have always wanted to be a writer. I want to write my own book. I have always imagined that my book is among the best sellers and I can see many people read it. Writing is about details. I practise a lot and write sentences or pages to remember the small details that occurred to me. I like how the writers use small details, so readers can visualise the scenes.

Additionally, instrumental motivation was found to be relevant to participants’ first evaluations of their SLWSE. Participant 18’s SLWSE was moderate, 900, when she started the academic term. She was externally motivated to learn English language, as she was aware of its importance for her future success. Since she had no internal interest in the language itself, she stated that she literally “forced” herself to learn, in order to be an integrated part of the world English community and to gain respect:

Learning English is important. People must learn English to have good future. Those who cannot speak English have to start learning the language now. I forced myself to learn English. Now every job requires English fluency. I decided to study English because I do not want to be a leftover. I want to be a part of this globalisation.
The same instrumental incentive to learn the language in general and writing in particular was expressed by participant 7. She highlighted her motives to learn English writing in order to have a better future and affective communication with others:

I like to learn languages in general and English in particular. I believe it is so important for my future life and part of learning is to learn how to write using that language. Sometimes, my friends send my MSM in English and I reply using simple words such as thank you or see you later.

In conclusion, results from this study supported those found in previous research (e.g. Bandura, 1994; Hsieh, 2008; Ueki & Takeuchi, 2013) wherein motivation was related to participants’ perceptions of their ability. Motivation was a key factor in determining participants SLWSE at the beginning of the term, whether it was internal, instrumental or related to their ideal future self. High motivation and clear vision of future self were linked to high perceptions of SLWSE. Interestingly, only internal and ideal self motivation were associated with a great deal of efforts given to writing. Such motivation enhanced both the amount and the content of writing practised by those students. Participants 6 and 10, for example, wrote frequently, sometimes a comment on Facebook or Twitter, other times they wrote pages. In order to develop their writing skills, they “work hard” and “practise a lot” on a daily basis to become a better writer. As far as the content of the writing was concerned, participant’s 5 vision of her future self as a writer encouraged her to believe that she could write in a wide range of topics and genres. The absence of such exertion of efforts among instrumentally motivated students might have been explained by their perceptions of writing as a means through which they could achieve their goal but not as holding a special significance in itself (Hsieh, 2008). Therefore, they might not have invested extra time and efforts to practise writing per se.
Furthermore, the findings concurred results from previous studies (e.g. Campbell & Storch, 2011; Yaghoubinejad, Zarrinabadi & Ketabi, 2017) which revealed that at the outset of the course, students’ motivation was shaped by factors such as previous experiences, positive attitudes, ideal self and instrumental goals. However, after a real engagement in the course, contextual variables became the most influential ones in determining students’ motivational levels, such as teachers and classroom environment.

**Beliefs about writing.** Students began their academic term with certain mindsets and beliefs they held in respect of what makes good writing, a good writer and what factors contribute to their learning. Such beliefs varied in relation to their impact on their SLWSE judgments. To begin with, participant 11 had a growth mindset as she believed in the learnability of writing skills, hence, she allowed for the possibility of making mistakes when writing. Writing was acquirable with time and efforts and mistakes were expected as a part of learning another language which was reflected on her high level of SLWSE:

I feel that I can write well in English although I know I make a lot of spelling mistakes. My writing is getting better and better but still not up to what I want it to be. Writing in English is not like writing in Arabic which makes it harder and needs more time and efforts to learn it.

Similar growth mindset and beliefs in the learnability of writing skills were associated with high SLWSE scores in the case of participant 23. For her, good writing involved good grammar, spelling, punctuation and organisation of ideas, and she was good at them all except for spelling. However, she was assured that her spelling would improve as it was believed to be learnable and under her control. In general, her first journal showed a great amount of positivity and SLWSE:
I am good at writing. I can write. My grammar is good. My punctuation is very good. I use them in the correct places. I use correct grammar. I can organise my ideas and express them but my spelling is not good. I am not that good and I need to work hard to improve it. It is learnable and if I work hard enough this term, I will learn to spell words correctly.

On the contrary, fixed mindset and beliefs in the innateness of writing skills were linked to low level of SLWSE as shown in the first entry of participant 24. She compared writing to art, highlighting that neither of them could be acquired, regardless of the time and efforts spent:

I am very weak at writing. I lack the ability to write in Arabic and in English. Even in Arabic I cannot write well. I do not have this skill. I always got my worst grade in writing. I do not have writing skills, the imagination, the creativity and the ability to put words together in wonderful sentences. I struggle when I write, it is not about lacking English proficiency because I struggle in writing Arabic essays as well. Writing is like art, not everyone is an artist, even when they study art they do not become artists.

As seen from the examples above, believing in the learnability of writing skills in general, growth mindsets, was linked to high SLWSE. Those who perceived writing as something they could acquire and develop were more likely to express high levels of confidence in their writing ability than those who perceived it as an innate talent, fixed mindsets. These findings were in line with Wood and Bandura’s (1989) model where they indicated that self-efficacy and mindsets are closely related constructs. An increase in self-efficacy is associated with an increase in the beliefs of the malleability of ability as it is based
on efforts. Bandura (1997) elaborated that individuals with fixed mindsets who regard ability as an innate talent, perceive performance results as signs of the levels of their inherent capability and intelligence. Therefore, they avoid difficult tasks and seek easier ones to demonstrate their ability and conceal their weaknesses even at the expense of learning development.

Other beliefs in regards to good writers involved the ability to express ideas without difficulties and the abilities to link them coherently. That view was presented by participant 1 who justified the reported moderate SLWSE by her lack of such skills:

I am somehow not good at writing, I have a good vocabulary size but I am unable to use them to express my ideas and organise them. Most of the time, I feel reluctant to write essays and wish I could write them properly, move easily from one idea to another.

Similarly, inability to write what she aimed was a core issue for participant 12 who struggled to express herself in writing in both L1 and L2 and thus reported a low level of SLWSE:

Writing is my problem. To be honest I am not good even at Arabic writing. It is about writing what you want. Sometimes or most of the time I cannot translate my thoughts into words. There is a gap between what I want to write and what I write. It is not easy for me at all.

At this stage, most learners emphasised the importance of basic components of writing such as grammar, vocabulary and spelling when judging their writing abilities, paying less attention to other advanced aspects namely essay structure and good organisation. To
begin with, spelling was prioritised by some participants, such as participant 25, who summarised her good writing abilities and high SLWSE to mastering the skill of spelling:

I had written in English even before I became an English learner. I love writing and have the ability to write without making many spelling mistakes.

Participant 16’s SLWSE, on the contrary, was moderate as she did not believe she could spell words correctly:

I am not good at writing. My spelling is very weak. When I do not have access to a dictionary, my writing is hardly read.

Secondly, vocabulary and grammar were given significance by participants at this stage of learning. Participant 19 for example referred to them as measurements of successful writing. She lacked both of them, therefore, she felt she was inferior to her peers:

When I cannot write words in English I feel sad. But then I insist on learning these words and write them several times to remember them. I am not good at grammar either. I cannot tell if a sentence is correct or not because I do not know. It will affect my level this term and I will be behind my friends.

Participant 13 referred specifically to her vocabulary and grammar skills when she evaluated her SLWSE for the first time at the outset of the academic term:

My writing ability is great. I love writing. Usually I find the correct words to write and I am good at putting them in correct grammatical sentences.

Participant 27, on the other hand, related her deficiency in L2 writing to the lack of sufficient vocabulary knowledge that impeded her to write in English:
My writing is very basic. I do not develop my vocabulary. I do not have good vocabulary size. I tried many times to memorise words but then I forgot them. I find it hard to write without learning some words.

At the beginning of the term, students came to classroom with certain beliefs and preconceived assumptions about successful learning and good learners. Richards and Lockhart (1994) indicate that beliefs influence the way students approach learning. If students believe that good writing involves making no mistakes, then they will be less likely to tolerate them. Additionally, if they believe that writing is about expressing ideas, then failing to do so would largely affect their perceptions of themselves as L2 writers. In general, what students believe in regard to L2 writing affect their judgments of SLWSE.

In summary, previous experiences, expectations students had, motivation and beliefs they held had been combined together to shape participants’ perceptions of their SLWSE at the beginning of the course. As seen from the aforementioned examples, each factor constituted either a positive or negative influence.

*Before the mid-term exam.* Before the mid-term exam, participants’ evaluation of their SLWSE was affected by various factors such as their reflection on their progress so far, their preparations for the exam, ambiguity in regards to the exam’s scope, duration, teacher’s correction methods, concerns over grade and by their fear of making mistakes. Each of these factors will be discussed below.

*Reflection on their progress.* One of the most repeatedly raised themes in participants’ second entries was the assessment of their writing experience and progress so far based on external variables such as marks or feedback received on their homework and quizzes or on
internal self-awareness. Positive assessment led to an increase in participants’ confidence in their writing abilities and on having the writing skills necessary to perform well in the exam and vise versa. External-source of assessment could be in a form of good marks awarded to current term’s assignments and attributed to self and to hard work, as in the case of participant 18:

I can write to some extent. All my assignments were marked positively. I study hard because I want to master the language skills. I have a home tutor and she helps me a lot. I feel great being able to learn that much.

In a similar pattern, a high mark on a previous assignment resulted in a boost in participant 19’s SLWSE from a moderate to high level which was combined with positive attitude towards writing, referring to it as “good” and therefore she felt relaxed to write just before commencing her mid-term exam:

Writing has been good so far. Last assignment I got A. It makes me feel more confident and relaxed today.

In addition to good mark, feedback from the teacher could persuade students to believe that they had the abilities required to succeed in the exam and to believe that their writing had improved. Therefore, participant 4 reported a rise from a moderate to high level of SLWSE having received assurance from her teacher:

I may say I have confidence that I can write. I performed well in the previous quiz. I usually meet with the teacher after classes to discuss her feedback on my work and to ask her about my progress. Last time I checked, she believed that I was doing well.
Participant 14 presented a different example wherein lack of good mark could lower SLWSE to the extent that she did not trust her ability to generate novel ideas. That is, her learned helplessness was caused by attributing poor outcomes to lack of competence, instead of linking them to not trying hard enough:

I have not got a good mark in writing until now. I can write only simple sentences about something I already know. When I write, I use google to search for ideas. I cannot make up new ideas myself. I cannot write introduction and cannot conclude my paragraph. I just write simple sentences beside each others.

However, when unsatisfactory grade and negative feedback on writing were attributed to controllable variables, they had a slight impact on participant 6’s SLWSE. She linked her performance to lack of efforts given to the assignment and lack of attention paid to punctuation, thus, not related to ability:

I know I am a good writer. I find it hard to use the punctuation correctly. Last essay I got a lot of comments on using punctuation, especially commas, and teacher told me I would have got a better grade if I had paid more attention to punctuation. To be honest with myself, I got this grade because I had not done enough. I did not write the essay till the night before it was due, so I did not get enough time to review it and to correct it. I also did not think that the teacher would focus on punctuation, I did not even consider it at all. I just focused on my ideas, my spelling and grammar. I think I have learnt my lesson now.

Furthermore, persuasion through praise could come from people other than the teacher and still had the same positive impact on students’ SLWSE. Participant 3, for example, was
convinced by online friends that she could communicate effectively in English which resulted in an increase in her developmental trajectories:

   My English is improving. I had a conversation with native speakers, who were my brother friends’ daughters, and they understood me very well. They thought that my English was good and I felt so proud of myself. We get along together and now we often talk and chat online. I got motivated to work even harder to improve my proficiency.

   Another source of assessment was coming from self-awareness in relation to writing learning and development. For instance, self-efficacious participant 8’s awareness of her improper performance and dereliction led her to work hard to compensate for lack of efforts:

   There is a slow progress in my writing. I have already skipped two classes. They are boring. Now I regret it so badly. I prepared well for the exam and I think I will do well if things go normal and teacher does not surprise us. I practised at home and prepared well for the exam.

   Similarly, participant 11 had high SLWSE but acknowledged that she had a problem focusing on a topic when writing. However, she was assured that she would perform well in the exam if the time permitted:

   My confidence in my ability to write now is good. I can write but sometimes I do not stay on a topic. Usually when I review my writing, I see how I get off-topic. I know readers cannot follow my points. Like what is she trying to say? If I get enough time today to review my essay before handing it in, it will be good.
The first construct that made up Saudi SLWSE before the mid-term exam was participants’ assessment of their writing experiences and the progress they made until now. Such assessment was informed by current term experiences, either successful or not, and by feedback from teacher and others. These findings are in agreement with Bandura (1989, 1977) who identifies mastery experiences and persuasion through feedback and praise as sources of self-efficacy beliefs. Just before their exam, Saudi students summoned their achievements and positive feedback they gained in order to assure themselves that they can perform well. Others such as participant 14 did the opposite and felt less confident in their L2 writing ability. Nonetheless, attribution was a key factor in moderating the effect of previous experiences, grade and feedback on SLWSE. That is, when limitations or lack of success were justified and attributed to controllable variables, a high level of SLWSE was maintained. However, when they were linked to a lack of ability, a lower level of SLWSE was recorded. These findings concur with others found in L2 literature (e.g. Graham, 2006; Hsieh & Kang, 2010; Hsieh & Schallert, 2008) that reported a relationship between attribution and self-efficacy beliefs.

Another source of assessment came from participants’ awareness of their development. Students who were aware of their limitations and had a strength to admit them, had the confidence to confront these difficulties and therefore increased their efforts (Ruegg, 2014). Consequently, if students had SLWSE and believed they could improve their writing, they tended to be more aware of their cognition, hence regulated their learning (Oxford, 2016).

*Preparation for the exam.* Interestingly, preparation for the exam was a common theme in participants’ second entry that could have shaped their SLWSE judgments. Participants who reported good preparation, practice and effort were also self-efficacious before the exam and vice versa. Emphasis on practice and preparation was combined with a belief in the learnability of writing. Participant 10, for example, came prepared for the exam and showed a high level
of SLWSE. She believed that writing was acquirable and therefore with effort and practice she could master it. Thus, she was motivated to learn, to persist and had a clear vision of her future goal:

I came today to the exam prepared. I studied and practised. I tried several past papers. My mum corrected them for me. I did great most of the time. I tried writing about different topics. Brainstormed, wrote ideas and discussed them with my mum. The exam is important to me. I want to do well because it feels good to know that I am a good writer. Good marks will motivate me and push me closer to achieve my dream of being a good writer.

A similar perception of writing as being learnable through practice was shared by participant 15 who had a high level of SLWSE before the exam. She was assured of her ability to write as she had exerted a great deal of effort practising weekly:

I feel I become good at writing. Last weeks I had practised writing a lot. I wrote every week and sometimes more than one essay a week. So I get used to writing. The more I practise, the better I become at writing. I am not afraid to take the exam. I just think of it as another assignment to be written.

Therefore, believing in the importance of practice, some students such as participant 22 committed to it as it was the only way to improve writing and reduce anxieties:

My confidence in writing increases and improves with time. The main reason is that I am forced to write so I have to face my fears of failing to write by writing and practising. I like to use difficult terms, complex and long sentences.
Thus, when those students were not provided with opportunities to practise writing, their perception of their writing ability was affected. Consequently, participant 24, with moderate SLWSE, illustrated that teaching writing should be mainly through practice:

I do not write well. Teachers tell me to write without teaching me how to write. I do not remember engaging in a real writing experience in class where teachers practise writing with students step by step. Just telling me to write and write without telling me how. No one taught me how to generate ideas or how to discuss a topic. Teachers usually read from the textbook and read examples written by people whose English is their mother tongues. Writing classes should be for practising writing, giving each student the chance to write and correct their writing.

From the examples presented above, it can be seen that good preparation for the exam combined with a great deal of practice provided students with confidence to do well in their exams. Such an emphasis on practice and preparation was associated with growth mindset beliefs, those participants perceived writing as learnable, therefore, invested their time and efforts to develop the skill. Additionally, they showed internal locus of causality, hence, they took responsibility for their learning (Dweck, 2006; Robins & Pals, 2002).

*Ambiguity.* Another variable that emerged from participants’ second entries was their concerns over lack of clarity in terms of the exam allocated time, its content and teacher’s correction methods. To begin with, several participants’ SLWSE decreased as they were worried about not knowing the exam duration. This was best represented by participant 12 whose SLWSE dropped from 1170 to 1060 as she was not sure about exam allocated time and remembered her previous experiences with not completed writing exams. She failed to finish on time on several occasions:
I know I may not be able to do well in the exam, as writing takes time. I need a lot of time to write a few sentences. In most cases, the exam time finished and I did not. It passed and I did not write because nothing seemed good. I do not know how much time we get for exam today.

Such a concern over time was also combined with the concern over the exam essay topic. A great number of students were anxious that the teacher would choose a difficult topic for them. Participant 1 revealed her fears in relation to these two points and scored 770 at SLWSES:

I am worried over time. I need more time to be able to write good essays and to be able to write about details and to support my ideas with examples and more explanation. I hate to be surprised by the upcoming test’s questions and hope that we will be asked to write about something we had practised before. I am quite nervous that I will not do well in the exam.

Similarly, participant 25’s SLWSE decreased from 1125 to 950 before the exam as she expressed a conditional type of self-efficacy that was dependent on the familiarity with the essay topic and word counts:

My confidence in my writing ability differs from one topic to another. It also depends on the number of words required. If in the exam the topic is easy and the number of lines is reasonable, I believe I will do very well. But if the topic is very complicated or difficult and the number of lines required is large, then I may not be so confident in doing very well.
Participant 9 was also concerned about the word limit and hoped that she did not have to distract her attention from writing content to focus on the word limit of her essay:

I wish teacher would not ask me to write a specific number of words. I do not want to worry about word counts. I want to focus on the content.

Furthermore, lack of clarity in relation to the exam questions and correction negatively related to SLWSE of participant 17, as it dropped sharply from 1180 to 580. She was not sure how she would perform in the exam as her writing teacher refused to share with students any details regarding the nature of the exam questions and how she would calculate the exam scores. Such ambiguity left her worried and unsure:

Although I know I can write, I am not sure I will do well in the test. It is the teacher. She is not clear, I do not know what she wants and how she is going to mark my paper. She just said “prepare well and do your best”.

Additionally, apart from how teacher was going to correct the essay, what would be regarded as mistakes affected some participants’ perception of their SLWSE at that time. For instance, participant 16’s SLWSE dropped before exam, from 930 to reach 570 as she was afraid of losing marks due to her spelling mistakes:

Writing is very hard. It is difficult. I cannot write a perfect paragraph with no spelling mistakes. Spelling is my problem. Also ideas. I cannot write a well organised paragraph. I am not sure about the correction of the essay. Does each mistake count for one point? If so, there are too many, five spelling mistakes for five marks.

As shown above, a crucial factor that may have shaped students’ SLWSE prior to their mid-term exam was lack of clarity in terms of the exam duration, content and teacher’s
correction methods. As a result, those concerns provoked additional anxieties, which in turn may have led to decreasing their self-efficacy in writing (Bandura, 1977; Cheng, 2001; Öztürk & Saydam, 2014). These could have been rectified taking into account teachers’ roles whose responsibility is among others to lower the affective filters by familiarising students with the exam structure as best as possible.

These findings led support to the questionnaire results that revealed a link between SLWSE and SLWTA before exams. Participants who were worried over the ambiguity and lack of clarity before the exam were more likely to experience a drop in their SLWSE trajectories as their confidence of their writing abilities lowered. During the period before the exam, students’ concern over their performance may have increased their demands for clear and specific questions, familiar topic, well-defined correction methods and for the exam duration to be known in advance.

**Concern over grade and fear of mistakes.** A fourth construct that shaped participants’ SLWSE prior to their mid-term exam was their concern over their grades and consequently fear of making mistakes. That is, students who expected to get a good exam mark showed a higher level of SLWSE than those who were afraid to lose marks due to their deficiencies. Participant 13, for instance, had high SLWSE and was confident in her ability to obtain good marks which made her optimistic before the exam:

My writing skills are great and my essays have always been well-written and organised.
I will do the same in the exam and will get excellent mark.

On the other hand, concern over grades as well as fearing mistakes made students underestimate their SLWSE when it was before their mid-term exam. Although participant 21
acknowledged that her mistakes were small and “silly”, she still worried about them as they became important in the exam context:

I think I underestimate my SLWSE today because of the exam.... If I think of the spelling, I do not feel good. Spelling is hard. Sometimes I wrote with no spelling mistakes but sometimes I made many silly mistakes which would affect my grade… My mistakes are always something like changing the e to a or u to o. They are very similar and I get confused. But they do not change the word or make it not understandable.

Participant 26’s SLWSE dropped from high to moderate as she doubted her ability to perform well and obtain good marks:

Time truly flies. Before I know it, it is the exam. I am not ready yet. I would like to postpone it to develop my level and get a better result. Now I cannot write one-page essay. I find it very challenging especially when I take mistakes into consideration.

Such fear of mistakes and concern over grades were associated with less tolerance of mistakes. Thus, participant 22 changed her adventurous writing styles in exchange for fewer mistakes and better results:

I like to use difficult terms, complex and long sentences. I want to be different from other students. This is why my writing is different. I do not think it is a good idea to do this in the exam, I do not want to risk it.

Additionally, the exam context may have been perceived by participants as a situation where mistakes were not tolerated and accepted. Therefore, it provoked memories of similar
events. Participant 7, for instance, remembered her previous writing teacher who did not accept mistakes and made fun of her writing:

Last term writing was a nightmare. The teacher was so unbelievable. She screamed all the time. She told us that she has a high standard reputation so noting satisfied her. I hated her classes as they were full of negative vibes. She did not even seem to enjoy teaching us, she looked at us as if we were inferior to her. Even her comments were rude, she made fun of us in front of the whole class.

As expected, students’ concern over their grades and their fear of making mistakes in the exam affected their judgments of their SLWSE. In particular, the pressure exerted on Saudi students to perform well in their one opportunity mid-term exam contributed to their increased fear and anxiety to fail to meet the expectations of their schools or parents (Qudsyi & Putri, 2016). Interestingly, these fears were so powerful to the extent that they made participants underestimate their SLWSE levels as well as simplify their writing styles in order to avoid making mistakes and losing marks. These outcomes substantiate previous findings in the literature that found a relationship between performance goal orientation and self-efficacy (Bong, 2001; Hsieh, Sullivan & Guerra, 2007; Phillips & Gully, 1997). Performance-oriented participants were more likely to have low self-efficacy beliefs as mistakes were interpreted as signs of failure. When grades were stressed and equated with success, students were more likely to adopt performance goals, particularly, those who believed that their ability was low.

In summary, participants’ judgments of their SLWSE at the second data collection point were heavily influenced by its contextual factors, mainly the exam. Certain variables including participants’ reflection on their progress so far, their preparations for the exam, ambiguity in regards to the exam’s duration, scope and teacher correction, concerns over grade and fear of
mistakes shaped SLWSE beliefs before exam. Their judgments included elements of assessment, preparation, intolerance of ambiguity and fear of mistakes.

**After the mid-term exam.** Having taken the exam, students’ perception of their SLWSE was influenced by their performance in the exam, the familiarity with the exam questions, how they attributed their performance to a range of factors and the strategies they used to obtain the highest possible grade.

**Reflection on their exam performance.** Almost every participant reflected on her exam performance. Those who thought they had done well, reported an increase in their SLWSE while those who perceived their performance as being poor or unsatisfactory reported a decrease in their SLWSE developmental trajectories. Participant 24’s and 26’s SLWSE, for instance, enhanced from a moderate to high level after a successful exam experience. Participant 24 was so happy to be able to write, understand the questions easily and to finish before time:

I wrote in the exam. I used good vocabulary and I wrote good sentences. I love exams where the questions were very clear and the language was easy. I was afraid I would not understand the questions but I did. And the time was sufficient. I was also worried the time would not be enough. But I finished before time ended.

Similarly, participant 26 was proud of writing a well-written paragraph:

I wrote a 7-line paragraph. It was not long but the good thing was that it was well written.
On the contrary, some participants such as 20 and 25 had reported a drop in their SLWSE from a high to moderate level after the exam. Participant 25 was afraid of failing due to her deficiency in spelling:

Not very optimistic about the result. I made a lot of spelling mistakes. My grammar is good, I used simple present. So I am sure about my grammar. But spelling is hard and it worries me.

Unsatisfactory performance that was due to the exam difficulty and panic was experienced by participant 20 and affected her SLWSE evaluation:

I am disappointed because I could not write. Once I read the questions and realised they were difficult, I panicked and could not think properly. I am not happy with my performance and feel sad that I did poorly in the exam. I did not finish on time. Teacher took the paper from me before I finished.

At this time of the academic term, Saudi participants’ SLWSE was largely shaped by their performance in the mid-term exam. Successful experiences and positive perceptions of the exam promoted their sense of self-efficacy in their writing while lack of success and negative perceptions of the exam lowered their senses of efficacy in relation to L2 writing. This is in line with previous research (e.g. Bandura, 1977; Schunk & Pajares, 2001) stating that mastery experiences exert a great influence on students’ self-efficacy, as success increases it and failure has the opposite effect. It also collaborates with Abdel-Latif’s (2015) that previous writing experiences are a crucial factor in determining students’ current SLWSE, as self-efficacious students are reported to have high grades in writing and tend to reflect on their writing development as improving through their learning experience.
**Familiarity.** Familiarity was a variable that was frequently expressed in participants’ third entries. Being familiar with the essay topic, for example, gave participants confidence to write on it. However, those who perceived the exam questions, such as the grammatical judgment question, to be new and unfamiliar to them showed some hesitation and were less confident in their performance. For instance, participants 1’s and 30’s SLWSE was boosted after the exam as they both perceived the exam as familiar and clear to them. Participant 1 practised writing about the same topic in advance therefore felt so self-efficacious and relaxed:

The exam was good, really good. She asked us to write a paragraph about a topic we had practised before, so I felt confident and was at ease. My sentences were connected and my ideas were clear.

Similarly, participant 30 loved the exam as the topic had been practised before in the class which saved her time and gave her the chance to organise her essay:

I love the exam questions. I love her choice of topics. We did them in class before. So I did not face any difficulties understanding them or thinking what and what not to write. It saved me a lot of time. I think I wrote a very good essay with topic sentences, introduction and conclusion.

Familiarity with the topic was also a main reason for participant 21’s good performance in the exam. It was not the serious topics that might be seen by teachers as ones which would push students to develop their writing skills, but actually the more personal topics that helped her to feel more effective and comfortable:

I wrote about how to lose weight. I love the topic because I had a past experience with losing weight so I wrote about something I know. I knew many words already like diet, healthy style, protein bars, exercise and GYM. I could not have written it any better.
Lack of familiarity, on the other hand, was associated with a drop in SLWSE trajectories as in the case of participant 3 who reported a writing self-efficacy of 690 at that time. She was surprised to be asked to do anything other than writing essays in the exam as they only wrote essays in all their previous quizzes. She clarified that a great number of students agreed with her:

I expected the exam to be about writing only. But we were asked to do some grammaticality judgment tasks. That was so hard. I am not sure if I did well in the exam or not. Most students were not happy about the exam questions, there were nothing like what we used to do in the quizzes. Last quiz we were just asked to write an essay and given half an hour to finish it.

Therefore, the exam was perceived as being tricky and confusing which affected participants’ SLWSE, which was the case with participant 16. Her SLWSE dropped from 930 at the beginning of the term to reach 570 at this stage:

It was hard and confusing. The question on correcting grammar sentences was very tricky. They were not common mistakes. I did the writing part only.

In summary, familiarity is regarded as a vital aspect either prior to the mid-term exam as well as after it. Prior to the exam, students expressed their concerns over ambiguity and after it they complained over lack of familiarity in regard to exam’s scope. That is, familiarity/ambiguity heavily influenced students’ perceptions of their SLWSE and affected their prospective future performances. A possible explanation was provided by cognitive theories of knowledge types that indicate
when confronting a challenging and novel learning task, self-efficacy tends to be low because of the amount of conscious, declarative knowledge that must be manipulated. As learning progresses satisfactorily, declarative knowledge gradually automates and efficacy increases. As knowledge becomes more and more automated, effort decreases even though self-efficacy continues to increase. (Clark, 1999, p. 81)

That is, lack of familiarity and ambiguity of the L2 writing tasks may have required a greater number of cognitive functions which may in turn have lowered the levels of SLWSE. As soon as the knowledge became familiar and therefore easily processed cognitively, SLWSE may reach a higher level.

*Attributions.* After participants finished their mid-term exams, they made several attributions to their performance that might have affected their sense of SLWSE. Various attributions were noticed that ranged from controllable internal (e.g. efforts) to uncontrollable external factors (e.g. the exam duration).

Firstly, participants who attributed their good performance to their ability became more self-efficacious after the exam. Participant 9’s SLWSE, for example, was boosted after a successful performance and she felt proud to be able to write a good essay with an introduction, supporting sentences and a proper conclusion:

> I am happy with myself. I did well. I am sure the teacher will like it. I even liked it when I read it and felt so proud. I was able to express my ideas. All of them. I wrote them very clearly. I wrote a strong topic sentence. Then I explained in each paragraph one idea. I wrote examples. I think I will get a good grade.

On the contrary, participant 14 attributed her unsuccessful exam experience to lack of ability which resulted in a decrease in her SLWSE from high at the outset of the term to
moderate before and after the exam. She reflected on her performance as resulted from her low English level that impeded her understanding of the topic, so she wrote about something else:

I will not lie and say the exam was good. It was not. It was difficult. I could not write about the topic. Honestly, I did not understand what the topic was. When the exam finished and my friends told me I realised that I had written about something else. I did not understand the topic. My English is not good. My level is not improved. I tried many things but my language does not change.

Another type of attribution was made to practice and hard work. Those participants who thought that they did well because they had practised and prepared for the exam showed an increase in their SLWSE. Participant 15’s SLWSE was high after the exam and reported the reason for her good performance for practice and especially practising using outline before writing:

I think I did well. I felt a relief upon completing the exam. Practising helped me a lot. It helped me also outline all my ideas first before I began to write the paragraph. I did this because sometimes I forgot what I want to write.

Similarly, participant 4 took the credits as she attributed her success to her efforts and practice so at this time, she felt more self-efficacious than ever:

I feel more confident about writing after the exam. The essay I wrote was much better than any one before. I used better grammar structure and organised it in a way that made it looked interesting. I am not sure about some spelling. But I am trying to be optimistic. I worked hard and I practised for hours before the exam. I even hired a home tutor to correct my drafts and to give me proper feedback.
On the other hand, misperformance was attributed to the exam time as being not enough. Participant 5 who reported a high level of SLWSE believed that if she had had enough time, she could have written a good exam:

It was an easy exam, but I did not have the time. Time was not enough to do grammatical tasks and then write an essay. Writing an essay alone needed a lot of time. First brainstorming, then writing your first draft before finalising your essay. I feel I did well but my ideas were not connected. I was jumping from one idea to another. If I had had 20 minutes more, I would have had the time to write a better essay.

In a similar pattern, participant 8 got panicked in the exam writing and crossing till the page was so messy, however, she reported a high level of SLWSE at 1180. She attributed her performance to lack of sufficient time:

I did not spell words correctly in the exam. I know I made many spelling mistakes. My paper was messy. I wrote then crossed out. It was chaotic. After writing a few sentences, I realised that they were wrong or unrelated so I crossed them out. Then I started again, then crossed out. I got panicked and my brain went blank. I crossed out a whole page and then asked for an extra sheet of paper. I was panicking because time was so short that I could not concentrate.

Overall, high SLWSE students attributed their successful performance to their abilities and to the efforts they had expanded while their less SLWSE counterparts attributed their failure to lack of ability and exhibited helpless learning behaviour. In addition, highly efficacious students attributed their misperformance to lack of time given to do the exam, therefore, they maintained their high SLWSE. These results share a number of similarities with Hsieh and Kang’s (2010), Hsieh and Schallert’s (2008) and Graham’s (2006) findings that self-
efficacious participants ascribe their exam results to personal ability and perceive their outcomes as controllable and thus report a high level of confidence in their ability to perform well in the future. However, it refutes from previous research as high self-efficacious students in this study attributed their lack of success to external and uncontrollable variable, the exam allocated time, which in fact helped them maintain their high SLWSE, an explanation supported by Weiner’s (1972).

Strategy to avoid losing grades. Participants’ concern over their exam grades made them apply some strategies that guaranteed their obtaining good exam results. One of these was to avoid writing excessively in order to reduce the number of mistakes made, as in the case of participant 26:

I wrote a 7-line paragraph. It was not long but the good thing was that it was well written. If I wrote more, it would be rubbish. It is better to write a short but good paragraph than to write a long essay full of mistakes. It is a strategy I used to avoid making mistakes. Exam is not the good time to be adventurous. I may try writing long essays when doing my assignments.

Such an example lent support to the questionnaires’ findings that Saudi students may have perceived the context of exam as different from other writing contexts where they should not have taken risks that resulted in losing grades.

Another strategy was to write about a different topic instead of leaving a blank page, as in the case of participant 29:

I did not write well because I did know many words. I had many ideas and they were good but I could not find the words. I felt very devastated. So I wrote about something else. I got off topic, as it was my only option to keep writing and not to stop.
Another strategy was used by participant 10. When she did not find the right word for her sentences, she wrote the best equivalent she could think of:

I faced difficulty writing some words correctly. I just guessed them. More than once, I could not find the right words. So I wrote the best words I came up with. My mum told me not to wait for the perfect words and just write down any words that came to my mind.

Even a time management strategy was employed by participant 11 to avoid feeling the pressure of time on her:

The test was good. I had enough time to write and to edit. I started the writing part first. I think it was more important, and in case the time was not enough, at least I finished the important part. I would not be able to write under pressure so I had to finish it first.

Interestingly all students who reported using strategies had a high level of SLWSE after the exam. When they were faced with challenges in the exams, learners still managed to sustain their efforts and find alternative ways to perform well by implementing a range of strategies (Heidari et al., 2012; Li & Wang, 2010; Magogwe & Oliver, 2007). These strategies relied more on students’ ability to find alternative words, write about different topics and their ability to manage their time. Therefore, it can be noticed that self-efficacy is largely related to the cognitive aspects of exam writing, as those with high SLWSE were more likely to be self-regulated. As Bandura (1997) indicates, self-efficacious students employ a range of strategies when faced with difficulties, that help them approach academic demands by utilising more processing resources.
In summary, participants’ judgments of their writing ability after they took their exam were largely influenced by their performance in the exam itself. Another construct that may have played a key role was how the exam topic and questions were familiar to them. Those who reported being surprised with the tasks and lacked prior practice showed a decrease in their SLWSE trajectories. Furthermore, attribution of the performance shaped students SLWSE at that time. Finally, strategies were reported by only high SLWSE participants as an effective way to perform the task.

After participants receiving their exam results. A number of factors shaped participants’ SLWSE after they received their exam’s results. One of the most crucial factors was their perceptions of the exam’s outcomes. Followed by teacher feedback, attribution of results and their perceptions of failure and mistakes (mindsets). Further details in regard to each factor will be discussed below.

Perceptions of the exam’s result. Participants’ perceptions of their exam result played a key role in affecting their sense of SLWSE. Generally speaking, a mark that was perceived by participants as good had a positive impact on their SLWSE and that perceived as poor had a negative influence. Participant 1’s SLWSE had dropped after receiving her result, she commented:

I thought I really improved till I saw my mark today. My problem is that I do not give details, people do not understand my messages. Sometimes, ideas are buzzing in my head but I cannot write them down. I cannot put them into sentences, I cannot.

Similarly, participant 2’s result was shocking to her and affected her SLWSE, she explained the difficulties she encountered in the exam:
I deserve a better result. I can write but when I was asked to identify the nouns or adjectives in the exam, I found it hard. It was like someone asking me to say the alphabet backwards.

Participant 3’s SLWSE, on the contrary, enhanced from 690 to 740 after obtaining a good result, she commented:

I am happy to receive a good feedback form my teacher on my performance in the exam. If I compare myself to my friends, I know I am in a good place. My grade is above average, so I am better than most of the students in this class.

In the same way, participant 4’s positive outcomes boosted her SLWSE to its highest point in her trajectory. She reflected on her achievement as following:

My grade was very good and I feel self-satisfied. I am satisfied with my result. It feels amazing to know that you can write with no mistakes, or just a few. The exam was not easy but I was prepared well.

As noticed in the aforementioned examples, students’ perceptions of their exam outcomes constituted a base for their evaluations of their capabilities to perform in the future. Positive perceptions, regardless of the actual grade, enhanced their SLWSE and gave them a boost while negative perceptions lowered their SLWSE and undermined their abilities. These outcomes confirm Abdel-Latif’s (2015) and Öztürk and Saydam’s (2014) findings that writing accomplishment, previous experiences and writing competence are prime factors determining L2 students’ writing self-efficacy.
Teacher feedback. Teachers could persuade their students to believe in themselves and thus increase their writing self-efficacy. Participant 22, for example, received constructive feedback and praise from her teacher throughout the term. Moreover, teacher commented on her exam writing “unique as usual” which had a significant effect on her SLWSE and motivated her to write further:

I got my exam result today. I got a very good mark and I am proud of myself. Now I feel so excited to learn more and to write more. I like the teacher comments that my writing is “unique as usual”.

Similarly, participant 30 was praised in front of the whole class for her performance in the exam and recommended it for other students which raised her level of SLWSE:

My grade was very good. I was happy to hear the teacher’s praise. She praised me in front of everyone. She liked my essay and said students should read it to see how to write a good introduction and conclusion and examples to support their ideas. It is very encouraging.

Participant 25, on the other hand, was so discouraged by her teacher’s correction that her writing self-efficacy was in its lowest dip in her trajectories. She was upset as the teacher corrected every grammar and spelling mistake in her writing and thought that some mistakes should be left uncorrected:

When I write something, I am not sure about its spelling and the teacher corrects it for me, I get discouraged to try again. I do not think I have the energy or desire to write the next assignment because I do not want to go through this again.
The same negative reaction to teacher feedback and correction was expressed by participant 24. Her SLWSE dropped sharply after receiving her mark from a high level, 1040, to reach 620:

My writing was not good. I made many spelling mistakes. Teacher wrote a lot of question marks, like saying hey I do not understand you. If the teacher is so picky, it is hard to get a good grade. She corrected every mistake and wrote many comments.

The instances above clearly demonstrated that feedback and verbal persuasion have a significant role in shaping students’ SLWSE and their future perspectives. Although Bandura (1977) claims that it is easier to convince people of their deficiencies than to persuade them of their mastery, the finding obtained from this study show that feedback have a strong influence on both sides. Positive comments and praise encourage students to work harder and to believe in themselves whereas excessive negative feedback tends to be counterproductive. Additionally, it is consistent with Abdel-Latif’s (2015), Öztürk and Saydam’s (2014) and Ruegg’s (2014) findings that L2 students tend to evaluate their ability based largely on the feedback they receive from their teachers. Such effects may have been amplified in a teacher-centered classroom, as was the case in this study.

*Attribution.* The exam results were attributed to ability, practice and to the course teacher. Participant 6, for example, attributed her good exam mark to her ability which resulted in high motivation to work even harder to achieve her goal and in an increase in her SLWSE to reach its highest point at 1100:

So proud of myself. I got B+ in the exam and I am so happy with it. It is good to receive such good news at this time of the term. I was so unmotivated, stressed and busy trying to catch up with homework and study for midterms. This week, we have
two midterms and three assignments. I spend all my time studying. Literally, I have not had any social life for weeks and I do not have any spare time. But such an achievement reminds me of what I am capable of doing and achieving.

Participant 10 reported a high level of SLWSE at 1140 after obtaining her grade that was perceived as a proof of her ability to write, thus motivated her to start writing her book:

My grade was excellent. I did very well in the exam. I used to write. The result motivated me a lot. It proved that I can write even if the topic is new and I have never written about it before. Teacher feedback is crucial to push me further to dedicate more time of my day to write and to share my writing with others and get their feedback. When I dream of writing a book, I know I have to take many small steps before doing so. These steps will begin now.

Similarly, participant 20, who was demotivated after the exam and was preparing herself for failure, received a good mark that emphasised her ability to write and motivated her:

I feel good and motivated. I was not expecting it at all. I even hated writing after the exam and prepared myself to the worst. But now I feel I am motivated and I am happy. The results rebuilt my confidence in my writing abilities and made me feel better. I did not have the time and words to write but still got a good mark that means I am good at writing.

Other participants attributed their results to their hard work and practice. Participant 11’s SLWSE, for example, reached its highest at 1260 after obtaining a good exam result.

Good writing came with practice:
I am confident I can write, I got a good exam mark. I can write short essays using good spelling and correct grammar. When I practise, I do better. I like my second and sometimes the third drafts better than my first one.

Additionally, participant 13 reported the highest level of her SLWSE after receiving her exam result that was largely attributed to practice and being with friends who were hard workers:

It is great. I feel good. I got A in the exam. Yes, there were small mistakes but my overall performance was great. Teacher said that I sometimes got off the topic but I think this is writing. I am so excited. I practised a lot. The environment here helps me a lot, to be around students who work hard to improve their writing and to be taught by a great teacher helps me to be a better writer.

In addition to practice, being taught by a teacher who was understanding and encouraging her students not to be hindered by their mistakes was a reason for some participants to build their SLWSE. Participant 16 was an example of SLWSE that was affected by the teacher and her encouragement, as it raised from a moderate to high level:

It seems like I did very well. I got B. It is the first time I got such a grade in writing. I think practising writing every week improves my writing. And the teacher. She is very good. She reads all my homework and gives comments. She tries to encourage everyone to do their best and I learn not to be ashamed of my mistakes.

Participant 21 was also among those whose SLWSE depended on the teacher. Her teacher was good and encouraging, so she felt self-efficacious and enjoyed writing, not fearing making mistakes:
My confidence in my writing skills increases every class. I got A+ in the exam. I love writing classes as there is no limit to my ideas. Teacher is very good. I am lucky to have her as she helps a lot and she understands my level and my limitations. She chooses topics that are relevant so I enjoy writing about them. Most students like her and do not feel bored in writing classes. Last term teacher asked me to write about economic matters and climate changes which I had zero interest in and hated to do them.

After participants received their grades, several attributions were made in relation to abilities, efforts and interestingly to teacher. As shown the role of the teacher on SLWSE was vital in simulating their students’ motivation by offering encouragement, praise and guidance. These results supported the similar findings reported above in regards to attribution and the role of teacher’s feedback.

*Mindsets.* Different aspects of mindsets (Dweck, 2006) were found to interact with participants’ sense of their SLWSE. To begin with, a competitive aspect of mindset, that was seeing improvement as getting better than others rather than about mastery of a subject. For example, participant 3 was concerned with being better than others thus even such an achievement was not enough to boost her SLWSE to a high level, as she reported a moderate one at 740:

I am happy to receive good feedback form my teacher on my performance in the exam. If I compare myself to my friends, I know I am in a good place. My grade is above average, so I am better than most of the students in this class. I am really proud of the fact that all my hard work has finally paid off in the end and proud of the fact that I proved myself to my teacher and other students in the class.
Another perception of SLWSE based on competitive judgments was expressed by participant 27 who was not happy as she scored lower than all her friends, her SLWSE was 680 at that time:

I am not happy with my grade. It is one of the lowest in the class. Other students scored much higher than me. I saw them happy and looked proud of their achievement.

Secondly, growth mindsets who believed that learning writing was acquirable and with time and efforts they could master it. Those participants had high levels of SLWSE, participant 5 for example had a high level at 1290 after obtaining her exam results and commented that:

I am really confident in my ability to write. I notice my progress week by week. I also see it in my teacher’s comments on my homework. She praised my efforts and thought my writing is creative and imaginative.

Teacher praised her efforts which emphasised their importance in learning to write. Therefore, she was so confident to write more than what was required from her:

I often challenged myself and wrote more than what teacher required. Last assignment I wrote two different versions. I could not decide which one to present so I handed in the two copies. It was about a place I visited before, so I wrote one about New York and one about Istanbul. I loved them both and so did my teacher. I love to write, especially if it is about something I am interested in.

Participant 15 was another example where her SLWSE enhanced to 1240 after seeing her exam marks that confirmed her progress in writing:
My exam grade was ok. I am happy with it. I feel this term is good. My language improves and my writing too. I do not feel reluctant to write anymore. I practised hard but still need to improve my skills. I am at the beginning of my learning and feel I have already learnt a lot.

Finally, fixed mindsets were shown among those participants who believed that improving their writing was not possible, which was associated with a moderate level of SLWSE. Participant 17 whose SLWSE score was 680, explained that no matter how many efforts she had made to learn, she did not improve:

I have a feeling that even when I practised a lot, it was not enough. I also have the feeling that I will make mistakes and I cannot write correctly. Especially spelling. New words are hard to spell.

Such attitude towards learning led to the unacceptance of mistakes as they were perceived as a sign of inferiority. Participant 25 recorded its lowest SLWSE, 870, when she had fixed mindset:

My result was not good. Sometimes I feel I do not want to write because I do not want to make mistakes. I feel ashamed when I make mistakes so I try all my best to learn new words and write them many times to memorise their spellings. When I write something, I am not sure about its spelling and the teacher corrects it for me, I get discouraged to try again. I do not think I have the energy or desire to write the next assignment because I do not want to go through this again.

Furthermore, it caused helpless behaviour towards learning and a give up attitude, such as in the case of participant 23 whose SLWSE was 670 at that time:
I made a plan to improve my writing weeks ago but could not stick to it because of the study pressure. Loads of homework, lots of exams and quizzes. We do exam after exam and instead of studying at home I spend all my time filling papers doing the assignments. When I finish, I am so exhausted and cannot do anything else and it is almost my sleeping time. If we have less homework, we may learn better, have time to practise and revise what we have already learnt. But now teachers do not care about our learning outcomes, they care about submitting assignments on time only.

The beliefs students held in regard to learning writing greatly affected their SLWSE at this time when they received their exam outcomes. Those who perceived their learning as a competition with peers as well as those who regarded it as unacquirable, had lower level of SLWSE than those who viewed it as malleable. These findings are in line with Wood and Bandura’s (1989) that mindset and self-efficacy beliefs are closely related. In addition, they are in agreement with Limpop and Alves’s (2017) findings that stronger growth mindset beliefs are associated with a great tendency towards mastery orientation, which is also linked to self-efficacy beliefs (Pajares, Britner & Valiante, 2000; Pajares & Valiante, 2001). It is more likely that mastery-oriented students work hard to improve their competence and ability via their efforts and persistence particularly in face of struggles, which may provide them with a high sense of efficacy to write in English. Students with fixed mindset, on the other hand, are more likely to focus on their mistakes and try to avoid demonstrating incompetence in front of others.

After participants received their exam’s results, their SLWSE was largely influenced by their perception of their outcomes, teacher feedback and praise, how they attributed their results and the type of mindset beliefs they held.
**At the end of the academic term.** Having reached the end of term with the proximity of the final exam and a sense of course completion, students’ perceptions of their SLWSE at this stage was influenced by the following variables: reflection on their performance so far, fearing failure, teacher, mindsets and homework loads. Each of which will be explained thoroughly in the following section.

**Reflection on their performance so far.** Students’ reflections on their performance were based on a variety of factors such as: teacher feedback as well as previous experiences resulted from quizzes and mid-term test outcomes. Highly self-efficacious participant 2, for instance, was aware of her progress and of her strengths as L2 writer. Such awareness relatively stemmed from her teacher evaluation and peers’ persuasion:

Overall, I feel my writing improved. Teacher feedback has been positive for the past couple of weeks. I learn to organise my ideas and to focus on what I want to write. I learn to use outline to keep my writing organised. My friends are now asking me for help with their writing.

Similarly, participant 19 positively reflected on her development enumerating her abilities to write across genres and to write proper topic sentences, introduction and conclusion. Successful experiences with a previous quiz and self-correction boosted her self-efficacy in writing to reach 1330:

I am very good at grammar. Rarely I make a grammar mistake. But spelling and punctuation are not perfect yet. The important thing is that I can write different essays like telling a story or describing a thing. I know the difference between them and can write a good topic sentence for each type. My conclusion is usually good and I summarise my ideas in a good way. When I start writing, I know what the result is and
I know what to expect. Last quiz was about friendship. I wrote a really wonderful essay. After I received teacher comments, I corrected them by myself in the class and returned the paper, teacher gave me an extra mark for that.

Unsuccessful writing experiences and negative feedback, on the other hand, had a strong effect on SLWSE such as in the case of participant 26. Her SLWSE dropped sharply from 1110 to reach its lowest point at 510 after a negative experience on social media:

I do not think I learn much this term. I mean I do not see any progress even a slight one. I gathered all my strength and started a social media account and wrote in English but I wish I had not. The number of negative comments was so huge. Most of them making fun of my language and asking if I am a real English student. It was a very devastating experience. I blame myself a lot for hurrying and wish I had given myself much more time to develop my language and started the account in Arabic first.

Similar use of the internet, however with people who were encouraging and supporting, resulted in an increase in SLWSE as in the case of participant 3:

I think I learnt a lot this term comparing to the previous one. It feels good to be able to write in English and use Twitter and Facebook to find friends from all over the world. Since I started using social media in English, I have made friends from USA, New Zealand and Japan. I do not write in perfect English, but they understand me well.

At this stage and towards the end of the term, it was not uncommon that students became more likely to evaluate their progress in order to highlight their strengths and weaknesses which could in turn enhance their chances of passing their final exam. Therefore,
their SLWSE became related to how they perceived their capabilities and how they reflected on their previous performance. Self-reflection process is considered by Bandura (1997) as the powerful means of human agency, through which individuals assess the appropriateness of their thoughts and behaviour, and then alert them and their future behaviour, if needed. Frequent self-assessment of behaviour and interpretation of outcomes create beliefs in regards to what individuals are capable of doing and achieving which then is used to inform their subsequent behaviour.

**Fearing failure.** SLWSE at this time was partly affected by participants fearing of failing their final exam. Participant 1, for example, was worried about the final exam which resulted in a drop in her SLWSE to reach 620 at the end of the term:

> Writing is so important. If I fail writing, I will not be able to pursue my education in this department. Everything depends on it. We need to write research, homework and projects and I am not sure I am ready for that.

Participant 17’s SLWSE fluctuated throughout the term from high at the beginning to moderate in the end when she became stressed and afraid of failing the course:

> I understand teacher’s explanation in the class but when I want to write down I find it difficult. I know the theoretical part but the practical part is not easy. I panic when I want to write, then I remind myself that I should forget this fear and focus my attention on writing. Sometimes it works but other times it does not. Now towards the end of the term, my fearing of failing is exaggerated. Writing becomes a heavy load.

Additionally, participant 29’s SLWSE dropped sharply as she knew that the teacher might not have corrected her final exam. In her mid-term exam, teacher accepted her essay on
a different topic and gave her good marks which resulted in an increase in her SLWSE. However, now the teachers changed, her SLWSE dropped and she became worried over exam correction. Such SLWSE might not have been based on a mere belief in her ability to write but relied on her teacher, especially on her tolerance:

I am afraid of the final exam because teacher told us that 3 other teachers will correct our essays. I am not happy with that. In the mid-term I did not write about the topic the teacher chose but she accepted it because she knew me and knew my level. But if other teachers had corrected my paper, they may have failed me because they do not know me. I do not know how they are going to correct our essays and what their criteria are. We know our teacher and her style and what she focuses on but we do not know anything about the other teachers even their names.

Students with higher levels of SLWSE expressed their confidence in their ability to perform well in the final exam. Participant 16, for example, had high SLWSE as she thought that she was well prepared for the final exam:

I can write well organised essays. I am not afraid of the final exam. I wrote many good essays and teacher liked them. On one essay teacher commented that she was happy to see a change in my writing. Everyone noticed the change. My parents are so happy.

Alike participant 30 expressed her high confidence in writing her final exam which resulted from a very successful experience. It is interesting to see that unlike Bandura’s (1997) argument that self-efficacy beliefs are domain-specific, her SE transferred to other disciplines and even made her a brave person:

I can write very professionally; I am good at writing. I am one of the best in the class. I can get high mark in the final exam. It is a very successful experience that makes me
stronger and more confident not only in writing, I become good at all other subjects too. It changes my personality: I do not feel shy, I become so brave and do not hesitate when use English.

The final exam appeared to affect students’ perceptions of their SLWSE as the academic course came to its end. Low levels of SLWSE were linked to fear of failing as students were not sure they had the skills required to pass their final exam. High self-efficacious participants, on the other hand, were not afraid to take their exam as they believed that they were capable of writing.

*Teacher.* Since participant 21 got along with her teacher and found writing classes to have a supportive atmosphere, she reported high levels of self-efficacy during the whole term. She stressed the role of teacher in her achievement:

> Writing classes have been great this term. Teacher changes her styles every class. Sometimes, she asks us to write in class, other times we take it home and write it. Yet we sometimes work in a group. We organise sentences to form a paragraph. I always get a good mark and this is encouraging.

In participant 22’s final entry she acknowledged the role of teacher in elevating her belief in herself as an English writer and how this in turn had a positive impact on her writing and her attitude towards writing:

> I am a good writer and teacher likes my writing style and encourages me to write more. She is very nice. She helps me believe in myself and improve my writing skills. She told me that even next term when she is no longer my teacher, I can still come to her to
seek help in writing. She said that I am good at writing which makes me very proud of myself.

Participant 25, on the other hand, was first discouraged by her teacher correction that her SLWSE was in its lowest dip in her trajectories. Afterwards, she decided to talk to the teacher to discuss her performance. Teacher was positive and focused on her strengths which boosted her SLWSE to reach its highest level of 1240 out of 1400 by the end of the course:

I had a long conversation with the writing teacher about my writing. It was really helpful to talk to her. She said that she knew my writing was good and my choices of ideas and words were interesting. Even when I did not get a good mark, she thought my writing was good. I asked her not to focus only on spelling and grammar and she explained that her role as a teacher is to correct me and that correction should not discourage me at all. Since that conversation I think I have changed. I do not care much about the correction per se but also work hard to eliminate the number of my mistakes and to improve my writing.

The teacher was able to persuade her to accept her mistakes and not to exaggerate them. She also drew her attention to her strengths as a writer. Her SLWSE was then built and positive attitude towards mistakes was developed.

The above examples highlighted the undeniable impact of the teacher in terms of promoting students’ beliefs in their capabilities. Taking into account the teacher centred learning environment in Saudi, many students perceive their teachers comments as final judgments of their performance. Such outcomes are in line with Bandura’s (1977), Abdel-Latif’s (2015), Öztürk and Saydam’s (2014) and Ruegg’s (2014) findings that stress the role of teacher in shaping students’ SE belief. Teachers who take into account students’ attempts to
write a good essay (e.g. good organisation, structure and valuable content) when giving their feedback, they draw less attention to mistakes (Lee, 2005) and therefore sustain higher levels of SLWSE.

Mindsets. As shown earlier, participants’ mindsets played a role in shaping their perceptions of SLWSE. Participant 24, for instance, had fixed mindset-related beliefs about learning to write, namely the belief in its innateness, which was associated with low SLWSE and low persistence and efforts. This participant reported a very low level at 390, in fact it was the lowest level recorded in the whole study:

My writing ability is weak. I will be lucky if I pass this term. If I do not, it will not be a surprise for me. I do not have a writing brain.

Similarly, participant 14’s SLWSE dropped to 600 and reported helpless behaviour and a tendency towards giving up when she believed that learning to write was not possible, at least for her:

I cannot write. I did not improve. Every assignment is worse than the one before. I tried but without improvement. I tried a tutor but then teacher knew it was not me. I got zero for that assignment. I tried an online course but learning cannot happen over night. I want to give up. Maybe I am not meant to be an English learner.

On the other hand, a growth mindset at the end of the term was associated with an increase in SLWSE, efforts and persistence. Participant 12, for example, reported a high level at 1350 as she believed that her writing improved to become more well organised and well explained:
My writing has changed. It changed a lot. Especially when I learned about the types of paragraph (story, descriptive, steps). I know now what to write and how to write. Practising writing every week helps me to improve my writing. I am happy with this change. I am also happy because I can now correct my friends’ writing.

Participant 7 also showed a growth mindset in reflecting on her performance this term which was combined with a very high level of SLWSE at 1380, one of the highest levels recorded throughout the study:

As we are heading towards the end of this term, I come to know that I am a good writer. I am glad I have achieved this level in writing. I am proud and satisfied. Writing now is not an issue for me. I started from a very low level and now I can write a well organised essay, with few mistakes, of course.

A growth mindset was associated with a great number of efforts expanded to improve writing, as in the case of participant 27:

I think this term writing changed me. Every week we write. At first, I did not like the idea and I did very poorly. But with practice, it got easier. I need to work further on my spelling and on my vocabulary. I do not want to rely on dictionary to find the correct words for me. Because I do not like to stop when writing to find the word as it cuts my thoughts and then I lose what I want to say.

Finally, a competitive mindset was shown in participant’s 8 last entry where her SLWSE dropped from high to moderate. She thought that her performance was compared with other advanced learners in the class:
I think I am not into writing. I worked hard but I did not improve much. I skipped many classes so I got my first warning. It is not fair when I have in class some students who studied in international schools and their English is good and the teacher compares my performance against them. Those students are teacher’s favorite, they are the only group who participated in class and the one who are praised all the time.

In a similar pattern, participant 23 compared her learning ability to her classmates and was not happy with her level:

I am a very slow writer and very slow learner. I need more time than other students to process learning and with the pressure of the study I think I am way behind in my academic learning. I am not happy with my writing assignments. I know I am not doing well.

Mindsets as shown in the above sections related to how students evaluated their SLWSE. Together, they shaped participants’ attitude towards learning and their motivation to expand efforts and persistence when they were faced with difficulties. It also influenced their perceptions of mistakes and imperfect results.

*Homework load.* A final variable that had indirectly affected SLWSE was homework load. Study pressure and loads of homework influenced participants’ performance; they got bad results or feedback which in turn affected their sense of self-efficacy. Participant 11 SLWSE had decreased from 1260 to 960 at the end of the term due to her failure to manage her time to finish her homework and study for her mid-term exams:
I can write but my writing assignments lately have not been good. I do not have much time to do them. I do most of them in a hurry in less than an hour. I wrote rubbish, just do not want to get zero.

Another participant, participant 6, struggled to catch up with others due to loads of homework. Her self-efficacy dropped at the end of the term from 1100 to 820 due to an experience of not completing homework:

I missed the last homework. I could not finish it on time. There were loads of assignments and they were all due at the same time, so I had to choose which one to hand in. I thought because I did well in writing so far, I did not have to do the homework and instead worked on my other assignments. I thought teacher would understand, especially that I did well throughout this term. But she shocked me when she refused. She insisted on giving me a “BIG ZERO” which was really frustrating.

As commonly known, homework is given to help students to practise what they learnt, however in some cases when required to do a significant number of assignments, it may be seen as hindrance. Therefore, students often had to prioritise their work and consequently may not be able to do some assignments properly. Bad outcomes, hence, could impact SLWSE especially at the end of the term and just before the final exam when students need a lot of encouragement to enhance their confidence in their writing abilities.

To sum up, at the end of the term, participants’ SLWSE was largely affected by their reflection on their progress so far, teacher role in alerting their SLWSE, fear failing the final exam, the mindset they held and the large amount of homework assigned to them.
**Summary.** Having analysed participants’ written journals at different times of the academic year, a conclusion may be drawn that among a group of factors influencing and shaping students’ SLWSE, not a single one was found to be dominant. Participants’ SLWSE interacted with different sets of variables at various times, which indicates its dynamicity as well as complexity.

**Second language writing tolerance of ambiguity.** Tolerance of ambiguity refers to the extent to which students are comfortable with complex, contradictory and uncertain situations. Lack of tolerance of ambiguity, on the other hand, causes uneasiness and anxiety especially when doubts are encountered. In order to differentiate between general anxiety and anxiety that is provoked by lack of tolerance, Ely (1989) ties it in L2 context to the following situations: “that one does not know or understand exact meaning; that one is not able to express one’s ideas accurately or exactly; that one is dealing with overly-complex language; that there is a lack of correspondence between the L1 and L2” (p. 439). Therefore, in this current study, anxiety that is triggered by novelty, inability to express selves or ideas clearly, lack of understanding exact meaning of topic, words, teacher explanations, feedback and writing, lack of transfer from L1 to L2, complexity as in the language structure, essay format and contradictory in meaning, grammar or spelling rules will be treated as lack of tolerance of ambiguity incidents.

Interestingly, there is a vast amount of work on neurological literature that has shown that ambiguity generates anxiety more directly than other emotions such as fear (for in depth discussion see McLain et al., 2015). Hirsh et al. (2012) go further to claim that “uncertainty is experienced subjectively as anxiety and is associated with activity in the anterior cingulate cortex and heightened noradrenaline release” (p. 1). Therefore, it can be argued that lack of SLWTA is experienced as anxiety with the same physical effects.
Such feeling of anxiety, that is a crucial component of lack of SLWTA as well as an emotional reaction to it, is presented in this study as a multifaceted construct that interacts with multiple variables at different times of the academic term. After participants filled in their SLWTAS, they wrote their entries to further explain their responses by answering questions and giving examples in regards to what makes them more or less comfortable in L2 writing. Using the word “comfortable” in the questions was inspired by Ely’s (1989) definition as well as SLTA scales’ items (e.g. item 10: when I am speaking in English, I feel uncomfortable if I cannot communicate my idea clearly) and aimed to identify the areas where students SLWTA become affected. Below is a discussion of the nature of SLWTA and what factors contribute to it at the five points of data collection. It is worth mentioning that as Saudi students exhibited a low SLWTA profile throughout the term as indicated in the questionnaire results, most participants’ written journals regarding their SLWTA were in general negative in terms of expressing their anxiety and subsequent concerns and worries.

At the beginning of the term. At the outset of the course, participants’ ability to tolerate ambiguity was in general low as shown in the earlier section. Such lack of tolerance of ambiguity was shaped by several factors such as: previous writing experiences, novelty of the class environment, perfectionism and a lack of ability to express ideas. These factors will be further discussed below.

Previous experiences. Successful previous experiences provided the students with the skills needed and the confidence to deal with uncertainty, while failure experiences tended to throw their shadows on participants’ confidence, thus they became more likely to be threatened by ambiguities and therefore avoided them when possible. Participant 4’s SLWTA, for
example, was very low at the outset of the academic course, as her past writing experience was unpleasant:

Writing classes are stressful, so I skipped some classes last term. I could not finish my homework on time. Even the one I completed on time was full of grammar and spelling mistakes, meaningless and graded low. I am worried this term will be a failure too.

Similarly, participant 7 reported low SLWTA and was discouraged by her previous teacher’s correction methods as well as her frustration with writing long essays:

Previous term teacher corrected students in front of the class which was not OK. It would be more helpful if we had one-to-one session with the teacher to discuss mistakes, strengths and weaknesses. It should not be every week or month, I think if I had it for two times during the term, it would definitely help. Another thing that made me frustrated was writing long essays because keeping sentences connected was not easy.

Participant 5’s successful experience, on the other hand, was reflected on a moderate level of SLWTA, tolerance of mistakes and more learning-oriented behaviour:

I love to write and do not feel stressed even if I cannot write. I am determined, I keep trying till I learn. Last term teacher challenged us to write on difficult topics which developed my skills a lot and prepared me for writing on several genres.

Previous experiences in writing whether successful or not may have influenced participants’ current levels of SLWTA. Students who were taught to take risks and to challenge themselves in order to develop their writing skills were more likely to tolerate the ambiguities they faced and perceived them as challenges to be mastered. Students who focused more on
their grades and their low achievements were more likely to be afraid of making mistakes and may have skipped classes as they perceived them as anxiety-provoking. These results are consistent with previous findings in literature (Atef-Vahid et al., 2011; El-Koumy, 2000; Erten & Topkaya, 2009) where achievement is linked to SLTA. SLTA is associated with greater exposure to language, a higher level of development which is combined with greater expansion of linguistic repertoires, therefore lower concern over details and mistakes.

Novelty of the class environment. First class was perceived by some students as being stressful. At the beginning of the term, new teachers, friends and class environment could have been linked to participants’ SLWTA. Participant 23’s SLWTA was very low as she was not sure about the class’s teacher and her peers:

I was so stressed before the first class. I did not know the teacher and whether she was nice or not. I even worried about students, were they friendly or not.

Therefore, participant 6 felt more comfortable at the first class when the teacher explained thoroughly her teaching syllabus. This introduction clarified her uncertainty as it was stated what they were going to learn and what was expected from them:

I feel comfortable so far. You know we have not started yet so there is nothing worrying me. I like it when the teacher introduced the syllabus. I am very optimistic that writing this term will not be a problem.

In addition, when students were told to write their first assignments, some of them felt the need for it to be perfect in order to give the new teacher a good impression about their writing levels. Such commitment was related to high anxiety and low tolerance for mistakes and ultimately, a low level of SLWTA. Participant 8 explained:
Teacher wanted us to write a paragraph introducing ourselves to her and I do not want to make any mistakes. Mistakes will give a bad impression about me. I do not want to be judged badly from the beginning of the term.

Participant 30 shared similar perceptions and emphasised the importance of well-written first assignment:

When teacher asked us to write for the next class, I felt anxious because it is my first writing and I want to give her a very good impression. When teacher has the impression that I am a good writer, she will keep it in her mind for the rest of the term and will treat me based on that. So the next assignment is a big job for me to prove myself to the teacher.

Participants perceived first class as anxious as there were ambiguities and lack of clarity in regards to class teacher and classmates. As soon as the teacher was introduced and her teaching methods and syllabus were explained, their anxiety may have diminished. In addition, seeking perfectionism when writing the first assignment could have caused some stress for participants who considered it an opportunity to show off their writing skills and ability. It is a relatively common belief among students that writing teachers form most of their opinions and views of the students from their initial written texts. Therefore, they attempted to make a good impression on their teachers in order to facilitate obtaining good results at the end of the course. Such beliefs in the importance of first assignment were linked to a lower level of SLWTA among Saudi participants. These outcomes are in line with Thompson and Lee’s (2013) findings that classroom performance anxiety is related to students’ TA as they experience panic when facing difficulties and challenges. Students who are concerned with their performance, for instance by striving to make a good impression on their teacher or obtaining good initial
marks, report low levels of SLWTA. They also support Almutlaq’s (2013) findings that SLTA correlates negatively with perfectionism in general and concern over mistakes in particular.

Perfectionism. As seen from analysing SLWSE, students sometimes became motivated and ambitious at the beginning of the term. Therefore, they established high standards for themselves which in turn could have caused them stress and affected their SLWTA. Participant 10’s tendency towards perfectionism was related to intolerance of mistakes and a preference for getting her writing proofread:

Writing is not easy. Although I write everyday, it is not easy, specially for me. I want everything to be perfect. I do not like to read for people who make mistakes or do not say what they want clearly. Poor writing makes me nervous. I always ask my mum to correct my writing. She is an English teacher. I like to have her second opinion on my writing. She is good and she encourages me to write better.

The need for proofreading before submission, lack of SLWSE and fear of mistakes were also linked to lower levels of SLWTA, such as in the case of participant 28:

Because I do not have confidence in my writing, I get nervous when I write. I am afraid of making mistakes. I do not want to be wrong. But if I write, I make mistakes. So I do not want to write. I am thinking of hiring someone to edit for me and to help me write better. That will reduce the stress and make me feel confident again in my writing.

Fear of mistakes and criticism were associated with participant 15’s low level of SLWTA:

If I make mistakes, I feel anxious. If someone corrects me, I feel anxious. If I get a low grade, I feel anxious. If I do not perform well, I feel anxious.
This is in line with Almutlaq’s (2013) findings that perfectionist students tend to be less tolerant of ambiguity in L2 learning. Students with low SLWTA were more likely to strive to achieve high standards, and sometimes unrealistic in terms of performance in writing in order to avoid criticism. Their fear of making mistakes is linked to a tendency towards getting their work proofread (Frost et al., 1995; Stoeber & Yang, 2010). Such fear led to exaggerated reactions towards mistakes as well as constant low evaluations of abilities which resulted in anxiety, depression and ultimately giving up (Schweitzer & Hamilton, 2002).

*A lack of ability to express ideas.* Inability to express ideas and opinion in writing could have impacted participants’ SLWTA, as in the case of participant 12. She perceived writing as being stressful when her deficiency in regards to spelling and grammar prevented her from conveying her message and thoughts in writing:

Writing sometimes makes me nervous like when I cannot write what I want to write clearly. Because spelling and grammar are difficult, I just cannot write what is in my mind. Sometimes when I read other people’s writings, I love it. I love how they choose their words. Their writing speaks about me. It says what I am unable to write.

Similarly, participant 22 hesitated when she attempted to write as she found it very difficult to express her ideas in a simple and clear way:

Writing is an overwhelming process. I am hesitating a lot when writing because I cannot write the ideas in my head in good English sentences. I write then erase several times before I can decide on the sentences that are very close to my ideas.
Interestingly, participant 11 clarified that her SLWTA was dynamic; most of the class time when teacher explained the lesson, the grammar rules and discussed the lessons with students, she maintained a good level of tolerance and she felt relaxed. However, when they started writing and she was not able to express her ideas, her SLWTA decreased:

I am not relaxed and not completely freak in writing classes. I have my moments. I feel normal most of the time but when teacher asks me to write I start to panic. It is not easy to say what you want in English.

SLWTA at the beginning of the term was affected by participants’ inability to express their ideas clearly, since they regarded this as the starting point of writing and therefore, they were unable to proceed further with their writing. This finding confirmed Ely’s (1995) identification of the lack of ability to state the message in a precise way to be linked to participants’ intolerance of ambiguity.

At the beginning of the term, these four variables greatly influenced students’ SLWTA. Previous experiences whether positive or negative may have determined their initial behaviour. Furthermore, being in a new learning environment may have created additional doubts as not everyone was able to adapt to unfamiliar situations quickly. It is also worth mentioning that the striving for perfectionism, which may have been intensified at the beginning of the term, exerted extra pressure on students. This in turn affected their SLWTA and their ability to deal with ambiguities in L2 writing. Finally, participants expressed a specific type of intolerance that was encountered when they failed to express their ideas precisely. In summary, SLWTA at the outset of the academic term was largely influenced by prior experiences, uncertain present, high future expectations and a lack of ability to state their ideas clearly.
Before the mid-term exam. Participants’ evaluations of their capabilities to tolerate ambiguity before the exam were associated with several factors that were relatively related to the exam context. Their level of SLWSE as well as their perception of the exam as an anxiety provoking situation played a role in shaping their SLWTA. Additionally, goal orientation as well as concerns over the exam’s duration and scope were other variables that constructed their SLWTA at this specific time of the term. Further discussion of each variable will be given below.

Their senses of SLWSE. Participants’ perceptions of their writing ability before the exam may have been linked to their SLWTA, particularly in an anxiety-provoking situation such as the exam. Participant 30, for instance, reported a low level of SLWTA and was aware of the relationship between believing that she could write and her anxiety during the exam. She had a strategy that helped her to avoid being stressed and then lost her concentration in solving the exam’s questions:

I feel stressed but when I read the exam questions and I know I can do them, I may become relaxed and focus only on writing and solving the questions. The first thing I do is reading all the questions, then I do the one I know the best so I feel confident and relaxed. It helps me focus my attention on the thing I know the least.

Participant 8 agreed to some extent. She had a low level of SLWTA and felt everyone was anxious before the exam. However, believing in self could have diminished the negative effects and helped in focusing on writing the exam:

I start to panic but I do not want to or I will lose control over myself. I want to focus and concentrate on my strengths and I have faith in my writing. Everybody is stressed here.
On the contrary, participant 28 reported low SLWTA and struggled to hide her anxiety symptoms from her friends. She linked it to a low level of SLWSE which bothered her to be obvious to her classmates:

I am shaken and I feel a pain in my stomach. I hate to get stressed, people staring at me, I cannot control it. People will know that I cannot write.

Such effect of anxiety before the exam was buffered by Participant 19’s high SLWSE, as she reported a moderate level of SLWTA:

I feel normal. A bit stressed because of the exam but it is not drama. It is not hard to write an essay or paragraphs. I did it every week, I wrote assignments, projects and presentations.

Additionally, when the anxiety was not attributed to confidence in ability but rather as a normal reaction to every exam, even the easy ones, SLWTA was at a moderate level, as in the case of participant 15:

Feel the stress of the exam. But it is not because of writing. It happens before every exam. I feel stressed and I have a strong headache before the exams. Even before easy exams. I pray for an easy topic.

This outcome lends support to the statistical findings in previous sections where exam periods are identified as a key time in Saudi participants writing developmental trajectories. Participants who are taught in an exam-oriented environment, may perceive it as an anxiety provoking situation where their beliefs, psychological, cognitive variables and ultimately their performance may be affected. The effect of such anxious context is buffered by participants’
belief in their capability to write and by attributing their stress to uncontrollable variables. These findings share similarities with Barrows et al.’s (2013) and Qudsyi and Putri’s (2016) results that participants’ SE correlates negatively with anxiety before the exam. Students who have strong beliefs in their ability to perform well are also less anxious about their upcoming exam. On the other hand, participants with low levels of SLWSE, are more likely to experience a great deal of anxiety and therefore low levels of SLWTA. This outcome is in agreement with Locker and Cropley (2004) who indicate that students’ anxiety elevates prior to exams, which in turn has a detrimental influence on their performance.

Goal-orientation. Prior to the exam, most students became concerned over their performance which, along with their inability to accept mistakes and to positively perceive them as developmental constitutes, shaped their SLWTA at that time. Participant 27’s low SLWTA was associated with exaggerated fear of mistakes and concern over grades before the exam:

I fear of making mistakes and I fear that my panic will not allow me to write. I am worried about getting distracted by my deficiencies.

On the contrary, recognising mistakes as a part of learning was linked to a highly moderate level of SLWTA, as in the case of participant 6:

I keep assuring myself that I will write very well in the exam. The essay topic is not known but we have been practising for weeks. The teacher gave me a lot of comments on my previous assignments so I can avoid making mistakes today.
Students feared mistakes that could have stemmed from the lack of transfer of rules from their L1 to L2. In such context, they might have contributed to participants being less tolerant, as in the case of participant 23 who referred to this difficulty as causing anxiety:

I feel stressed before the exam because I know my spelling is very weak. If I write only the correct words that I am sure of their spelling, there will be no enough words to write an essay. English is very different from Arabic. In Arabic we spell the word as we pronounce it but in English sometimes they are not similar so it is difficult to spell some words correctly.

Participant 14 shared the same worries which were caused by discrepancy between English writing and pronunciation of words:

I am worried about many things. I made a lot of spelling mistakes. English words are not spelled as they sound. I misspell many words even the word write, last time I wrote it like wrigh.

Such concerns over mistakes were associated with great endorsement of purely performance-orientation goals, particularly here the exam grade. That is, when participants’ chances to pass the course were based partly on their mid-term exam grade, it was not surprising to notice the repetition of concerns over grade on their second entries. Participant 21 stressed such importance by describing mid-term exam as being “fateful” in determining the subsequent course of action:

Yes, I am stressed. I woke up this morning with a stomachache. Midterms are fateful. The result will decide what will happen after it. Good grades mean I am doing very well so far and bad grades mean hard work needed.
Similar low SLWTA was associated with fearing of failure and missing the chance of success, as in the case of participant 24:

I do not know what to do. I feel I am lost and I am scared. I am scared of failing. If I miss this opportunity to get a good grade, final exam will be much harder.

Such fear and anxiety were linked with a greater demand for clear and exact exam instructions: easy, direct language as well as specific identification of the number of words or lines required:

If the instructions are very clear, then I will not feel stressed because I know what to do exactly. But if the instructions are not clear or vague, I will not be comfortable. The important thing is to define the topic for me (participant 25).

I would feel more comfortable in the exam, if the teacher told us exactly what she wants like the number of words and paragraphs (participant 2).

I hope the teacher will use simple language. Some questions are sophisticated and distracted me, even if I know the right answer (participant 4).

As seen from the examples presented above, prior to the exam a low level of SLWTA was associated with high anxiety that was provoked by the test as well as a great tendency to exhibit performance-orientation goals. Participants’ concerns over their grades and their fear of failing the exam were associated with low levels of SLWTA. In addition, they were linked with the demand for clarity and the exam being straightforward. At this stage of the course, ambiguity is more likely to be intolerant as students perceive this part of year as crucial in terms of obtaining their final grades. These findings confirm others in literature such as
Stoeber, Feast and Hayward’s (2009) and Eum and Rice’s (2011) which indicate that a concern over mistakes is associated with test anxiety. Furthermore, participants who perceive mistakes as developmental and constructive, report a highly moderate level of SLWTA while those who regard them as a sign of weaknesses and shame have low levels of it. Such findings support Eum and Rice’s (2011) that those who express a high concern over mistakes are more likely to be performance-oriented, fear failure, concerned over their imperfect performance and tend to experience higher levels of test anxiety.

*Concern over exam scope and duration.* Prior to the exam, students were concerned over the exam scope and duration which was associated with anxiety that affected their SLWTA. Despite participant 29’s confidence in her ability to write, factors such as the topic chosen and the time allocated for the exam could have impeded her writing performance and lower her SLWTA:

I am worried that I will not be able to remember words or I will not be able to write an essay because of time. I am sure I can write if the topic is good and the time is enough.

Similarly, participant 17 reported low SLWTA as she was concerned that time would not be enough to write and revise her essay:

I am afraid I will not have time to write. Maybe I have ideas tumbling in my head but I do not have time to arrange them. Also spelling needs time. Time to check the spelling and check the word choice.

Participant 8 agreed that the exam time and topic were the most dominant variables that concerned students prior to the start of their exam:
Everybody is worrying about the time. What if we do not have enough time to finish the essay? If the topic is easy and I am familiar with it, maybe I can finish on time. But a new or a difficult topic, for sure I will not have enough time to organise my ideas.

Students’ concerns over the exam scope and duration affected their SLWTE prior to the exam. Therefore, these two factors, which were greatly related to students’ beliefs, may have proved to be essential in determining their possibility of passing or failing the exam. These findings are in agreement with Young’s (1991) and Ohata’s (2005). Young (1991) reveals that students struggle with anxiety, particularly when the exam involves items or issues that were not explained and taught before in the class. Additionally, Ohata (2005) indicates that when L2 students are required to write in the exam, they experience anxiety as they have to compose, organise and review their writing in a limited period of time.

To sum up, prior to the mid-term exam, SLWTA was dependent on three main variables; their SLWSE, goal orientation and concerns over the exam’s scope and duration. Lack of confidence in one’s writing ability and adopting performance-oriented goals together also hindered participants’ tolerance of ambiguity at this time of the academic term. It is interesting to notice the great impact of test anxiety on participants’ performance before the exam, which will be further elaborated on in the result discussion section in this chapter.

**After the mid-term exam.** Having taken the exam, students SLWTA was greatly affected by their perception of their performance, lack of clarity in regard to teacher correction methods as well as the major difficulties caused by their lack of knowledge, lack of transfer between the two languages and lack of rule clarity.
Performance in the exam. Participants who reported performing poorly in the exam, scored low in their SLWTA. Participant 29 was an example where her stress was elevated as she feared the result of her exam and therefore her SLWTA was low:

I am a bit stressed because I did not do very well in the exam. I am afraid of the result and I cannot stop thinking about it. I do not want this to affect me and discourage me from trying harder to learn to write.

After an unsatisfactory performance, participant 13’s SLWTA dropped from moderate to low. She was desperate and hoped to pass the exam with any possible result:

Exam was so stressful. I am sure I made many mistakes. Besides, I did not understand the topic. I was hoping this exam would be different and I would do better, but now all what I am hoping for is just to pass even with a very bad mark, I just want to pass.

It may have happened that an unsuccessful experience resulting in a student giving up on their attempts, proved to show an increased level of SLWTA as such was the case with participant 16 whose SLWTA rose from low to moderate as she became less concerned over her performance:

I do not care anymore. Even when I study and try, it is not working. I simply cannot write. Maybe I am not a born writer. I am not afraid of failure. I actually failed last term. I passed the other subjects but could not pass writing. This term writing is my only difficult subject.

When performance was compared to other peers, SLWTA of some students might have decreased. For instance, low tolerant of ambiguity participant 8 was frustrated to see her friends engaging in writing their exam while she could not:
My head will explode from the pressure. I do not know what happened in the exam. I could not write properly. I could not focus, gather my ideas or plan my essay. I felt I had nothing in my head. I could not remember vocabulary, nothing in my head, nothing. I almost cried. I felt helpless seeing other students writing and I could not. Whenever I raised my head, I saw all students writing and they looked so engaged. It was frustrating.

Such comparison led some students to believe in inferiority and deficiency and therefore low levels of SLWTA, as in the case of participant 27:

It was so stressed. Looking for words and trying to remember them fast made me nervous. When I get nervous, I lose control of myself and just imagine the worst. What made me more nervous was watching everyone engaged in writing. Why they could and I could not. I do not want to feel stupid but this happened. I felt I am stupid and they are all clever and good and I do not deserve to be among them.

As the examples above indicate, negative experiences were associated with low level of SLWTA. These results are consistent with previous findings in the literature (Atef-Vahid et al., 2011; El-Koumy, 2000; Erten & Topkaya, 2009) where achievement is linked to SLTA. Low achievement is associated with a lower level of SLTA. Additionally, SLWTA is likely to decline when students adopt performance-oriented goals and compare themselves to their peers in a negative way. This tendency often leads to learners feeling inferior to others, which confirms the current study results that SLWTA is linked to participants’ perceptions of their SLWSE as well as their goal orientation. Finally, giving up on efforts does not always entail negative consequences, given the fact that in some cases it may result in an increased level of SLWTA.
Correction methods. Lack of clarity in regard to correction methods may have impacted participants’ SLWTA. For example, participant 28 reported a low level of SLWTA as she was not sure about the mark division:

I think I will be stressed till I get the result. I do not know how the teacher is going to correct the paper and which part gets the highest mark and which part gets the lowest.

These worries over correction prevented some participants with low SLWTA, such as participant 23, from elaborating on their ideas and writing, as their aim was to achieve a good mark by reducing the number of mistakes made:

Of course I was stressed in the exam because I know that everything I write will be judged and I should not make any mistakes. I write only what is required from me so I do not make more mistakes. I have some other ideas but I was worried about making spelling mistakes. Ideas do not count, what count is the spelling and the grammar. I did what the teacher asked for exactly.

Similarly, participant 21 encountered ambiguities in the grammatical judgment question that failed to state exactly the number of mistakes to be corrected. Therefore, she decided to give only one answer for each sentence as a way of avoiding the ambiguity:

It was tricky to correct the grammar. It was not clear whether it was one mistake or two or three. So I just corrected one mistake in each sentence.

Knowing that the exam was not about writing essay only was a relief for some participants who doubted their writing ability. Participant 12 explained:
I felt a relief when I read the exam questions. The exam mark is divided between two parts, one writing and the other on grammar. I am good at grammar and the sentences were not difficult to correct.

For other participants such as participant 9, the criteria for correcting writing were not clear which may have affected how they tolerated ambiguity when writing:

Writing exam is one of those exams that I cannot tell whether I will get a good mark or not. It depends on the teacher and how she corrects my paper. I am a little bit anxious about that. It is like uncertainty. Even if I got a bad mark I could not argue. I do not have standard answers to compare my answer to them. I should accept teacher’s judgment. Whatever.

Lack of clarity as far as the correction was concerned and how the marks were distributed made students’ SLWTA decrease. Furthermore, it was associated with performance goals where students strove to avoid appearing incompetent and making mistakes. However, knowing that the mark relied on both grammar and writing tasks gave some of them a sense of relief. Elliot (2006) indicates that people tend to judge all situations they encounter on a positive-negative continuum; those perceived as positive are approached while those perceived as negative are avoided. Perceiving the exam as a critical context, some students may have avoided elaborating on writing, writing more than required and gave the minimum answers in order not to make unnecessary mistakes which could have lowered their grades.

Lack of knowledge, transfer between languages and clear rules. Several students reported a number of issues they faced while taking the exam, which might have affected their
SLWTA perceptions. Participant 20 with a low SLWTA perceived the exam as difficult which was caused mainly by her lack of sufficient knowledge:

I felt so nervous especially when I do not have the words to write. I had good ideas but I did not know the words to write. I also forgot some words I knew. I just could not remember them.

In a similar way, participant 22 expressed low SLWTA that arose from vocabulary issues and lack of clear rules that govern English punctuation which made them ambiguous to her:

I felt a bit nervous when I spelled some words. Long words are tricky, and the punctuation, I get confused when to use a comma. I made some mistakes in my previous assignments but the rule of using punctuation is not straightforward. It is not clear at least for me.

Additionally, lack of transfer from L1 to L2 could have decreased SLWTA. Participant 18, for instance, attributed difficulties of English spelling and punctuation to the differences between L1 and L2:

I do not worry about anything but spelling and punctuation. They are different in English than in Arabic so sometimes I got confused.

What can be gathered from the cases discussed above was the relationship between languages differences in terms of transparency and clarity of rules. Both of them greatly decreased the level of participants’ SLWTA. Just as there was a demand for clarity before the exam as shown in the previous section, the lack of it may have contributed to participants’ reflection on their exam writing by referring to it as hindrance to their writing development.
These sources of low SLWTA are identified by Ely (1989) and Ehrman (1993) as provoking anxiety that obstruct their cognitive functions as they utilise cognitive capacity that otherwise can be used to facilitate their exam performance (Eum & Rice, 2011).

To sum up, post exam thoughts were mainly concerned with students’ thinking of their performance, the way the assessment will be corrected by the teacher and any difficulties which arouse during the time of taking the exam. All these factors contributed to varying levels of students’ SLWTA.

**After receiving their exam results.** At this time of the term, participants’ evaluations of their SLWTA were shaped by their perception of the exam results, their goal orientation, lack of understanding, transferability from L1 to L2, as well as novelty of the topic. Each of them will be discussed below.

**Perceptions of their exam results.** It was noticed that several participants who received unsatisfactory marks became less tolerant in terms of L2 writing, as they realised that their chances of passing the term were slim and there was no room for any additional ambiguities that could have affected their grades. Participant 17 reported a very low level of SLWTA as she was unable to write the upcoming assignment fearing losing additional marks:

> With C mark I cannot be sure if I am going to pass this term or not. I do not know how I am going to write the next assignment. I do not feel I have the motivation to write. When I write, I cannot be sure I will get a better mark.

The reason for the exam performance could have been a fear of writing excessively and making more mistakes, as was the case of participant 2:
I was not sure how much to write. It was not clear at all and I was afraid that I wrote too much and then the chances of losing marks increased.

Besides, after receiving exam feedback, participants’ concerns over mistakes had been elevated. However, correcting all linguistic mistakes could have discouraged students from writing and prevented them from developing their writing beyond sentence level (Lee, 2005). For example, participant 25 indicated how her intolerance for small mistakes turned into stress:

I check every word in order to be sure I write the correct spelling, writing becomes so stressful. I used to enjoy writing but now I am afraid to write not wanting to make mistakes. I know teacher has to correct all my mistakes but if she takes into account the content of my writing, I may get a better mark.

Students may have attributed their results to their perceptions of the exam as being stressful. Low intolerant of ambiguity participant 8 stated that:

80% of my result can be attributed to anxiety. My anxiety reaches its highest during the exam. Usually I do not panic much over homework, because I have time to do it. I do it at ease whenever I feel like doing it.

Similar perception was shared by participant 18 who reported low SLWTA at that time:

I like to write when it is not for exams. In exams I feel I am under stress. Because it is not allowed to use dictionaries and the time is short.

As indicated above, participants who received low grades became anxious as their chances of passing the course diminished and this in turn affected their SLWTA levels. The main issue noticed among participants was their fear of writing due to the possibility of making
additional mistakes. Furthermore, students who attributed their results to their exam anxiety reported low levels of SLWTA. These are in line with Eum and Rice (2011) and Stoeber et al. (2009) that students who were concerned more over their grades and feared failure were more likely to experience a higher level of anxiety. Anxiety, in turn, is associated with SLTA, where students with high levels of anxiety tend to be less tolerant of ambiguity.

*Goal orientation.* Participants’ perceptions of their teacher’s feedback as well as their goal-orientation may have influenced their tolerance of ambiguity. Those who perceived teacher’s feedback as constructive and perceived mistakes as important constructs for learning, tended to express more acceptance of mistakes and less anxiety and fear from trying and taking risks. Participant 1’s SLWTA increased as she learned to tolerate mistakes:

> My teacher once told me that I cannot learn without mistakes. I do not care about the marks as much as about what I have learnt. When I pass, I want to pass with knowledge, I do not care about the grade per se.

Additionally, they reported taking risks and using their knowledge extensively, such as communication outside the classroom. Participant 4 explained:

> After I improved my writing, I became more relaxed. I even start to enjoy writing and use English to text friends and email my teachers. I do not worry any more about my marks as I know that I am a better writer now. I still sometimes get upset when I make mistakes or get corrected by others, but I get over it very quickly.

And some of them have developed an internal interest in writing such as participant 30:
No stress in writing my assignments. I love writing and love to write something long and complicated. I am not afraid of doing my writing. I love to get my teacher surprised every time I write because at this level I can write very advanced essays.

Finally, some participants expressed their needs for a constructive approach to mistakes as being opportunities to learn from. Participant 6 was satisfied with the way the teacher conducted the error correction in class:

I like writing classes, we spend most of the time either writing or editing our classmates’ essays. The teacher is so encouraging and supportive. I like when she writes the common mistakes on board and the whole class discuss them. This gives us the chance to learn from our mistakes as well as from others and assures us that mistakes are tolerated and that everyone makes mistakes.

On the other hand, striving for achieving performance-orientation goals as well as negative perception of teacher’s feedback were associated with helpless behaviour and complaints about unfair correction from the teacher, as was the case of participant 9:

It is not good to feel that my mistakes have been exaggerated. I feel like I am underestimated and not judged fairly. I feel I am under pressure to prove myself to the teacher. To prove I deserve a better mark. When I discussed it with her, she said this is a very good mark and this is what I deserve. I know it is not true.

Interestingly, students’ goal orientations showed a relationship with SLWTA developmental trajectories. Mastery goals were associated with an increase in SLWTA trajectories while performance goals were linked to a drop in it. These results may have
signified that as students’ SLWTA increased students became more interested in mastering the writing skills and to accept the mistakes as a crucial part of their learning and vice versa.

*Lack of knowledge, transferability and novelty of the topic.* Lack of knowledge, transferability from L1 to L2 and novelty of the topic may have impacted students’ SLWTA. For example, participant 28 reported a low level of SLWTA as she experienced difficulties in grammar, particularly regarding the rules that could not be found in her L1:

I get stressed when I do not find the word I want to write. Also some grammar rules are so difficult such as the present perfect and the past perfect. I do not know the differences between them and when to use each one.

Similarly, some participants reported lack of transferability from L1 to L2 as causing confusion and therefore it affected the level of their SLWTA. For instance, participant 11 who scored low on SLWTA scale stated that:

When I do not have time to revise or edit my writing I worry a lot about grammar and spelling. Even punctuation. Everything is different in English than Arabic and I always make mistakes when I am confused between the two languages.

The need for development was also reported among participants and it was related to their SLWTA. Participants who believed in their capability to take risks and make progress reported moderate levels of SLWTA. Participant 19, for example, was ready to improve her writing:

I have become stressed lately because I can write only simple sentences forever. Teacher told me to try to combine sentences. So getting out from my comfort zone is
not easy. I feel I risk losing marks. And at the same time I cannot stay where I am. I need to improve my writing.

Another concern expressed by several participants was related to unfamiliarity with the task and its topic, which had an impact on their SLWTA as such was the case with participant 29 who had a low level of SLWTA:

I only feel stressed when I write about something I do not know or something I am not good at. Because ideas do not come up and words too. I also get stressed in writing classes when I do not understand and when teacher does not simplify things. I feel I am lost and panic.

Lack of knowledge, transferability from participants’ mother language to target language and novelty of the topic were variables that shaped students’ evaluation of their SLWTA at this particular time of the term. As mentioned earlier, these findings are in line with Ely’s (1989) and Ehrman’s (1999) identification of these three factors as sources for SLTA.

Having received their post-exam feedback, learners’ SLWTA was affected by their perceptions of their exam results, their goal orientation, lack of knowledge, transferability and novelty of the topic. Participants who viewed their exam performance as poor or unsatisfactory reported low levels of SLWTA as they became more concerned over their chances of passing the course. In addition, lack of transferability of rules between L1 and L2, unfamiliarity with the task and its topic and lack of knowledge may have caused lower levels of SLWTA.

Interestingly, an increase in SLWTA trajectories was associated with a tendency towards adapting mastery oriented goals and acceptance of mistakes as a part of learning. A decrease in SLWTA developmental trajectories, on the other hand, was linked to a concern over performance and fear from mistakes.
At the end of the term. At the end of the term, students’ SLWTA was heavily influenced by their concern over their final exam, their confidence in their ability to pass, goal orientation, and teacher role in elevating or diminishing their SLWTA. The aforementioned factors will be discussed in greater detail below.

Concerns over the final exam. By the end of the course, participants with low levels of SLWTA reported concerns over their performance in the final exam and were worried over their chances of passing. Participant 8, for example, reflected on her mid-term exam’s result:

I did not do well in the mid-term exam so I need to get at least B+ in the final exam to pass the course. I did not know how to do it. When I cannot, my mood turns upside down. I do not write anything if I am not sure. So I prepare a lot. I practise a lot. Read a lot. But in the exam when I face something I cannot do, I lose my concentration and fail to write.

Participant 11 reported a low level of SLWTA as her overall performance did not satisfy her:

I love writing and I usually do not get stressed when writing. But now I know that my performance was not good. My assignments were not good. I worry a lot about my overall performance.

Participant 14 exhibited a withdrawal behaviour at the end of the course that was associated with low SLWTA:

Repeated failures make me hate writing. I do not tolerate the class and skip many classes. I came up with excuses but the real one is that it reminds me what failure I am.
I felt a relief when the class ends. Now I am thinking of dropping the subject, I do not care much about the classes. It is a shame that for around 3 months, I learned nothing. I think it is a failure for the teacher too. She could not teach me for 3 months. Maybe if she tried harder and encouraged me, I would change.

The correction of the final exam worried participants to the extent that they became low tolerant of any mistakes, as in the case of participant 29:

Writing exam will be so stressful. I have to be so careful with spelling mistakes, grammar mistakes and off topic ideas. It is quite impossible for beginners like me not to make mistakes. I should practise and read a lot before the final exam. It terrifies me that more than one teacher is going to read my essay to evaluate it. I hope their standards are not so high.

Similar to prior the mid-term exam, before the final one, students became worried over the performance, which affected the degree to which they could tolerate ambiguity, uncertainty and mistakes. Moreover, concerns were expressed in relation to the exam correction and were reflected in low levels of SLWTA. As explained earlier these results confirm those in the literature that indicate a relationship between achievement and SLTA (e.g. El-Koumy, 2000; Erten & Topkaya, 2009).

SLWSE. Students’ confidence levels in their capability to write came to play a significant role in terms of their SLWTA prior to the exams. SLWSE that stemmed from mastery experiences and familiarity with the learning environment, such as participant 19, was associated with high levels of SLWTA:
I get used to writing classes and to the teacher. I do not get stressed in the class. I may feel a bit anxious before the exam and quizzes but because I know I can write; I do not let my feelings distract me.

Even SLWSE that originated from verbal persuasion had a similar effect on SLWTA, as was the case of participant 16:

Positive feedback makes me believe in myself and when I trust myself, I do not feel anxious. It is important to believe in myself, my mind controls my behavior. If I believe I am a failure, I will act like one, but when I believe in myself, I change and my writing improves and now I am a better writer than I used to be.

On the contrary, several participants had a negative evaluation of their writing abilities, which was reflected in a low level of SLWTA, as in the instance of participant 23:

I do not like writing and I hate to write and feel so anxious when I do not know what to write. I feel I want to cry because I am helpless. It is like I want to do something but I do not know how to do it. I experience a headache every time I write because I feel it reminds me of my weaknesses.

Similarly, participant 24 with a low level of SLWTA shared her experience:

Like I said before, writing is not my thing even in Arabic. So I feel stressed when I need to write because I know I cannot. My writing is silly and childish. I do not like to write because I do not want to look silly to others or funny. I panic when I remember that teacher will read it and comment on it. No one wants to look inadequate to others.
Such beliefs in one’s capabilities to write in L2 can affect the degree at which students could tolerate ambiguity when they write. Low perceptions of their ability corresponded to low levels of SLWTA and vice versa. These findings support the statistical results of the current study that found a correlation between SE and TA among Saudi L2 learners.

*Goal orientation.* Before exams, students were more likely to exhibit greater tendency towards performance goals and show greater concern over their mistakes which reflected in low levels of SLWTA, as was the case of participant 2:

> I do not tolerate mistakes; I just feel incompetent. I feel ashamed and disappointed.

On the contrary, accepting mistakes was reported when participants tolerated ambiguity more and thus felt gaining two benefits: emotional and attentional, as the case of participant 25:

> I learn to accept my mistakes and deal with them with less anxiety and do not exaggerate them. I feel much better and save my energy to focus on my writing.

Participant 10 perceived teacher feedback as challenging that she became motivated to encounter:

> Not stressed at all. I really love writing classes, they are my favorite. The time flies in writing classes and passes faster. I like teacher’s feedback so I wait to read it. She likes to challenge me and I love it.

As stated earlier the approaches to mistakes could be either beneficial or detrimental. Students’ perceptions of them are crucial in shaping their capability to tolerate ambiguity, to
take risks and undertake new challenges. The link between concern over mistakes and tolerance of ambiguity was discussed above.

*Teacher’s role.* The end of the course witnessed an acknowledgement of the teacher’s role in making writing classes more tolerant and less anxious. Participant 3 wrote in her final journal entry:

I enjoy my writing classes and wish next year we will have the chance to be taught by even a better teacher.

Class environment encouraged some participants to tolerate making mistakes and gave them the courage to participate even when they were not completely sure. Participant 20 explained:

Writing classes are very relaxing. Teacher accepts students’ answers even if they are not correct. She does not correct in public so I do not feel stressed even when I know my answer is not correct, I try. I participate in her classes. And even her correction and feedback are so constructive and fair.

Participant 7 agreed:

The writing classes are not stressful. Teacher creates a good encouraging atmosphere.

As noticed from the examples presented above, the teacher plays a vital role in making students comfortable in class and encouraging them to perform better by accepting their mistakes and looking at them in a positive way. Lee (2005) argued that teacher feedback can buffer the effects of making mistakes. Teachers who do not only focus on error, but pay
attention to writing content and organisation, lessened the effect of errors as they opened
students’ eyes to their strengths.

At the end of the term, SLWTA was shaped largely by participants’ concern over their
final exam, their confidence in their ability to pass, acceptance of mistakes, and teacher role in
elevating or diminishing their SLWTA.

**Summary.** Analyses of participants’ written journals at different times of the academic
term revealed that the components of SLWTA were changeable as different sets of factors
influenced their judgments during these various times. Similar to SLWSE, no single variable
was found to be dominant, which in turn reflected its dynamicity and complexity.

**Results discussion**

**Quantitative data results**

At the specific level of analyses, significant positive correlations were found between
SLWSE and SLWTA before the mid-term exam and at the end of the academic term, which
happened to be just before L2 writing final exam. The relationship between SLWSE and
SLWTA was not significant at the beginning of the term, after finishing mid-term exam and
even after receiving mid-term exam’s related feedback. Therefore, it was anticipated that the
exam would have the effect. Presumably, the Saudi educational context may be responsible
for this result. Saudi educational system is examination-oriented (Javid et al., 2012). In such
educational culture, the exam is largely the main determiner of students’ success or failure.
Other standards such as participation in class, homework, research papers and projects have
little, if any, impact on students’ overall evaluation. Thus, a possible explanation may have
had to do with different L2 writing ideologies at different times of the academic term.
Participants may have had two different views about writing tasks that had an impact on
changing the nature of the relationship between SLWSE and SLWTA. These views were largely influenced by the specific Saudi cultural educational context investigated in this current study. In this context, quizzes and assignments counted 10%, the mid-term exam counted 20% and the final exam counted 70% towards the final scores. Therefore, throughout the academic term, participants in general perceived their writing tasks or homework as opportunities to practise. They wrote their assignments to learn and to master writing skills. They knew that teacher feedback did not significantly impact their final mark nor it influenced their chances to pass or fail the course. The aim of writing this homework and tasks was to practise writing and to improve students’ writing-related skills. In this case, dealing with ambiguity and taking risks in making mistakes did not relate to how students evaluated their writing ability. Failing to accept ambiguities, feeling stressed when they could not express themselves or when they did not understand was not linked to how good or bad a L2 writer they thought of themselves. Only when these writing tasks were to be evaluated and marked as in the exam, facing ambiguity, making mistakes and risking losing grades correlated significantly in the way participants judged and evaluated their SLWSE. Their view of writing changed before the exam, from perceiving writing to learn and master to perceiving writing to be evaluated and judged. They became more grade oriented and thought more about passing the test than mastering writing per se. Young (1991) stated that unlike other learning contexts, testing L2 students may raise their anxiety. This feeling is triggered mainly by their fear of failure (Horwitz, Horwitz & Cope, 1986). Therefore, test anxiety may be considered a vital predictor of this relationship. In fact, studies that investigated SE in relation to anxiety before exams yielded similar conclusions (Barrows et al., 2013; Qudsyi & Putri, 2016). A possible cognitive interpretation of the predictive role of test anxiety in the relationship between SLWSE and SLWTA was presented by researchers such as Eum and Rice (2011) and Galla and Wood (2012) who explain that test anxiety may influence the cognitive
functions of students and limit their cognitive resources needed to facilitate their performance. This in turn lowers the levels of their perceptions of their ability to perform in the test as well as it causes concerns over their mistakes and failure, of which they become intolerant.

In summary, findings from quantitative data revealed that the relationship between SLWSE and SLWTA was context-dependent and hence it needed to be studied in relation to their contexts. This relationship fluctuated throughout the year and this might be explained considering the characteristics of the Saudi L2 writing classrooms that are exam-oriented. It may be argued that the test anxiety was a predictor for a significant correlation to be established between these two factors, as such significance was only found prior to the exams.

**Qualitative data results**

Interestingly, the qualitative findings provide evidence for the notion that SLWSE and SLWTA are context-specific given the fact that their levels fluctuate from one context to another (Endres, Camp & Milner, 2015; Zimmerman & Cleary, 2006) Therefore, it can be concluded that SLWSE and SLWTA are best perceived as dynamic entities that change across different contexts of writing. Additionally, they are in line with those findings in L2 literature (e.g. Irie & Ryan; 2015; MacIntyre & Serroul, 2015; Mercer 2011; Piniel & Csizér, 2015) which stress the dynamicity of L2 constructs such as self-efficacy, motivation, learner agency, anxiety as well as learners’ behaviour.

**SLWSE.** These aforementioned analyses offered compelling evidence that SLWSE is complex and multifaceted, as no single or fixed variables constitute it. Rather, SLWSE has been shown to have multiple representations at different times of the academic terms affected largely by its context. It ranged, in this study, from being a general judgment about writing that was based on previous performance, expectations and motivation at the beginning of the term...
to being shaped by students’ concerns over their upcoming performance, their fear of failing and making mistakes before the exams periods.

Students’ SLWSE is a dynamic construct that evolves over time as it interacts with various sets of interconnected variables. A different range of factors came to play a significant role at different times of the academic term. For example, at the beginning of the term, participants’ first entries were greatly influenced by their previous experiences (Abdel-Latif, 2015; Bandura, 1989; 1977). Those students oriented their judgments to either past positive experiences (e.g. winning a competition when she was a child), negative ones (e.g. low grades in previous courses) or lack of experience. Another similar construct was participants’ reflection on their progress and awareness of their development which were recorded during the second and fifth data collection points, just prior to their exams. Unlike the construct “previous experience”, their reflections were based on their current term’s experience in writing, and their current teacher’s feedback on their performance so far. At this time self-efficacious students, who believed in their ability to learn and develop, tended to be more cognitively aware of their strengths and limitations. Therefore, they were more likely to avoid their limitations and benefit from their strengths to obtain better exam results. Acknowledging limitations, without believing in one’s capabilities to overcome them, as well as attributing them to lack of ability may have caused learned helplessness.

A great deal of expectations that had been placed on the course’s teacher at the beginning of the term was transmuted into emphasis at the end of the course on the role of the teacher in facilitating/impeding the participants’ development. Participant 21, for example, declared from the beginning that if the teacher was good and encouraging, she would develop her writing skills and ability. From her entries, it can be seen that she liked her teacher and her classes, where creativity was encouraged and mistakes were expected. As the teacher continued to encourage her, her performance and perception of writing capabilities developed.
Motivation was another variable that influenced participants’ SLWSE only at the beginning of the term (Bandura, 1994; Hsieh, 2008; Ueki & Takeuchi, 2013). Several students expressed their internal, external and future-self related motives to master English in general and writing in particular. Motivation, that came from internal sources, was associated with a great amount of effort given to writing. However, such motivation diminished from participants’ entries and was substituted with compliments from homework loads at the end of the course. Failure to do the assigned homework and perceptions of the effort required to finish assignments and exams as being beyond capability may have demotivated students and detracted their learning.

Attribution (Graham, 2006; Hsieh & Kang, 2010; Hsieh & Schallert, 2008) was found mostly throughout the term, except its beginning and end. It was greatly related to assessment, performance and evolution and how students interpreted these. It moderated the effect of writing experiences, either successful or failed, on their SLWSE. Similarly, various types of mindsets (Bandura, 1997; Dweck, 2006; Limpo & Alves, 2017; Wood & Bandura, 1989) were largely shown to be related to SLWSE throughout the course. Mindset beliefs moderated the effect of failure and mistakes on SLWSE. Mistakes that were perceived to be developmental were associated with a higher level of SLWSE than those viewed as signs of incompetence or failure.

Interestingly, participants’ second and final entries reflected a similar pattern of behaviour. Prior to mid and final exams, students were more likely to be concerned over their performance and therefore, they tended to be more grade-oriented (Bong, 2001; Hsieh et al. 2007; Phillips & Gully, 1997). Hence, they became less tolerant of mistakes and more concerned over exam’s scope, time and teacher correction. Coupled with these, familiarity with the exam questions was one of these variables that had been repeatedly referred to in participants’ after exam entries (Ohata, 2005; Young, 1991). That is, at the exam time, and
more likely before it, students sought clarity and certainty about the essay topics, word limit, mark division and exam duration. Ambiguity, on the other hand, increased participants’ anxiety (Dewaele & Ip, 2013), which was associated with lower levels of SLWSE.

In summary, SLWSE was best perceived as a complex decentralised dynamic system. The complexity and dynamicity of SLWSE may have emerged from the dynamic interactions among its different components at different times as well as its dependency on the context.

**SLWTA.** As indicated in the above-mentioned sections, it can be concluded that SLWTA is dynamic as it is considered to be interchangeable and therefore it is not a static trait. Moreover, it is a complex and decentralised construct that consisted of various sets of factors at different times of the academic term. For example, at the outset of the course, students brought with them memories from previous learning experiences that shaped their SLWTA at that time (Atef-Vahid et al., 2011; El-Koumy, 2000; Erten & Topkaya, 2009). Equally important was the novelty of the learning environment including the teacher and classmates, which may have proved conductive to studying or posed a threat and hindered their learning development (Thompson & Lee, 2013). This factor also appeared at the end of the course when students acknowledged the role and contribution of their teacher in determining their SLWTA.

Students’ perceptions of making mistakes and their tolerance of ambiguity were vital in most times of data collection and this was recorded in participants’ entries. This may have indicated the relationship between these two cognitive beliefs. The reason behind such low tolerance is a cognitive belief of learning as being not becoming. A belief in learning as becoming sees learning as a process in which learners develop through making mistakes and learning from them (Dweck, 2006). A belief in learning as being views a mistake not as sign of learning, but as deficient and incompetent.
The difficulties that arose from lack of familiarity, novelty, inability to express ideas, lack of transferability between L1 and L2 and complexity shaped SLWTA at the beginning of the course, after the mid-term exam and after receiving their results (Ehrman, 1999; Ely, 1989). As it can be noticed, these variables appeared in all contexts apart from prior to the exam time, which provided additional support that these contexts were perceived differently by students. Furthermore, in an exam oriented educational context, assessment may have been so powerful to the extent it could have changed participants’ perceptions of SLWTA.

Interestingly, a similar pattern of factors affecting SLWTA emerged during the second and last stage of the term, which was the time prior to the mid-term and the final exams. What can be noticed here was students’ perceptions of their writing abilities (SLWSE) as they became influential in defining the extent to which participants could tolerate their degrees of SLWTA. Additionally, the concern over grades and a fear of making mistakes and failure took place at these times. This gave support to the previous statement that these two prior the exam contexts shared a number of similarities and were viewed differently from the other contexts.

In summary, SLWTA can be perceived as a dynamic, complex and decentralised system as there is no single conceptualisation of it. Its complexity may have stemmed from the dynamic interconnectedness among its various components at different times as well as its dependency on its context.

**The relationship between SLWSE and SLWTA.** The dynamic change in the relationship between SLWSE and SLWTA could be attributed to the change in L2 writing ideologies and what constituted good writing and writers at different contexts and times of the academic term which led to various conceptualisations of SLWSE and SLWTA throughout the term. However, qualitative analysis showed that similar factors may have influenced students’ performance prior to their exams and shaped their SLWSE and SLWTA such as their fear of
making mistakes, concerns over grades, demand for clarity with regard to the exam scope, duration and correction as well as their perceptions of their writing abilities so far.

The significant correlation between these two variables before the exams may indicate the importance of such context to establish their relationship. It needs to be highlighted that the exam context is possibly a unique one (Young, 1991) as it may provoke anxiety that is triggered largely by the concern over their performance (Horwitz et al., 1986). Such context allows for a particular set of variables to shape SLWSE and SLWTA and therefore become closely related.

**Summary**

In this chapter, the relationship between SLSE and SLTA was investigated at general level using quantitative data. Results found a significant positive correlation between SLSE and SLTA among Saudi learners of English. Self-efficacious participants were more likely to tolerate ambiguity in L2, and tolerant of ambiguity participants were more likely to have high levels of self-efficacy in regard to their L2 learning.

The focus was, then, shifted from the general to the domain-specific perspective applying a longitudinal perspective in order to gain in depth understanding of these variables. Results revealed that interaction between SLWSE and SLWTA has gone through phases of significant and non-significant correlation throughout the term. The dynamicity of the relationship could be attributed to the complexity and multifaceted nature of SLWSE and SLWTA, as different aspects of SLWSE and SLWTA came to play a role at different times of the academic course.
CHAPTER 6

RESULTS AND DISCUSSION OF THE DYNAMICITY OF WRITING SELF-EFFICACY AND WRITING TOLERANCE OF AMBIGUITY

Introduction

The focus of this chapter is on investigating the changes that took place in SLWSE and SLWTA by providing answers to the following research questions:

Q4: Is there a significant change in students’ SLWSE and SLWTA as the academic term unfolds?

Q5: Are there any typical trajectories in the obtained results? What are their major characteristics?

Data analyses and the results discussion proceed from quantitative towards qualitative longitudinal to trace changes and then identify their triggers and influences. The presentation of data analyses and discussion is organised into two sections; the first related to SLWSE and the second about SLWTA. At the onset of each section, the temporal change of variables over a period of one academic term is investigated by assessing the mean differences between the five data sets using repeated measure of analysis of variance (ANOVA). Then, the typical trajectories of change found in the data are presented.

Second language writing self-efficacy

This section is dedicated to examine the changes in the development of Saudi L2 learners’ writing self-efficacy. First, several SLWSE’s means, obtained from collecting data at 5 points of time, are compared in order to determine the differences between them. Afterwards, participants’ developmental trajectories are discussed to gain better understanding of how changes occur in their SLWSE throughout the academic term.
Quantitative longitudinal change in SLWSE

In a comparison of means of SLWSE over the period of one academic term, the results show some fluctuation and instability from one time to another, as depicted in table 22 and figure 7 below.

Table 22

<table>
<thead>
<tr>
<th></th>
<th>SLWSE-1</th>
<th>SLWSE-2</th>
<th>SLWSE-3</th>
<th>SLWSE-4</th>
<th>SLWSE-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1010.00</td>
<td>996.30</td>
<td>1031.17</td>
<td>1049.43</td>
<td>1016.67</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>191.622</td>
<td>198.026</td>
<td>210.704</td>
<td>251.997</td>
<td>311.388</td>
</tr>
</tbody>
</table>

This suggested that participants’ SLWSE reaches its lowest point just before the mid-term exam and then increases gradually to reach its highest point after participants received their mid-term exams’ results and feedback. It then drops sharply towards the end of the term and before the final exam. Again, the periods before the exams play a significant role in changing SLWSE developmental trajectory. The biggest variation in participants’ scores takes place at the end of the term, $SD = 311.38$, whilst the least variance is at the outset of the course. $SD = 191.62$. 
Is there a significant change in students’ SLWSE over a period of one academic term?

In order to find out whether the change is significant or not, ANOVA test is utilised (Dörnyei, 2007). ANOVA results indicate that there are no significant differences between participants’ SLWSE means throughout the term, $F (2.5, 73.8) = .443, P = .691$. Thus, it can be concluded that although SLWSE fluctuates over the academic term, the change in participants’ SLWSE across different times is not significant, see table 23 below.
Table 2

Summary of repeated measure ANOVA results comparing SLWSE mean scores at five time points

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWSE</td>
<td>49838.173</td>
<td>2.546</td>
<td>19571.449</td>
<td>.443</td>
<td>.691</td>
</tr>
<tr>
<td>Error</td>
<td>3260539.827</td>
<td>73.848</td>
<td>44152.203</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Qualitative longitudinal change in SLWSE

Examining the qualitative data can help understand better the process of change and the significant aspects of it. Although the change in SLWSE is not statistically significant at the inter-individual level, it is of vital importance to consider the intra-individual level of the development, as it may lead to significant insights into SLWSE progress and interaction. Analysing participants’ written journals, data reveal three patterns of SLWSE developmental trajectories: upward, downward and fluctuating (see Appendix T). In the following sections each trajectory pattern is discussed and its major characteristics are highlighted.

**Upward pattern.** It is the most common among participants, 43% of the participants have shown a general positive gradual development in their senses of SLWSE (e.g. participants 4, 19, 5, 18, 7, 22, 28, 30). This pattern is characterised with an overall increase in SLWSE towards the end of the term. In addition, they exhibit a profile of self-efficacious, motivated, self-regulated, holding positive attitudes towards writing, having growth mindset and making internal attributions.
Participant 4 is chosen to represent an example of this pattern as she displayed confidence in her L2 writing abilities that had been built up throughout the term, see figure 8 below.

![Figure 8. Participant 4’s SLWSE Developmental Trajectory.](image)

Participant 4’s judgment of her SLWSE at the beginning of the academic term was at a moderate level, 840 out of 1400. Her previous term experience was not very successful as she hardly passed her final exam. She was aware of the powerful influence and consequences of such previous writing performance on her current motivation to write. However, with strong determination to improve her GPA, she was willing to work hard this term:

I do not think that I am a good English writer. I barely passed my final exam last term. This had an effect on my overall GPA, so I am under significant pressure to work hard this term to improve my GPA. I am afraid that such an unpleasant experience will affect me and make me unwilling to write (1st entry).
This previous unsuccessful learning experience was totally justified by her unfamiliarity as a freshman with the university educational system. It took her time to get used to learning independently of the teacher and to wrestling with materials that were beyond the subject books:

Last term was my first term in the university, everything was different and it took me ages to get used to the system. Teachers did not explain everything and exams were not based on the textbooks (1st entry).

Just before her mid-term exam, her confidence in her ability to write was boosted as a result of a teacher positive compliment and a successful writing quiz experience:

I may say I have confidence that I can write. I performed well on the previous quiz…. I usually meet with the teacher after classes to discuss her feedback on my work and to ask her about my progress. Last time I checked, she believed that I was doing well (2nd entry).

The exam went very well for her that she felt more self-efficacious than ever. At this time, she took the credits as she attributed her success to her efforts and practice. She was prepared by working hard and hiring someone to help her with her writing. Furthermore, she was aware of her strengths as a L2 writer:

I feel more confident about my writing after the exam. The essay I wrote was much better than any one before. I used better grammar structures and organised it in a way that made it look interesting. I am not sure about some spelling. But I am trying to be optimistic. I worked hard and I practised for hours before the exam. I even hired a home tutor to correct my drafts and to give me proper feedback (3rd entry).
SLWSE has increased to 1270 after she received her mid-term exam result. She felt “self-satisfied” as such achievement proved her capability to write successfully. Once again, she attributed her good result to herself, and not to the easiness of the test:

Thanks God. My grade was very good and I feel self-satisfied. I am satisfied with my result. It feels amazing to know that you can write with no mistakes, or just few. The exam was not easy but I was prepared well. I have been practising a lot every week since the beginning of this term. I write at least two essays per week and then I have in depth discussion with my tutor on my writing performance on each essay (4th entry).

Her strong confidence in her writing ability encouraged her to practise writing outside the classroom context. It gave her the courage to write to her teachers and to her friends without fearing of making mistakes. At this level of SLWSE, grade per se did not have great importance to her as she knew that she became a better writer:

After I improve my writing, I become more relaxed. I even start to enjoy writing and use English to text friends and email my teachers. I do not worry any more about my marks as I know that I am a better writer now. I still sometimes get upset when I make mistakes or when I am corrected by others, but I get over it very quickly (4th entry).

At the end of the term, she expressed her feeling of satisfaction and happiness for the development achieved. Every successful experience she had, was attributed to herself and her hard work which resulted in an increase in her SLWSE, her self-respect and self-esteem:
No pain no gain. I worked hard throughout this term and I feel happy and satisfied. It was important to me to do well or I may need to reconsider my options to continue my studies in this department. I was left with only one choice: to work hard. Such success makes me respect myself more and even my classmates look up to me now. Most of them want to be my friend so I help them with their work (5th entry).

Even in situations when she experienced some difficulties, she did not give up but rather faced them with courage and determination to succeed. She reflected on one occasion of misperformance as following:

There are moments of uncertainty and doubts throughout this term, such as when I did not do well on my third quiz. I was not feeling well and I asked the teacher to postpone my test and she did not agree. So I did poorly in the test. I felt disappointed and ashamed of my performance but I managed with the help of my teacher and my tutor to fight these doubts and to work extra homework to make up for my quiz result (5th entry).

From a DST perspective, multiple control parameters such as repeated success in writing quizzes, assignments and the mid-term exam, in addition to positive feedback from teacher and tutor enforced participant 4’s SLWSE beliefs into a strong attractor state. Besides, her perceptions of success and failure strengthened her SLWSE beliefs. She made several attributions for her performance to stable, internal and controllable variables. Every success, for example, was attributed to her ability and her hard work whereas her failure was attributed to a lack of effort. When SLWSE was in such a strong state, weak parameters such as failing a quiz were not enough to push the system away towards low SLWSE.
Another example of a participant who displayed a general upward pattern of progress was participant 19. Her SLWSE trajectory is depicted in figure 9 below.

![Figure 9. Participant 19’s SLWSE Developmental Trajectory.]

Participant 19 first evaluation of her SLWSE was moderate, 790 out of 1400. Her first journal was not very optimistic. Rather, it showed devastation as she believed that her writing level was not good and she lacked grammatical judgment abilities. In addition to devastation, it showed fear that her writing would not be as good as her classmates. However, success can be controlled and achieved through extensive practice:

My ability to write is not good enough. I need to practise and to study more… When I cannot write, I feel sad. But then I insist on learning these words and write them several times to remember them. I am not good at grammar either. I cannot tell if a sentence is correct or not because I do not know. It will affect my level this term and I will be behind my friends (1st entry).
Learning to write necessitates making mistakes which terrified her. At this stage, it seems that she thought of her mistakes emotionally more than rationally. Propitiously, her fear of making mistakes motivated her to develop her writing skills:

I do not like to make mistakes in front of people. Writing scares me. I feel embarrassed. This pushes me to learn to avoid looking silly in front of others. When I made mistakes in front of class, I did not forget it for days. Students make fun of me and it scares me a lot, I do not want to be bullied by others (1st entry).

Before the exam, and just after an excellent performance on her assignment, an improvement in her SLWSE was witnessed. She was quite self-efficacious which led to a more positive attitude towards writing, referring to it as “good” and felt relaxed to write. Unlike her first journal entry, her second one was written with more positive spirit as she came to know herself better and counted her strengths:

Writing has been good so far. Last assignment I got A. It makes me feel more confident and relaxed today. I know myself better. If the topic is easy and interesting, I will do great. But If I am asked to write on things I do not understand or they are complicated, then I have my doubts. My language is easy and direct and my writing is very neat (2nd entry).

Writing-exam experience was crucial to her SLWSE trajectory. She did very well in the exam, as the topic was familiar to her so she wrote a good essay about it. It surprised her that she was able to write without facing many difficulties. She took the credit herself for being able to do well although she had just started learning writing at the university, with no previous experience in high school. She reflected on the exam:
It was great. I did not know I was good like that. I wrote a very good essay. Questions were clear and understood. I liked the topic I knew I could write about it. I did not start learning writing till university but I noticed the difference. I am not a professional writer but I am better than I used to be in high school. In high school they did not give much attention to writing and they did not expect students to write (3rd entry).

Her good mid-term exam’s result confirmed her capability to write, so she felt highly self-efficacious:

My mark was good. I become a better writer with time. I expected to see grammar mistakes but there were none. I had some spelling mistakes but they just a few (4th entry).

In her last journal, she counted all her strengths as a L2 writer. For example, she was capable of writing across different genres with correct grammar and good topic sentences, she was good at summarising her essays and concluded them properly, and she was capable of finding out her mistakes and corrected them:

I am very good at grammar. Rarely I make a grammar mistake. But spelling and punctuation have not been perfect yet. The important thing is that I can write different essays like telling a story or describing a thing. I know the differences between them and I can write a good topic sentence for each type. My conclusion is usually good; I summarise my ideas in a good way. When I start writing, I know what the result is and I know what to expect. Last quiz was about friendship. I wrote a really wonderful essay. After I received teacher comments, I corrected them by
myself in the class and returned the paper, teacher gave me extra mark for that (5th entry).

Participant 19 is a very interesting case that represents SLWSE as a dynamic system that changed as it responded to external factors. Her learning experience involved continuous evolving of her SLWSE, changing from a person that was afraid of being bullied for being incompetent to the emergent of a very confident writer who was proud of her achievements. The change in her perceptions of SLWSE was combined by adaptation in her attitude towards writing, from being scared and feeling ashamed of her mistakes to being more relaxed and enjoying writing her tasks. When she reported high SLWSE levels, she focused more on her strengths than on her limitations as a L2 writer.

**Main characteristics of upward pattern.** The first response pattern shows an overall growth in participants’ SLWSE towards the end of the term. There were common characteristics among most participants displaying such a pattern. First, most of them did not report low levels of SLWSE at any time points of data collection. They started their academic term with a good sense of their SLWSE that was moderate or high and continued to increase gradually. Yeo and Neal (2006) argue that the stronger positive impact of students’ past experiences on their SE can alleviate the weak negative impact of SE on their future performance. From a DST perspective, these beliefs, SLWSE, were internalised, so they became remarkably hard to dislodge. SLWSE was settling in a powerful attractor that pulled the system towards it. In contrast, when the beliefs were developing, they showed a great deal of variability (Verspoor, 2015).

Secondly, most of these participants made internal attributions; they based their learning to write on their ability and believed they could control their learning outcomes.
Success was attributed to ability (e.g. participant 4), to hard work and practice (e.g. participants 4 and 19). When they succeeded, they took the credits themselves and it was not a result of teaching per se (e.g. participant 18) nor it was attributed to easiness of the exam (e.g. participant 4). Although they went through unsuccessful experiences, their perception of failure was not completely negative nor did it relate to their ability to write. Unsuccessful experiences were attributed to variables such as lack of effort, unfamiliarity with the educational system (e.g. participant 4), and to lack of knowledge (e.g. participant 19). These outcomes confirm Schunk and Pajares’ (2001) results that failure or slow progress that has been attributed to lack of efforts, and not to a personal ability, had little impact on lowering self-efficacy. Moreover, they are in line with previous studies (e.g. Graham, 2006; Hsieh & Kang, 2010; Hsieh & Schallert, 2008) which indicate that self-efficacious students are more likely to ascribe their success to a personal ability and perceive their outcomes as controllable and thus report a high level of confidence in their capability to perform well in the future.

Thirdly, they were highly motivated. Each of them had motives that urged her to write and persist in writing. Such motives ranged from those arising from within participants, such as in the case of participant 5 who was intrinsically motivated by her personal desire to become a story writer, to those motives that were externally driven, such as in the case of participant 18 who was motivated by the prestige of English, its promises for a better future job and her parents’ rewards. Other motives included fear. Fearing of failure and fearing of making mistakes could be considered as a sort of hindrance to writing development, but not for self-efficacious participants. Those participants perceived this fear as a motive to become better writers and as challenges to overcome. These outcomes are consistent with previous results (e.g. Hsieh, 2008; Piniel & Csizér, 2013; Ueki & Takeuchi, 2013). L2 learners who score high in self-efficacy are more likely to be interested in learning L2 language, express a
more positive attitude towards learning, have a higher integrative orientation, are inclined to increase their efforts to learn and to promote their motivated learning behaviour.

Fourth, they were self-regulated. Goals and plans to reach were set in their journal entries. Participant 5 stated from the beginning that she wanted to be a story writer. Participant 18 set a plan to improve her writing as she declared that she dedicated time for learning and hired a tutor to help her. Participant 4, also, stated from the beginning of the term her goal, which was to improve her GPA. She hired a home tutor and wrote two essays at least each week to be corrected and discussed with her tutor. Moreover, they monitored their writing development. Participant 5 wrote “I notice my progress week by week” and participant 4 met her teacher after classes to discuss her progress and to receive feedback. These results substantiate previous findings in the literature (Aidinlou & Far, 2014; Heidari et al., 2012; Li & Wang, 2010; Magogwe & Oliver, 2007). Self-efficacious learners plan their learning, manage their time, set their goals and use strategies to enhance their learning and performance. Additionally, they continuously assess their learning abilities and discuss difficulties with their teachers and peers.

Fifth, they expressed positive attitudes towards learning outcomes and learning environment. Positive beliefs were manifested in positive attitudes and perceptions. They interpreted their mid-term exam’s mark positively with words such as “good”, “satisfied”, “proud” and “happy”. No negative comments were written about their results. In addition, participants had general positive attitudes towards classroom and their learning experience in general, as were shown in the following expressions; “relaxed”, “enjoy writing”, and “love to write” and “writing is not a worry for me”. These findings are in agreement with Hsieh’s (2008) which indicates that self-efficacious students tend to have positive attitudes towards learning.

Finally, in the process of learning, they had developed a growth mindset whereby they believed that their writing could be cultivated through practice and persistence. They believed
that their ability to learn to write was malleable, “I know that I am a better writer now” (participant 4), “I am better than I used to be in high school” (participant 19), “I see the improvement in my writing” (participant 18), and “I notice my progress week by week” (participant 5). When their ability was perceived as an acquirable skill, they accepted their mistakes as crucial part of their learning experience, “I expected to see some grammar mistakes” (participant 19), and to exert more efforts “work extra homework to make up for my quiz result” (participant 4). These results lend support to Wood and Bandura’s (1989) model where they indicate that self-efficacy and mindsets are closely related constructs. An increase in self-efficacy is associated with an increase in the beliefs of the malleability of ability as it is based on efforts.

It can be concluded that participants in the first group exhibited a profile of self-efficacious, motivated, self-regulated learners who made internal attributions, held positive attitudes towards writing and had growth mindsets.

**Downward pattern.** It was the third common pattern, with 20% of participants displaying such a pattern of development. Participants (e.g. participants 23, 24, 9,1, 26) clustered under this pattern showed an overall decrease in their SLWSE towards the end of the term. Generally speaking, they exhibited an opposite profile to those in the upward pattern group. They attributed their outcomes to uncontrollable variables, had fixed mindset and had negative attitudes towards writing.

Participant 23 represents such a pattern. Her confidence in her ability to write dropped before the exam and then dropped after receiving her exam mark and never rose again. She started her academic term with a high level of SLWSE, 1160 out of 1400, but then it dropped very sharply to reach 520 by the end of the term. Her developmental trajectory is shown in figure 10 below.
In her first journal she was so affirmative and confident about her writing capabilities. She was confident in her writing in general except spelling. However, she was assured that her spelling would improve as it was believed to be learnable and under her control:

I am good at writing. I can write. My grammar is good. My punctuation is very good. I use them in the correct places. I use correct grammar. I can organise my ideas and express them but my spelling is not good. I am not that good and I need to work hard to improve it. It is learnable and if I work hard enough this term, I will learn to spell words correctly (1st entry).

However, things did change and she was not that sure before the exam. For one reason, the differences between her L1 and L2 orthographical systems confused her. Unlike
Arabic, English does not have regular spelling based on its pronunciation, which made English spelling somehow difficult for Arab students to master:

I feel stressed before the exam because I know my spelling is very weak…English is very different from Arabic. In Arabic we spell the word as we pronounce it but in English sometimes they are not similar so it is difficult to spell some words correctly (2nd entry).

In her preparation for the mid-term exam, she realised how behind she was in her writing skills. She blamed herself for wasting her time not working on improving her writing. So, she made a plan that included more reading and writing and enlisting the help of another friend to remind her not to give up:

My writing will improve in the nearest future. I will write a lot and I will read more books to make my writing better. I will learn many new words everyday and will write sentences everyday. Reading will improve my spelling. I do not have much time to waste, I will start from today. I regret wasting my time so far. My friend and I make a plan to work on our writing skills and it is good that we encourage each other so I do not give up when I feel overwhelmed (2nd entry).

She did well in the exam but only because it was unchallenging. All her classmates thought it was very easy which made such success in writing have slight, if any, impact on her perception of her writing capability. This confirms Bandura’s argument (1989) that building self-efficacy necessitates an experience in overcoming appropriate challenges through efforts and persistence:

It was not difficult as I expected it. I think the topics chosen for us in the exam are the reason. They were easy and anyone can write about them using simple words
and simple grammar. The exam was not challenging or difficult which was very good. Not only me but all students are happy with it and say it was so easy (3rd entry).

The plan she made earlier did not work as it was supposed to. She attributed her failure to academic pressure and reported a significant drop in her self-efficacy. She complained that she was drowning in homework and blamed her teachers for not caring about her improvement. With all this pressure, she failed to find the time to work on her writing:

I made a plan to improve my writing weeks ago but could not stick to it because of the study pressure. Loads of homework, lots of exams and quizzes. We do exam after exam and instead of studying at home, I spend all my time filling papers doing the assignments. When I finish, I am so exhausted and cannot do anything else and it is almost my sleeping time. If we have less homework, we may learn better, have time to practise and revise what we have already learnt. But now teachers do not care about our learning outcomes, they care about submitting assignments on time only (4th entry).

By the end of the term and as her plan fell apart, she seemed to give up. She lost her faith in her ability to write so she experienced anxiety, headache and a strong desire for crying every time she wrote:

I do not like writing and I hate to write and I feel so anxious when I do not know what to write. I want to cry because I am helpless. It is like I want to do something but I do not know how to do it. I experience a headache every time I write because it reminds me of my weaknesses (5th entry).
Her evaluation of her SLWSE at the end of the term was just the opposite to her first evaluation at the beginning of the term. Her determination to improve her writing skills had vanished and she seemed to give up. She was not happy and she blamed department policy for the study pressure they put on students:

I am a very slow writer and a very slow learner. I need more time than other students to process learning and with the pressure of the study, I think I am way behind in my academic learning. I am not happy with my writing assignments. I know I am not doing well. But this is all that I can do... Even if I study for hours and write for hours, the result will be the same. I wish the department would reconsider the curriculum. Teaches should teach fewer subjects for more hours. Instead of teaching many subjects for a few hours then students do all the hard work at home (5th entry).

In the case of participant 23, several factors, that worked together over time, led to the emergence of new SLWSE beliefs. She lost a great amount of her SLWSE as she failed to cope with the academic pressure that required several assignments to be handed in at the same time. She was struggling to take control over her learning, blaming her teacher and the department policy for her performance. Despite all her efforts, she believed she did not have the ability to write. Although she did very well in her mid-term exam, she did not take the credit for that. Instead she attributed it to the easiness of the exam. Thus, she developed negative attitude towards writing. It was not hard to notice that she constantly compared herself to others, which might have put more pressure on her that resulted in her giving up in the end.

The last example is participant 24 whose SLWSE dropped sharply towards the end of the term, as shown in figure 11 below.
Participant 24 is an example of a learner with a fixed mindset. She believed in the innateness of writing which had an influence on her writing on both her L1 and L2:

I am very weak at writing. I lack the ability to write in Arabic and in English. Even in Arabic I cannot write well. I do not have this skill. I always got my worst grade in writing. I do not have writing skills, the imagination, the creativity and the ability to put words together in wonderful sentences. I struggle when I write, it is not about lacking English proficiency because I struggle in writing Arabic essays as well. Writing is like art, not everyone is an artist, even when they study art they do not become artists (1st entry).

Before her mid-term exam she blamed her writing teachers for not teaching writing through modelling and supported practices. Instead of reading a book out loud, she felt that
the teacher should provide her students with a real engagement in writing under her supervision in order for them to learn how to write:

I do not write well. Teachers tell me to write without teaching me how to write. I do not remember engaging in a real writing experience in class where teachers practise writing with students step by step. Just telling me to write and write without telling me how. No one taught me how to generate ideas or how to discuss a topic. Teachers usually read from the textbook and read examples written by people whose English is their mother tongue. Writing classes should be for practising writing, giving each student the chance to write and correct their writing (2nd entry).

She was happy and optimistic after finishing writing her exam. The exam questions were clear and the topics were familiar:

I wrote in the exam. I used good vocabulary and I wrote good sentences. I love exams where the questions were very clear and the language was easy. I was afraid I would not understand the questions but I did. And the time was sufficient. I was worried the time would not be enough. But I finished before the time ended (3rd entry).

After receiving her mid-term exam’s result, her SLWSE dropped significantly. The teacher was firstly blamed for her unfair correction before she finally attributed her results to her deficiencies in writing:

My writing was not good. I made many spelling mistakes. The teacher put a lot of question marks, like saying hey I do not understand you. If the teacher is so picky, it is hard to get a good grade. She corrected every mistake and wrote many comments. I did not write details. I just put sentences beside each other and they did not make sense for the teacher (4th entry).
By the end of the term, she again stressed her beliefs in writing as a gift, that no one can learn it, people are born with it. Therefore, she planned to seek help next term from a tutor. SLWSE at this time reached a very low level, 390 out of 1500;

My writing ability is weak. I will be lucky if I pass this term. If I do not, it will not be a surprise for me. I do not have a writing brain and I am not good even at Arabic writing. Next term I will make sure the teacher is good and can help me in writing, or I am going to find a tutor for me to show me how to write and to practise writing at home. Here at university teachers do not teach, they think we know everything already. Students like me need to have tutors to help them survive the university or they will struggle (5th entry).

Participant 24’s SLWSE was influenced by her belief in the innateness of writing. Although the figure above showed some increase in her SLWSE at times 2 and 3 that was not supported by her written journal entries. Exam results were crucial in her trajectory, as if they confirmed her beliefs in the difficulty of mastering writing. She blamed her teacher before the exam and at the end of the term for not providing enough practical exercises for writing during the class.

Main characteristics of downward pattern. The second response pattern showed an overall decrease in SLWSE towards the end of the term. Five characteristics were shared among participants with a downward pattern of SLWSE development. First, there was a notable discrepancy between their perceptions and their actual performance. Most of them went out of their mid-term exams very confident of their writing ability and felt happy about it. Participant 1, for example, showed shocking reactions upon receiving her mid-term
exam’s result. She wrote “I am shocked… I was 100% sure I did well”. Participant 9 refused to accept her exam result and commented that she did not understand her teacher comments on her writing. Those who have unrealistic appraisals in relation to their actual performance are one type of self-efficacious individuals identified by Bandura (1977). They are described as over-confident people who exaggerate their self-efficacy judgments. Towards the end of the term, their overconfidence in their writing ability had shifted to deep disappointment as shown in their final entries “I do not understand school writing anymore” (participant 9), “I am helpless it is like I want to do something but I do not know how to do it” (participant 23) and “If I fail writing, I will not be able to pursue my education” (participant 1).

Secondly, participants with a downward pattern of SLWSE development attributed the outcomes of their performance to uncontrolled variables. After failing their mid-term exams, for example, they blamed their teacher and/or English department for their under-achievement. That is, their performance was determined by external factors that were out of their control and thus could do little, if any, to improve their outcomes. Such an attribution could have lowered their SLWSE, impacted their subsequent future judgments, the amount of effort they invested in learning and their persistence to difficulties (Weiner, 1985). Success, on the other hand, was not attributed to ability. Participant 23 was happy to write her mid-term exam and ascribed it to the easiness of the essay’s topics. In addition, participant 1 felt self-efficacious after writing her mid-term exam due to familiarity with the topic, as she had a previous experience writing about it. However, such feelings of efficaciousness that were based on success attributed to external variables may not have the same strong and long-term impact on self-efficacy as when success attributed to self or controllable variables. These findings lend support to Bandura’s (1997). Cognitive appraisals of the causes of success may have determined the strength and significance of the experience on individuals’ senses of SE. As shown from the examples above, success
attributed to external causes had weak and temporary effects on SLWSE. These results are in agreement with other findings in the literature (e.g. Graham, 2006; Hsieh & Kang, 2010; Hsieh & Schallert, 2008; Zimmerman & Cleary, 2006). Low self-efficacy individuals attributed their performance outcomes to uncontrollable variables such as the teacher and program policy, which may have hindered their performance success and influenced their subsequent SLWSE judgments.

Thirdly, they developed a fixed mindset, “I do not have a writing brain” and “writing is like art, not everyone is an artist” (participant 24), where they gave up trying and came to believe that they were “not good at it” (participant 9) and finally quitting “even if I study for hours and write for hours, the result is the same” (participant 24). It is interesting to notice the change in mindset beliefs in the case of participant 23. At the beginning of the term she was self-efficacious with a growth mindset in regards to writing learning. She believed that writing was learnable and with hard work and efforts she could improve her writing skills. However, the decrease of her SLWSE was combined with a development of fixed mindset. She gave up trying because she felt that she lacked the writing ability and hard work was not enough to improve her writing. These results concur well with previous findings in literature (Limpo & Alves, 2017; Wood & Bandura, 1989). Self-efficacy and mindset beliefs are two related constructs that an increase in SE is associated with a great tendency towards a growth mindset, while endorsing a fixed mindset is more likely to be linked to lower levels of SE.

Fourth, they showed negative attitude towards writing, as they expressed that “writing is very stressful” (participant 9), “I struggle when I write” (participant 24) and “I do not like writing and I hate to write and feel so anxious” (participant 23). Such negative attitude was reflected on their behaviour when they wrote. Participant 23 experienced a headache and anxiety when writing. Writing also provoked crying. Finally, it seems that the
exam result was the most powerful factor that directed participants’ behaviour towards an attractor state of withdrawal from writing as well as low SLWSE. What was before the exam was self-efficacy and optimism and what came after it was low self-efficacy and helpless learning behaviour. These findings are in line with Hsieh’s (2008) which reveal a connection between attitude towards learning and SE.

It can be concluded that participants in the second group exhibited an opposite profile to those in the upward pattern group. Their self-efficacy decreased after a discrepancy was realised between their self-efficacy beliefs and their actual performance, they attributed the outcomes of their performance to uncontrollable variables, had fixed mindsets, held negative attitude towards writing and their exam results had a powerful force that directed their self-efficacy towards an attractor state of low SLWSE.

Fluctuating pattern. This pattern was the second common among participants, with around 37% of the sample displaying such development of SLWSE. It was characterised by a nonlinear development that involved periods of ups and downs in participants’ SLWSE. Hence, participants’ sense of SLWSE may not have been stabilised throughout the academic term. Participant 17 is an example. As shown from figure 12 below, her developmental trajectory was very fluctuating, started with high SLWSE then alternated between moderate and low levels until it ended with nearly the same level of SLWSE as at the onset of the academic term.
Participant 17 started the academic term with high SLWSE that was based on successful previous writing experiences. She wrote an article for the university magazine and received encouragement and positive feedback from readers. Such a pleasant experience heartened her to consider writing other articles in the future:

I wrote several successful essays and I am proud of them. Then, I participated in the university magazine. I wrote an article and I got amazing comments. I wrote tips to survive freshman year. Now I am thinking of writing another one about how to make the best of your academic year (1st entry).

The key to her success in writing, according to her, was to practise and never give up. With practice, she developed her writing skills and became able to state her opinions in a very clear way:
I overcome my fear of writing by practising. I can now write smoothly. I tried and tried and I am still trying, and every time my ideas become deeper and my argument clearer (1st entry).

Her SLWSE dropped before the mid-term exam. She was not sure how she would perform in the exam as her writing teacher refused to share with students any details regarding the nature of the exam questions and how she would calculate the exam scores. Such ambiguity left her worried and unsure even though she believed she could write:

Although I know I can write, I am not sure I will do well in the test. It is the teacher. She is not clear, I do not know what she wants and how she is going to mark my paper. She just said “prepare well and do your best” (2nd entry).

The exam content was unexpected. She did the essay part but the grammatical exercises were not part of her daily practice routine and she did not expect to do them in the exam. She blamed her teacher for not telling and preparing them enough before the exam:

Very hard exam. I was reluctant to write many words because I was not sure about their spelling. I did not like the grammar judgment questions. Teacher did not say anything about them before. The teacher should have given us practice on them. It is not easy for me to see the mistakes in these sentences. They appeared fine for me (3rd entry).

After receiving her mark, she reported the lowest level of her SLWSE. She was demotivated and tended to abandon trying to learn writing as no time and efforts appeared to be enough. She complained particularly about her spelling and she feared making more mistakes:
I have a feeling that even when I practised a lot, it was not enough. I also have the feeling that I will make mistakes and I cannot write correctly. Especially spelling. New words are hard to spell (4th entry).

Towards the end of the term, she sounded more determined to work hard to succeed in the writing course. Although she feared failure, she had beliefs in her ability to change and to develop her writing, which encouraged her to resist her fears and doubts:

I am scared of failing the final exam. I can change it. I just need to be optimistic and see my strengths instead of focusing on my limitations. I want to come back to be the same person who started the term with hopes and ambitions. I will never give up and I will try. I need first to trust myself and ignore all my fears and stress (5th entry).

From a DST perspective, participant 17’s SLWSE was not internalised thus it fluctuated and changed as it interacted with different factors. It went up when she had successful writing experiences and when she received encouragement from others. However, it dropped significantly to reach a very low level when her mid-term exam’s result was not good. A bad exam result affected her writing performance and her perception of her writing ability that she was ready to quit trying. She continued to fight doubts and fears until the end of the term when she became more intent on redoubling her efforts to pass this term. It is interesting to notice that whenever her SLWSE rose, she projected signs of a growth mindset where learning was acquirable and change was possible. However, when her SLWSE dropped, she presented signs of a fixed mindset where she believed that no time and efforts could help her learning. Her mindset fluctuated; she did not just have one type of mindset, and other factors influenced how optimistic and open she was feeling about her abilities and SLWSE.
Participant 14’s SLWSE was fluctuating too. It declined then rose then dropped again as shown in figure 13 below.

She started with expressing a conditional SLWSE that depended on the topic and the teacher. Familiarity with the topic as well as constructive and positive feedback led to high levels of SLWSE, and vice versa:

My confidence in my writing depends on the writing topics and depends largely on how the teacher corrects my writing. If the topic is easy and I have prior knowledge about it, then I can say I feel so confident that I will do very well. But when I am asked to write about something new or difficult, something I have no ideas about, then I will say I do not trust my ability to write about such a topic. If the teacher corrects every single mistake and returns my homework all red, then I will be
discouraged. But if the teacher just comments on the major mistakes and gives positive feedback, this will encourage me to try and to write more (1st entry).

Before the exam, her SLWSE dropped as the exam provoked memories from the previous term’s experience, which was not satisfying. She attributed her poor performance to lack of competence:

I have not got a good mark in writing before. I can write only simple sentences about something I already know. When I write, I use Google to search for ideas. I cannot make up new ideas myself. I cannot write introduction and cannot conclude my paragraph. Writing is not my thing. Maybe because I did not write before. I did not use to write in high school. I am starting from scratch (2nd entry).

The exam was hard as she did not understand the exam question and wrote about a different topic. Therefore, she attributed her performance to low levels of English proficiency:

I will not lie and say the exam was good. It was not. It was difficult. I could not write about the topic. Honestly, I did not understand what the topic was. When the exam finished and my friends told me I realised that I had written about something else. I did not understand the topic. My English is not good. My level is not improving. I tried many things but my language does not change (3rd entry).

The teacher decided to accept her essay, so she passed the mid-term exam which gave her hope to pass the final exam as well and motivated her to write:

I passed the exam. My mark was so bad but I passed. I plan to work hard to make it up. I think of many ways like seeking help from a tutor, attending online courses or
going to an institute to work out on my writing. I know my teacher is so understanding. She gives chances to students and she promises to give us extra marks if we do extra assignments. This mark is not final, I can make it better if I want to (4th entry).

However, she could not keep that motivation and hope for long. She gave up by the end of the course as all her attempts were abortive. This might have been due to the fact that her SLWSE was not grounded sufficiently in a strong sense of SE, but may have stemmed temporarily from her teacher encouragement:

I cannot write. I did not improve. Every assignment is worse than the one before. I tried but no improvement. I tried a tutor but then the teacher knew it was not me. I got zero for that assignment. I tried an online course but learning cannot happen over night. I want to give up. Maybe I am not meant to be an English learner (5th entry).

Participant 14’s SLWSE was fluctuating. It went down until she passed her mid-term exam which boosted her SLWSE and motivated her to write. However, such positive attitude did not last for long, as her SLWSE dropped towards the end of the course and she abandoned all her attempts to become better at writing. The reason for her fluctuation might have been because she felt she did not really deserve to pass; she only did so because the teacher was indulgent in accepting her writing on the wrong topic. That suggests that she did not see the writing itself as carrying value, but the exam parameters, write on the topic given, as more important. Additionally, she made external attributions in judging her SLWSE which might have been another reason for the fluctuation in her trajectory. Factors such as teachers and topics are changeable which made her perception of writing ability far from stable. Furthermore, she expressed signs of a fixed mindset “writing is not my thing”
and “maybe I am not meant to be an English learner” during her lowest phases of SLWSE trajectory while she presented signs of a growth mindset when she felt more self-efficacious “I can make it better if I want”.

Main characteristics of fluctuating pattern. The third response pattern showed a fluctuating development of SLWSE over the period of one academic term. Two characteristics were shared between participants with fluctuating SLWSE. First, their profiles were a combination of characteristics from both upward and downward SLWSE development profiles. That is, changes in SLWSE were associated with changes in other variables such as changes in mindsets and changes in attribution. Low SLWSE was found to be associated with fixed mindset and external attributions. High SLWSE, on the other hand, was linked with growth mindsets and internal attributions. When participant 14’s SLWSE, for example, dropped she stated that she did not think she could write as writing is a gift that she did not have. However, when she reported a high level of SLWSE, she was convinced that writing is learnable and she could develop her skills if she wanted to.

Second, participants’ SLWSE perceptions were not internalised. SLWSE was shown to be conditional, hence it was associated with change and therefore was not stable. SLWSE was not in a strong stable attractor state and thus it was more vulnerable to changes. Participant 17’s SLWSE, for example, was dependent on familiarity with the topic and teacher correction methods. Therefore, a successful writing experience in a familiar topic as well as receiving good results may have raised it temporarily and an unpleasant experience might have dropped it to a very low level. Change is “related to the level of internalization of various dispositions and selves, that is, more internalized notions tend to withstand change, while issues that are less internalized might fluctuate more easily.” (Piniel & Csizér, 2015, p. 185).
It can be concluded that participants in the third group exhibited a mixed profile that combines characteristics from both upward and downward patterns. Their SLWSE was not internalised, but rather conditional, so it tended to change and fluctuate. It is important to stress that the findings revealed that mindsets and attributions are two variables responsible for the change. Additionally, they are fluctuating constructs. A given participant may have held different mindsets at different times due to variations in the writing tasks required from her, such as when participant 14 showed helpless behaviour before her exams and displayed a greater growth mindset elsewhere. This confirms our hypothesis that SE is best perceived as a complex construct that has a close connection with variables such as attribution, goal orientation and mindsets. These variables can be believed to be areas where controllability can be either learned or seen as something not able to be learned.

**Second language writing tolerance of ambiguity**

This section presents and discusses the changes in Saudi L2 learners’ SLWTA development over the period of one academic term. First, SLWTA means obtained from collecting data at five points of time were compared using ANOVA. After that, developmental trajectories for participants were examined in order to gain better understanding of how changes occurred in participants’ SLWTA.

**Quantitative longitudinal change in SLWTA**

SLWTA fluctuated over the academic term and rose sharply towards the end of the course, as shown in table 24 and figure 14 below. The largest variations in score took place at the end of the term, SD 11.93, and the smallest variations were before the mid-term exam, SD = 5.09.
Table 24

*Means of SLWTA at different times of data collection*

<table>
<thead>
<tr>
<th></th>
<th>SLWTA-1</th>
<th>SLWTA-2</th>
<th>SLWTA-3</th>
<th>SLWTA-4</th>
<th>SLWTA-5</th>
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</thead>
<tbody>
<tr>
<td>Mean</td>
<td>28.40</td>
<td>28.57</td>
<td>28.97</td>
<td>28.60</td>
<td>34.73</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>6.311</td>
<td>5.090</td>
<td>7.194</td>
<td>5.751</td>
<td>11.931</td>
</tr>
</tbody>
</table>

SLWTA changed slightly before and after the mid-term exams and after participants received their mid-term exam results. The biggest change from a low to a moderate level of SLWTA occurred by the end of the term.

![Figure 14](image)

Figure 14. The Fluctuations of SLWTA Throughout the Academic Term.

The results of ANOVA indicated that there was a significant difference in SLWTA scores across time, $F(1.83,53.2) = 5.308$ $P = .009$, as illustrated in table 25 below. It can be concluded that the change in participants’ SLWTA was statistically significant.
Table 25

*Summary of repeated measure ANOVA results comparing SLWTA mean scores at five time points*

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLWTA</td>
<td>898.173</td>
<td>1.838</td>
<td>488.765</td>
<td>5.308</td>
<td>.009</td>
</tr>
<tr>
<td>Error</td>
<td>4907.027</td>
<td>53.292</td>
<td>92.079</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Qualitative longitudinal change in SLWTA**

Several patterns of SLWTA developmental trajectories were depicted in the data (see Appendix U). Just like SLWSE, SLWTA developed in upward, downward and fluctuating patterns. Below is a discussion of each pattern and its major characteristics. It is worth re-stressing that the examples shown below from participants’ written journals were more about anxiety and lack of it in L2 writing. As explained earlier, anxiety and TA are two closely related constructs (Dewaele & Ip, 2013). In fact, Smock (1955) refers to anxiety as a crucial component of lack of TA, and Grenier et al. (2005) identify anxiety as an emotional reaction to lack of TA. Therefore, the examples below showed the anxiety, accompanying mental states as well as perceptions which went alongside the changing scores on SLWTA.

**Upward pattern.** This pattern was the most common pattern of SLWTA development among Saudi L2 participants in this study, displayed by 40% of them. In this group, participants’ SLWTA (e.g. participants 1, 30, 3, 4,5, 10) increased towards the end of the
academic course, they showed signs of growth mindsets, became more mastery-oriented as well as perceived their teacher’s feedback as constructive. Participant 1 was an example of participants with upward SLWTA, as shown in figure 15 below.

![Figure 15. Participant 1’s SLWTA Developmental Trajectory.](image)

Participant 1 started with a low level of SLWTA that was built up as the academic term reached its end. At first, she was afraid of doing her homework due to lack of practice and lack of understanding of her teacher’s explanation in the class. The novelty of the task might have triggered her low SLWTA:

During the writing class today, I felt uncomfortable specially when I did not understand. I am afraid I will not be able to do my homework correctly. The teacher gave us long homework and I am stressed, because I did not practise (1st entry).

She demanded practising in the classroom under the supervision of her teacher for some time before she could do her homework alone at home. Before her mid-term exam,
she again stressed her need to be familiar with writing through more practice. Additionally, she was worried that her writing deficiencies may cause her a great deal of anxiety:

My biggest worry is to get stressed in the exam when I do not know what to write, when I think about what to write or when I worry about my grammar and spelling. I easily become frustrated when I stop in the middle of writing because I do not know what to write next and how to finish it. I wish my teacher gave us more practice before the exam (2nd entry).

Unlike previous experiences, she felt relaxed during the exam. She wrote about a familiar topic which she had prior knowledge about, therefore her SLWTA elevated:

Usually I panic during exams, but this time I felt comfortable because I was writing about something I am familiar with. I did not need too much time to think about my writing or my sentences. I think I did well in the exam (3rd entry).

Although her mid-term exam result was not perceived positively, her teacher played a role in enhancing her SLWTA by assuring and convincing her not to exaggerate her mistakes but instead to take a risk and think of the knowledge she gained by doing so:

My teacher once told me that I cannot learn without mistakes. I do not care about the marks as much as about what I have learnt. When I pass, I want to pass with knowledge, I do not care about the grade per se (4th entry).

Again, in her final entry, she acknowledged the role of her teacher in elevating her SLWTA and particularly her tolerance for mistakes via creating an encouraging class environment where making mistakes was not a problem for the students:
I am not scared to try. I am learning. The class environment is relaxing and warm. The teacher encourages us to try. She is supportive and I love her classes (5th entry).

Participant 1 started with fears from writing her assignments without prior practising under the supervision of her teacher. However, towards the end of the term, she became more mastery-oriented so she tolerated and accepted mistakes as a crucial part of her learning. With the encouragement of her teacher, she was not afraid to try and to make mistakes as her ultimate goal was to gain knowledge and to master writing. From this evidence, SLWTA is best perceived as a dynamic system that is malleable and can be influenced by teachers’ constructive feedback, support and encouragement.

Participant 7 is another example of upward trajectory of SLWTA development. She started the academic term with low SLWTA, 21 out of 60, and ended it with a very high level of SLWTA, 45, as shown in figure 16 below.

![Figure 16. Participant 7’s SLWTA Developmental Trajectory.](image)
Participant 7 begun with low SLWTA that was combined with the fear of mistakes. This led to other several consequences such as the fear of correction in public and the fear of writing long essays to avoid making unnecessary mistakes:

Previous term’s teacher corrected students in front of the class which was not OK. It would be more helpful if we had one-to-one session with the teacher to discuss mistakes, strengths and weaknesses. It should not be every week or month, I think if I had it for two times during the term, it would definitely help. Another thing that made me frustrated was writing long essays because keeping sentences connected was not easy (1st entry).

Current writing experiences made her more comfortable in the class and more confident in her writing ability. Her teacher played a crucial role in raising her SLWTA. Here the link between SLWSE and SLWTA is established:

I feel so comfortable and relaxed in writing classes. The teacher is so positive and encouraging. She helps me in building my confidence in writing skills again. I think the key to an anxiety-free class is a good teacher. I am now about to start the exam and I feel a little bit stressed which is normal I think (2nd entry).

As her SLWTA increased, she was able to maintain positive expectations in regards to her exam results although she was not completely sure about her grammar and spelling. She recalled her experience with an assignment which she thought she had written poorly, but where her teacher had a different opinion. It is possible that she remembered this incident to reassure herself that it was not always as bad as she thought:
Last assignment I had a lot of spelling mistakes. My grammar was also poor. The teacher praised my ideas and liked them but my spelling and grammar were not good at all. In the exam, I read my essay twice, tried to spell every word correctly and checked my grammar too. I am still not sure about my performance (3rd entry).

Her SLWTA increased a great deal after she received her mid-term exam result. The teacher discussed with students their mistakes and then gave them a chance to discuss them with another classmate. She found that talking about mistakes with others made them easier to accept and easy to overcome:

I am an aural person. I learn better when I hear it from the teacher or from other students. Today I felt good when the teacher discussed with us our test results and then we had a look at our paper before we returned them back to her. I had a discussion also with my classmates and commented on our mistakes. After speaking about them with another student, I feel I can overcome them with time (4th entry).

By the end of the term, she thanked her teacher for supporting and encouraging her to develop writing skills as she became a more motivated, tolerant and confident L2 writer. An increase in her SLWSE was associated with an increase in SLWTA:

The writing classes are not stressful. The teacher creates a good encouraging atmosphere. The writing experience this term motivates me to be a good writer and shows me that it is possible to be whatever you want to be if you work hard. Nothing is impossible (5th entry).

Participant 7’s SLWTA is another example of a developing SLWTA. When she first started, she had low SLWTA and feared being wrong. With support and encouragement
from her teacher, she was willing to discuss her mistakes with others and to work hard to overcome them. Another change occurred in her perception of learning, from focusing on her performance and reluctance to write long passages because of the risk of mistakes, to become a very motivated person who, with hard work, improved her writing.

**Main characteristics of upward pattern.** The first response pattern showed a positive gradual development of SLWTA. There were common characteristics among most participants displaying upward patterns in developing their SLWTA in this study. First, they reported a slight decrease in their SLWTA before the exam, which was described as “normal” by participant 7, and a noticeable increase after their exam finished. As participant 30 explained it in her third entry immediately after the exam “I felt a bit anxious before test started. But when I read the topic I smiled with a very big smile”. The exam was not perceived as difficult or stressful for any of them. Participant 1, for example, described it as “familiar” and was “so easy” for participant 30. This confirms findings previously found in the literature such as that in Dewaele and Ip (2013) wherein L2 TA is found to correlate negatively with anxiety and tolerant participants are reported to have less anxiety than their intolerant counterparts.

Secondly, after their mid-term exams, and as their SLWTA increased, they tended to adopt more mastery-oriented goals. Additionally, they became less anxious, developed acceptance of their mistakes and they did not fear trying or making mistakes in order to learn. Participant 5, for example, explained that she focused more on her ideas and less on her mistakes and she learned from her teacher correction. Participant 1 stressed that she attuned to mastery of writing skills and not to her grades as indicators of her learning development. These findings are in line with those in literature where researchers found that
learners who fear mistakes, negative evaluations and focus on obtaining higher grades are more likely to be anxious and worried (Dweck, 1986; Horwitz, et al., 1986).

Finally, they perceived their writing teacher feedback as constructive and supportive which created a positive and relaxed environment for their learning. So teacher feedback and comments “help to improve” and “encourage us to try” to the extent that they encouraged participant 30 to write in new genres and on different topics to “surprise” her teacher. A whole line of research has investigated the impact of teacher feedback and its role in L2 learning (e.g. Abedi, Mahadavi & Hassaskhah 2015; Lochtman, 2002; Martin & Valdivia, 2017). In these cases, when feedback was perceived as constructive and not judgmental, it improved learning as students engaged more in writing without fearing their mistakes.

It can be concluded that participants whose SLWTA improved with time became less anxious when writing, showed greater mastery-oriented behaviour, did not fear making mistakes and perceived their teacher’s feedback as constructive and encouraging.

**Downward pattern.** This pattern was characterised with a gradual decrease in SLWTA towards the end of the course and it was displayed by around 27% of the research participants (e.g. participants 26, 9, 14, 2, 24). They expressed low SLWSE, anxiety and tended to be concerned over their performance and feared making mistakes when writing in L2.

Participant 26 presented an example of a downward pattern of SLWTA that dropped from a moderate to a very low level, as shown in figure 17 below.
Figure 17. Participant 26’s SLWTA Developmental Trajectory.

Moderate levels of SLWTA were associated with an acknowledgement of the importance of learning to write for her academic success. However, due to lack of SLWSE, writing became an unpleasant experience as she hated spending too much time just to write a few sentences:

Writing is important for my academic life…I need to be good at writing if I want to succeed in university…what makes me struggle when writing is my doubts. I doubt my spelling and grammar. So I do not like to write because of the hesitation. It takes me ages to write a paragraph. Spelling and grammar mistakes make me look silly and not secured (1st entry).

Before the exam, her SLWTA decreased and she became anxious fearing facing difficulties. Thus, she prepared for the exam by reading her friend’s essays and memorised her sentences. Her main concern was the exam grades which might have affected SLWTA:
My fear is that I do not remember words I need to write. The worst scenario is I will write the words in Arabic. At least I can guarantee that I will be given credits for my grammar and for organising my sentences. I do not want to panic because when I panic, my brain stops working and I cannot think or remember words I need to write (2nd entry).

During the exam she felt stressed as she considered her spelling, grammar and her choice of words. An incident happened which distracted her and influenced her exam writing:

I felt so stressed in the exam. There were a lot of things to worry about over a very short period of time. Spelling, grammar, words, sentences and punctuation. A student turned off the A/C and I felt so hot. Selfish students make me nervous. I asked her to turn it on and she did. I could not write well when the class was boiling. No one could (3rd entry).

After receiving her marks, her SLWTA decreased. She attributed her exam results to her inability to tolerate ambiguity that was triggered by complexity and unfamiliarity with the L2:

It bothers me that I cannot write at an advanced level, something long and good. My sentences are very short and simple. When I want to write something complex, I am reluctant a lot especially when I am not sure about the correct form of verbs. The tenses are very similar and confusing (4th entry).

By the end of the term, her SLWTA reached a very low level which was associated with the fear of negative criticism and mistakes:
I do not feel comfortable when I write. I do not like writing it puts me under pressure. My English is very weak. Students in my class do not respect me and laugh at me when I talk in English. I feel ashamed and I hesitated to participate I do not want to give them the chances to laugh at me. Sometimes I know the answer and I am quite sure but the fear of their looking and laughing make me prefer not to try (5th entry).

Participant 26’s SLWTA was a dynamic system that evolved as it interacted with variables such as SLWSE and her fear of making mistakes. Low SLWSE might have impeded her writing development as it is shown to cause hesitation and reluctance to write. It was also associated with making external attributions. For example, before the mid-term exam she memorised her friend’s writing to use the sentences when writing in the exam because she did not believe she could write on her own. Additionally, after the exam, she blamed her friend for feeling uncomfortable. Thus, it was expected to establish that writing provoked her anxiety and lowered her SLWTA, especially when making mistakes, which made her vulnerable to other’s judgments. As a result, she preferred to withdraw from participation in the class to avoid being laughed at.

Participant 2 is another example of a downward development of SLWTA, as shown in figure 18 below.
Participant 2 started the course with very low SLWTA, 26 out of 60. She had been told by her writing teachers that she lacked clarity in writing; she could not get to her points directly and her arguments were hard to follow. Although she was aware of their comments, she denied her awareness of such limitation when writing:

Most of the time I feel comfortable when I write but I can easily get distracted. I have been told that I beat around the bush and go off-topic and teachers cannot follow my arguments easily. It appeared to me that everything was clear and connected but it surprised me when I received feedback such as “what is your point” or “the argument is not clear” (1st entry).

Before the exam, she reported low SLWTA as she appeared convinced this time of her inability to write what she wanted precisely. In addition, she complained about her
inability to identify her own mistakes. Only teacher’s clear instructions would help her feel comfortable during the exam:

I cannot see my mistakes. Even if I revise my work, it is hard to spot my mistakes. I see that my ideas are clear but when I put them down on the paper, they look disconnected and irrelevant. It is so hard not to be able to write what you mean…I would feel more comfortable in the exam, if the teacher told us exactly what she wants like the number of words and paragraphs (2nd entry).

The exam was hard and stressful. She did not have enough time and information to write her essay. Besides, she was worried over her mistakes. Her SLWTA decreased to the extent that she could not tolerate ambiguity that arose from unclear places of a comma and whether to use it before or after the word:

The exam was hard and I found myself short in time. I did not do any punctuation. It is really hard specially the comma and I do not know whether to use it after words such as but, and, so, or, and not. I also got stressed because I did not know what to write (3rd entry).

She was not satisfied with her mid-term exam result. She attributed her results to the ambiguity of the exam questions. Here again she stressed the need for clear instructions from the teacher in the exam:

I was not sure how much to write. It was not clear at all and I was afraid that I had written too much and then the chances of losing marks increased (4th entry).

Later on, her SLWTA decreased and she became very intolerant of mistakes. Mistakes were perceived as a sign of deficiency and caused shame and disappointment:
I do not tolerate mistakes; I just feel incompetent. I feel ashamed and disappointed. I worry about everything and I ask too many questions before I write like how many words or lines (5th entry).

Participant 2 begun with low SLWTA. She was aware of teachers’ comments on her writing as unclear and ambiguous. At first, she denied them and claimed that her writing was so clear for her when she read it. Later and before the exam she was convinced that she was unable to state her opinions clearly which caused her stress. Her result was not good which she believed was caused by unclear exam instructions and questions. She was in need for explanations in regard of everything starting from the exam questions to the number of words required. This was because she did not like to make mistakes or miss anything out as mistakes mean only one thing for her, “incompetence”. Such obsessive need for clarity and details and intolerance of mistakes can be attributed to high concern over performance. She feared failure to the point that stressed her over the unclarity of the correct place of a comma and unspecified number of words required in the mid-term exam.

**Main characteristics of downward pattern.** The second response pattern showed an overall decrease in SLWTA towards the end of the term. Four characteristics were shared between participants with a downward pattern of SLWTA development. Firstly, they judged their writing ability as very low. Participant 24, for example, acknowledged her deficiency and how behind she was compared to other students in her class. Moreover, participant 26 expressed her doubts about her writing skills and linked them to hesitation to write to avoid mistakes. Participant 2, on the other hand, got easily distracted when writing because she could not make her points clear. She received the same feedback from all her writing teachers that she went off topic and lost her line of argument. These results confirm the
general questionnaire findings of this current study that indicate a relationship between SE and TA. Those who are more confident in their ability to write and to convey their messages are likely to feel more tolerant towards ambiguities when they write.

Secondly, high levels of anxiety and stress were reported by participants with decreased SLWTA. Participant 26 experienced anxiety whenever she wrote “I do not like writing; it puts me under pressure”. The same experience is shared by participant 24 who wrote “I feel stressed when I need to write” and participant 2 “I also got stressed because I did not know what to write”. These outcomes echo findings reported in the literature such as in Dewaele and Ip’s work (2013). Tolerance of ambiguity correlates negatively with anxiety and stress in learning L2 where stressful/anxious students are more likely to be intolerant of ambiguity than their less anxious counterparts. Additionally, they are in line with those (e.g. Grenier et al.’s, 2005; Smock’s, 1955) that identify anxiety as a component of lack of TA as well as an emotional reaction to it.

Thirdly, those participants feared making mistakes and perceived them as a sign of deficiency. They exhibited a great tendency towards performance-oriented goals. Participant 2 stressed that fact in her last entry. She wrote “I do not tolerate mistakes; I just feel incompetent”. Such beliefs could have impeded them from writing as in the case of participant 24 who believed that writing exposed her deficiency and may have led her teacher to discover how “inadequate” her writing was. This is in line with Almutlaq’s (2013) findings that students who are greatly concerned over their mistakes and fear criticism tend to be less tolerant of ambiguity in L2 learning.

Finally, they cared about people’s judgments and placed great importance on what others might have thought of them. Their fear of being judged kept them from developing their writing and thus released their anxiety that was attached to it. Participant 24 explained that her panic in writing was not caused by her knowledge of her weak ability, but because she did not
want her friends to notice how weak she was in writing. Such beliefs prevented participant 26 from participating in class discussion even when she knew the answer fearing her classmates’ judgments and negative comments. Thus, their intolerance of ambiguity and anxiety may have stemmed from their fear of being judged negatively or laughed at by teachers or classmates for using imperfect language (Szyszka, 2017).

It can be concluded that participants whose SLWTA decreased with time displayed a profile containing elements that opposed that for participants in the upward SLWTA pattern. They had low SLWSE, were anxious and feared making mistakes as well as people’s negative judgments.

**Fluctuating pattern.** It was the second most common pattern found in the data, with around 33% of participants displaying it. The main characteristic of this pattern was the instability of the change direction that could have resulted from the interaction between SLWTA and other variables. Participant 12 was an example that showed a fluctuating developmental trajectory of her SLWTA, as shown in figure 19 below.

![Figure 19. Participant 12’s SLWTA Developmental Trajectory.](image-url)
Lack of ability to state her ideas clearly was associated with a low level of SLWTA. Therefore, writing was perceived as anxiety provoking:

There is a gap between what I want to write and what I write…. Writing sometimes makes me nervous like when I cannot write what I want to write clearly. Because spelling and grammar are difficult, I just cannot write what is in my mind. Sometimes when I read other people’s writing, I love it. I love how they choose their words. Their writing speaks about me. It says what I am unable to write (1st entry).

Before her exam, her SLWTA was low as she was worried over the exam scope. Lack of familiarity with the essay topic was associated with doubting her ability to deal with such unclarity:

I feel anxious. We do not know what we are going to encounter. The teacher did not clearly talk about the exam and she did not tell us the hints about the topic. I am worried that I cannot write if I do not understand (2nd entry).

After the exam she felt a relief that was associated with an increase in her SLWTA to a moderate level, as she found out that the total mark of the exam was divided between writing an essay and doing some grammatical tasks:

I felt a relief when I read the exam questions. The exam mark is divided between two parts, one writing and the other grammar. I am good at grammar and the sentences were not difficult to correct (3rd entry).
After receiving her mid-term exam’s result, her SLWTA decreased to a low level. The ambiguity of writing correction made any prediction of performance results impossible:

Writing is not an easy subject. You cannot predict your results. The correction is not clear and not fair which makes me think of the final exam and worry (4th entry).

By the end of the term, she begun enjoying her writing classes as her SLWTA increased to a high level:

I do not have a problem with writing. If I am not under time pressure and the topic is familiar, I really enjoy writing then (5th entry).

Participant 12 showed moments of ups and downs in her SLWTA. She felt anxious at the beginning of the term as she was unable to state her ideas clearly. After the exam she felt more tolerant as she did well in the grammatical part of the test which could have guaranteed a good mark in the exam. However, it dropped again when she did understand the correction criteria and started to question the possibility of passing the final exam. However, she managed to increase her SLWTA and enjoyed writing by the end of the term as she became more confident in herself as a L2 writer.

A final example of fluctuating SLWTA was presented by participant 13, as shown from her trajectory in figure 20 below.
She begun the term with a low level of SLWTA that was associated with lack of ability to express ideas as well as lack of knowledge of relevant terminologies:

I do not express my ideas clearly. So, sometimes when I do not face this difficulty, I write the same sentence again and again, so the essay becomes longer. It is the same reason I do not like to write about a specific topic. I get nervous what if I do not know the relevant terminology. I like it when I write about something I choose, something I know, I am familiar with and I have a good vocabulary size to use (1\textsuperscript{st} entry).

Before the mid-term exam, her SLWTA increased. However, she worried about the essay topic:

It will be so frustrating when the teacher chooses the topic for me to write about. At least I want her to provide me with a vocabulary list to help me write. Oh but now the
teacher is going to say that I am an English student and should be able to write without such help. She would not cooperate; I know she is testing me (2nd entry).

After the exam she reported a decrease in her SLWTA from moderate to low as she questioned the purpose of writing. Writing just to be evaluated and examined was so stressful as it did not reflect the real purpose of writing:

Writing can be fun if I write without fear. Fearing of being corrected and fearing of being judged badly. I like to write but do not like it when I am over corrected over even simple mistakes like adding s and using wrong pronouns. I learned that writing is fun and people write to share their thoughts and this is why I like to write. But to write just to get a good mark is not the same. Write to impress the teacher and to show your writing skills is not fun and not creative (3rd entry).

SLWTA was raised to a moderate level after receiving her mid-term exam result before it dropped again to a low level at the end of the term. That was after being corrected in front of the whole class. The teacher invited students to write on a board and then asked others to correct their mistakes and to discuss their writing in general. She felt so embarrassed and angry:

I felt stressed standing in front of the class while the other students discussed my writing. I felt I blushed from anger when one student commented saying “this is not a good sentence; two words are misspelled”. I knew the correct spelling but I just wrote them in a hurry. I wanted to finish and went back to my seat. It was very embarrassing (5th entry).

Participant 13’s SLWTA was dynamic and fluctuated between low and moderate levels throughout the term. Her SLWTA increased after receiving a good exam result and dropped
after being corrected and criticised in front of others. This showed that her SLWTA was not stable and internalised, but rather was malleable.

**Main characteristics of dynamic pattern.** The third response pattern shows a fluctuating development in SLWTA over the period of one academic term. The profile of participants with this pattern of SLWTA development was a combination of characteristics from both upward and downward patterns. The increase in their SLWTA was associated with an increase in their SLWSE and a decrease in their anxiety. When their SLWSE elevated after successful experiences such as after good exam, their SLWTA increased and their anxiety decreased and vice versa. Participant 8 is an example. At the beginning of the term, her SLWTA was low as she was anxious and worried about the new teacher and her classmates. Before the exam, she reported a higher level of SLWTA and stated that she believed in her ability to do well in the exam. She was not stressed as her friends assured her that teacher’s exams were not difficult and she could do very well. Her SLWTA continued to fluctuate and at the end of the term it decreased as she was worried because she was not sure she could pass the final exam.

In fact, their SLWTA was far from being stabilised and appeared to influence and to be influenced by several other external factors such as positive feedback, time pressure and fear of failure. Participant 16 stated that “positive feedback makes me believe in myself and when I trust myself, I do not feel anxious”. Participant 12 wrote “If I am not under time pressure and the topic is easy, I really enjoy writing”. Participant 8 feared failing her final exam which resulted in raising her anxiety and lowered her SLWTA.

It can be concluded that SLWTA was not stabilised as it changed since it interacted with several factors such as SLWSE and anxiety. Interestingly, participants with fluctuating SLWTA trajectories shared characteristics with those with upward patterns, when their
SLWTA increased, and downward trajectories, when their SLWTA decreased. SLWSE and anxiety were two main variables that were closely linked to Saudi students’ evaluations of their SLWTA.

In conclusion, Saudi L2 learners developed their SLWTA into three patterns; upward, downward and fluctuating. Two main variables were identified as crucial in shaping SLWTA developmental trajectories; anxiety and SLWSE.

**Summary**

This chapter investigated the change that took place in SLWSE and SLWTA among and within individuals. Comparing mean scores at five different times, results showed that a significant change had occurred in participants’ SLWTA with an increase towards the end of the term, whereas the change in SLWSE was not statistically significant.

In general, Saudi L2 participants’ SLWSE seems to cluster around three patterns of development. Each pattern presents an overall direction of change, either upward, downward, or fluctuating, and has its own characteristics. SLWSE can be viewed as a process whereby writing learning is sustained especially when motivation, persistence, self-regulation, positive attitude, growth mindset and internal attributions are required. Participants with high SLWSE are more likely to engage in writing, to persist when they face difficulties, to take an active role in regulating their learning, attribute success and failure to ability, effort and lack of effort and put more emphasis upon growth.

In general, Saudi L2 participants’ SLWTA seems to cluster around three patterns of development; rising, falling and fluctuating. Each pattern is characterised by its own specific path and its own features. SLWTA can be seen as a process whereby writing learning is sustained in face of ambiguities when SLWSE, low anxiety, willingness to take a risk and acceptance of mistakes as a crucial part of learning are required. Students with a high level
of SLWTA are more likely to face challenges with confidence in their capability, have low levels of anxiety, accept their mistakes and learn from them, perceive teachers’ feedback positively and take a risk writing in new genres and using new vocabulary.
CHAPTER 7

CONCLUSIONS, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

Introduction

The aim of this chapter is to summarise the major findings discussed in chapters 5 and 6. Then, several theoretical and practical implications of the study are considered. They are followed by a recognition of the limitations of the current study. Finally, recommendations for further research in L2 learning related to these areas are proposed.

Summary of research findings

This study was carried out to examine the relationship and change in two key important factors, namely self-efficacy and tolerance of ambiguity, that influence students learning of English as L2 at a public university in Saudi Arabia. To that end, the relationship between them was investigated at two levels of specificity: general and domain-specific. Subsequently, the development of SLWSE and SLWTA was traced over a period of one academic term in order to identify the change that took place in their major components as well as their developmental trajectories. As noted in chapters 2 and 3, studies that examined SE and TA, especially in Saudi contexts, are scarce. Add to this, no large scale study, to the best of our knowledge has ever examined them in relation to L2 writing. Thus, this study was an attempt to fill in the gap in the literature and to go some way further towards enhancing understanding of the researched variables. In order to answer the research questions, two general questionnaires, Questionnaire of English Self-Efficacy (QESE) and Second Language Tolerance of Ambiguity Scale (SLTAS), were utilised for collecting general data and two domain-specific questionnaires, Second Language Writing Self-Efficacy Scale (SLWSES) and Second Language Writing
Tolerance of Ambiguity Scale (SLWTAS), and written journals were utilised for collecting longitudinal domain-specific data. A Dynamic systems theory (DST) perspective was adopted to give explanation for the research results. In the following sections, the main conclusions drawn from investigating the relationship and change at different levels will be presented.

The general relationship between SLSE and SLTA (research question 1)

The analyses of the general questionnaires about SLSE and SLTA yielded three significant results. Firstly, outcomes implied that Saudi English language majors had strong self-efficacy beliefs in learning and using English. Generally speaking, they believed in their capabilities to use English to communicate with others, to express themselves, to comprehend, and for other daily life activities. This is an encouraging finding as self-efficacy is found to be associated with high motivation, positive attitude towards learning (Hsieh, 2008), low anxiety (Öztürk & Saydam, 2014), persistence in face of difficulties and effort expended in learning (Woodrow, 2011). Secondly, results indicated that Saudi English language majors had a moderate level of tolerance of ambiguity when learning and using English. Those participants appeared to benefit from the adequate level of TA that facilitates learning development (Dewaele & Ip, 2013, El-Koumy, 2000; Ely, 1995; Oxford, 1999). Extreme levels of TA are perceived to be a hindrance to successful L2 learning as its high levels cause individuals to cognitively accept new information without questioning it, which may result in fossilisation. Its low levels, on the other hand, may instill anxiety, which also impedes learning. Finally, the most noticeable finding that resulted from analysing the general questionnaires was the significant positive correlation that was revealed between SLSE and SLTA among Saudi participants. Students with high SLSE were more likely to tolerate ambiguity in learning English than their counterparts with low SLSE. In addition, students with a greater degree of tolerance of ambiguity in English learning were more inclined to display a greater amount of
confidence in their ability to learn and use English than their counterparts with low levels of SLTA. Cause-and-effect relationship cannot be determined due to statistical limitations. However, related literature did support both hypotheses that SLSE can affect and be affected by SLTA.

In the first possibility, SLSE might be a predictor of SLTA. Researchers found that high self-efficacious learners are more likely to overcome challenges and difficulties with confidence in their capability, low apprehension, persistence and efforts (Bandura, 1993; Pajares et al., 1999; Zimmerman, 2000). Such characteristics are of utmost importance in order to learn L2 which is ambiguous by its nature (Dewaele & Ip, 2013). That is, during ambiguous situations, SLSE is required in order to gain some achievements as it is the prerequisite to maintain efforts and motivate individuals to be successful.

In the second possibility, SLTA is a cause of SLSE. This hypothesis is in line with Bandura (1989) who identifies anxiety as a source that provides the basis of low SE belief. Hence, individuals with low levels of SLTA may feel threatened and experience anxiety when they face ambiguities (Dewaele & Wei, 2013; Sugawua, 2010), which in turn may influence their SLSE judgments (Bandura, 1989; Mills et al., 2006). Such a view is supported with the explanation that anxiety may impede cognitive processes and reduce the learning rate and speed (Sellers, 2000). Therefore, high levels of anxiety may contribute to low achievements (e.g. Dewaele et al. 2008; Dewaele & Ip, 2013; Horwitz, 2001; Liu, 2006) which in turn affect students’ perceptions of future judgments of SLSE.

In the last possibility, causality is perceived to exist between these two variables as multidimensional. A perception that has been recently embraced by L2 research (e.g. de Bot et al., 2007; Dörnyei et al., 2015; Larsen-Freeman & Cameron, 2008; Mercer, 2011) which considers both SLSE and SLTA as dynamic systems and such is their relationship. Further exploration of the dynamic relationship is the focus of the following section of the chapter.
Dynamic relationship between SLWSE and SLWTA (research questions 2 and 3)

Satisfactory results were obtained from SLWSES, SLWTAS and participants’ written journals, supporting the third possibility that the relationship between SLWSE and SLWTA is dynamic and multidimensional. As far as the dynamicity is concerned, the interactions between the two variables had gone through phases of being significantly correlated to not correlated. The periods before the exams were found to be critical at which the interaction between SLWSA and SLWTA became significant, hence indicates that SLWSE and SLWTA are context-dependent. The heavily examination-oriented culture of the Saudi educational context may have influenced the developmental trajectories of students’ SLWSE and SLWTA. Examinations can be a stressful time for students, especially when it is the sole assessment method they are offered. Such assessment focuses on students’ performance at one particular time, paying no attention to their overall progress throughout the academic term. This may have created two different perspectives of writing. Firstly, during non exam periods, writing tasks and homework were seen as opportunities for practice and development. Secondly, an exam situation was associated with writing for the sake of obtaining good marks which therefore was linked to stress and anxiety. Such discrepancies may have contributed to various reactions to ambiguities and mistakes. In the first instance, when they practised for development and improvement, dealing with such difficulties was not perceived as a threat, therefore was not related to how they perceived their writing ability. However, when taking the exams, these issues became critical in judging their SLWSE. That was due to the fact that ambiguities and uncertainty at the exam time could have influenced their grades as well as their perceptions of their capabilities. Similar results were obtained from studies that were conducted to investigate the relationship between SE and anxiety before the exam (e.g. Barrows et al., 2013; Qudsyi & Putri, 2016). As the exam was perceived as an anxiety-provoking situation
(Young, 1991) that might have been triggered by the fear of failure and concern over performance (Horwitz, 1989), it can be concluded that the test anxiety was a predictor of the relationship between SLWSE and SLWTA significance. Cognitively, when students experience high levels of anxiety, their functions may be reduced and therefore their performance can be affected (Eum & Rice, 2011; Galla & Wood, 2012). This may in turn diminish the levels of students’ confidence in their ability to perform well in the exam as well as elevate their worries over their mistakes and fear of failure, which they do not tolerate. In summary, the change of context, from the exam to non-exam, may have contributed to the dynamicity of the relationship between SLWSE and SLWTA.

Interestingly, having analysed participants’ written journals during various times of the academic term, they validate the questionnaires results showing that SLWSE and SLWTA are best viewed as dynamic, complex and decentralised systems, as they interacted with a wide range of factors at different times of the academic course. To begin with, SLWSE was influenced by factors such as students’ expectations, their motivation as well as their previous writing experiences at beginning of the term. Subsequently, during the period of exams, it heavily relied on exam-related variables for instance ambiguity over the exam’s duration and scope as well as teacher correction methods, students’ concerns over grades, fear of failure and making mistakes. Upon completion of the exam, their SLWSE was shaped by their perception of the exam performance and how it was attributed. Finally, after receiving their exam results, SLWSE was greatly affected by their perceptions of grades as well as the teacher feedback. Attribution and mindsets also contributed to shaping their judgments of SLWSE. Similarly, previous writing experiences, inability to express ideas, novelty of the class environment, the teacher and classmates as well as students’ high and unrealistic standards may have shaped their perceptions of SLWTA at the beginning of the term. Afterwards, just before their exams, SLWTA was influenced by their concerns over grades, their fear of failure, worries about exam
scope and duration as well as their levels of SLWSE. Having taken the exam, variables such as perceptions of their performance, concerns over correction methods, lack of knowledge, lack of transfer between languages and lack of clear rules were associated with their SLWTA. Upon receiving their exam results, their perceptions of them, their goal orientation, lack of knowledge, lack of transferability and novelty of the topic may have shaped their SLWTA at that time.

Remarkably, qualitative data confirmed the statistical findings indicating that test anxiety is a predictor of the relationship significance between SLWSE and SLWTA for several reasons. Firstly, analysis showed that students perceived exams time as similar since a great deal of resemblance was found between the factors influencing the periods before mid-term and at the end of the term, just before final exams. Non-exam periods, on the other hand, did not share such great similarities among themselves. Secondly, a similar group of variables appeared to shape students’ SLWSE and SLWTA prior to their exams such as concerns over exam scope and duration, concerns over grades and a fear of failure. These factors have a common feature, which is provoking or being provoked by anxiety. Finally, as far as the multidimensionality of the relationship is concerned, qualitative results revealed that SLWSE affected and was affected by SLWTA prior to the exams. That is, concern over ambiguities, for example, was a major component that shaped participants’ SLWSE judgments before the exams. SLWSE, on the other hand, was a key factor that influenced students’ SLWTA at these times. These findings are in line with DST perception of causality as being nonlinear, multidimensional and unpredictable (de Bot et al., 2007; Dörnyei et al., 2015; Larsen-Freeman & Cameron, 2008; Mahmoodzadeh & Gkonou, 2015).
Change in SLWSE and SLWTA and their typical developmental trajectories (research questions 4 and 5)

This study revealed that the change in SLWSE over five testing points in one term was not statistically significant. This might indicate that English majors may have internalised beliefs in regard to what they are capable to do and exert in L2 writing. Bandura (1977) argues that when strong self-efficacy beliefs are internalised, minor or occasional failures do not have major effects on them. Speaking from a DST perspective, Saudi English majors seem to have strong self-efficacy beliefs that settle down in deep attractor states and therefore display a relatively stable development. Only a strong perturbation can make participants’ SLWSE jolt out of its state and cause significant changes, an alteration which is lacking in this study.

However, this does not necessarily mean that SLWSE is a static construct, rather it showed various patterns of changes. Findings indicated that SLWSE develops in three different patterns, namely: upward, downward and fluctuating. Generally speaking, fluctuating SLWSE may be significantly associated with the change in factors such as mindsets and attribution. Growth mindset as well as internal attribution correspond to an increase in the levels of SLWSE while fixed mindsets as well as external attribution relate to a decline in its levels. Stability in regard to these two factors signifies a consistent and regular direction of the developmental trajectory. Those three variables share a common belief in the possibility of controlling learning outcomes. When students believe they exert control over their performance results, they tend to expend more efforts, persist when they struggle, recover from their failure, which ultimately enhance their learning experiences.

As far as SLWTA is concerned, statistical results revealed that the change throughout the academic term in SLWTA is statistically significant. In general, Saudi English majors’ SLWTA increased towards the end of the course. SLWTA seems able to move out from an attractor state, that is characterised with a low level of tolerance which governed its
development for a while, towards another state with higher tolerance. The outcomes of this study may reveal that Saudi students’ beliefs in regard to their ability to tolerate ambiguities may be less internalised, thus, they fluctuated (Piniel & Csizér, 2015).

Three different patterns of changes in SLWTA developmental trajectories took place among students across the academic term; upward, downward and fluctuating. In general, fluctuating SLWTA appears to be strongly linked to the change in SLWSE, their levels of anxiety as well as their perceptions of mistakes. An increase in SLWSE, a decrease in anxiety and positive perceptions of mistakes contribute to a rise in SLWTA levels while low levels of SLWSE, high anxiety levels and a negative view of mistakes signify a decline in SLWTA. Stability in these three factors entails a consistent and regular direction of the developmental trajectory.

To sum up, it may be argued that Saudi students tend to have more internalised beliefs about their L2 writing abilities and less internalised ones in respect to their capabilities to face ambiguities in L2 writing context. However, both beliefs witnessed a fluctuating pattern in which several factors came to play a vital role. Mindsets and attribution are found to be crucial in defining the direction of SLWSE developmental trajectories while anxiety, SLWSE and perceptions of mistakes determine the direction of SLWTA developmental trajectories.

**Research implications**

**Theoretical implications**

The findings of this study have contributed significantly to the existing literature of self-efficacy, and tolerance of ambiguity in L2 learning. First, at the general English level, a positive correlation was reported between the two variables. Then, the research moves a step further in investigating the nature of the constructs and the relationship between them in a particular domain, writing. To the best of my knowledge, it is the first large-scale study that investigates
the relationship between self-efficacy and tolerance of ambiguity in L2 context. This study could be of considerable value as it fills a gap in the literature. Longitudinal research revealed that the relationship between these two factors was found to be complex and dynamic, given the fact that various sets of factors constitute them at different periods of time, therefore their developmental trajectories were non-linear and hence unpredictable.

Secondly, this study adopted a DST perspective in order to explain the complex findings of this study, which answered the call in L2 literature to incorporate a DST approach to the study of L2 affective development. It offered a comprehensive account of the nature of SLWSE and SLWTA as complex dynamic systems that evolved over time and depended on their context. Applying this approach was mainly undertaken for its enormous explanatory potential. It has allowed the researcher to investigate L2 learners as a whole system that is composed of different sub-systems, among them SLWSE and SLWTA. Furthermore, these systems are inseparable from their contexts, which enabled the researcher to gain more insights into the role of the teacher and classroom in terms of SLWSE and SLWTA.

Another advantage is that DST advocates researching the wholeness of the system showing its real nature and it avoids distorting realities, which ultimately increases the reliability of the findings. Additionally, it values individual variations among participants and does not view them as average. Unlike traditional perspectives of variables as fixed, it investigates the change in order to understand it and what factors trigger it. Therefore, it approached systems as complex and explored its interconnectedness and shed light on them as a whole. Moreover, it is suitable with longitudinal research design, tracing the developmental trajectories of the studied variables.

Finally, a significant contribution of this current study is in its presenting an example of applying DST approach to the explanation of L2-related variables. L2 researchers such as Dörnyei, MacIntyre and Henry (2015) indicate that using DST in L2 is still in its infancy and
researchers spend more time theorising it than using it practically in their studies. This research will, helpfully, encourage those who view the concepts of DST favourably, but are wary of using it in their own research.

**Implications for practice**

The findings of this study could be of considerable value to L2 educational policy makers, teacher trainers, practitioners and teachers. Firstly, the results of the current study conducted in Saudi educational context, showed the importance placed on the final assessment, which is known to provoke anxiety and stress among students. Alternative methods should be used, for instance low stakes or formative assessment which focuses on continuous progress as opposed to final exam results or a combination of formative and summative assessment to allow for a build up of SE and to mitigate anxiety around exams. This amendment would have a beneficial effect on the students, not only by relieving their anxiety, but also by providing them with more opportunities to assess their individual progress.

Additionally, the dynamicity of self-efficacy beliefs and the fact that they are not static encourages teacher trainers to prepare teachers to help their students to develop a better sense of SE. Teacher training should emphasise that the teacher’s role is not only to teach, but to understand their students’ differences at an individual level, then adapt their overall teaching styles to meet their students’ individual needs. Thus, teachers can work to enhance students’ self-efficacy levels by taking into account its four sources.

Firstly, providing learning materials differentiated in difficulties ensure that each student perceives their activities as challenging enough and thus success can enhance their SLWSE (Bandura, 1977). Thus we encourage teachers to be flexible in their teaching and open to the various and different paths of progress students take. Secondly, providing students with models of how to perform a particular task facilitates the learning process especially when the
demonstrators are equal to the students in terms of their level, which ensures the manageability of the task. Thirdly, constructive feedback and constant praise are considered to be useful in persuading students to believe in themselves (Pajares, 1997). It is of vital importance to direct this feedback to the efforts made by students in order to encourage persistence, hard work and willingness to improve (Dweck, 2006). Lastly, another teacher’s role is lowering students’ anxiety by creating a stimulating learning environment where everyone feels comfortable and by teaching them to use anxiety-reducing strategies.

As far as SLWSE is concerned, students’ beliefs in particular with regards to the malleability of skills seem to play a crucial role (Dweck, 2006). Therefore, the teacher should be trained to encourage students to view writing as learnable and constantly focus on their efforts in mastering it. Additionally, the teacher should pay attention to students’ beliefs and constantly prompt those that facilitate learning and adapt the ones that hinder their development. Apart from beliefs, mastery-oriented goals should be introduced to the students and then encouraged to be embraced as they are found to be associated with growth mindsets, high levels of self-efficacy and ultimately enhance the overall achievement (e.g. Limpo & Alves, 2017; Pajares et al., 2000; Pajares & Valiante, 2001). On the contrary, performance-oriented goals and the emphasis on displaying abilities and avoiding incompetence should be discouraged as they are linked with fixed mindsets, fear of mistakes and low levels of self-efficacy, which impede their learning (e.g. Limpo & Alves, 2017; Pajares et al., 2000; Pajares & Valiante, 2001). Such encouragement could be achieved for instance through an open discussion with the class, explicitly defining these factors, highlighting their advantages and disadvantages, offering tutorials and being approachable.

Results from this study are in line with those in literature (e.g. Abdel-Latif, 2015; Öztürk & Saydam, 2014; Ruegg, 2014) that reveal the significant influence of teacher feedback on participants’ SLWSE. Teacher positive feedback on students writing development may shift
their confidence towards a strong belief in their writing abilities and diminish the impact of doubts, difficulties or drawbacks on their development. Negative feedback, on the other hand, can reinforce students’ belief in their deficiency and pull them towards a strong state of despair. There are two implications which can be drawn from this crucial finding. First, teachers should provide encouraging and positive feedback to students when they perform well. Sometimes teachers do not feel the need to give feedback on good performance. However, praising students’ writing and acknowledging their efforts are shown to boost their SLWSE as they become more confident in their writing skills and abilities. Secondly, when students underperform and their writing needs correction, teachers should couple it with constructive and informative feedback, such as drawing students’ attention to their limitations and strengths as well. Teachers should teach students to perceive their mistakes and misperformance in a more positive way and as a crucial step for success. Students who perceive their mistakes and failure as sign of incompetence or inability show low level of SLWSE. This can be rectified by creating a safe learning environment where mistakes are accepted and viewed as developmental.

As far as tolerance of ambiguity is concerned, the results indicated that it is dynamic as well as context-specific. This is a promising finding as it helps teachers to know that they can control students’ level of tolerance in order to maximise their learning potential. Moreover, encouraging learners to move out of their comfort zones and try new vocabulary, language structures or strategies may have a beneficial effect on their development (Dahbi, 2015). Additionally, trying to prompt the students to be risk-takers may increase their levels of tolerance of ambiguity and uncertainty (Oxford, 1999). This could be achieved by a wide range of ways for instance having an open conversation with the class where the teacher stresses the importance of supporting unsuccessful attempts and models her own learning through mistakes and failures. It could be also done by demonstrating the process of risk taking, telling them
about appreciating their willingness and stating that efforts lead to improvement, therefore they are the first steps to success.

As for SLWTA, results show that it was associated with SLWSE. Therefore, helping students believe in their capability to write could enhance their ability to deal with new, complex and contradictory situations. Another way to achieve this could be through adapting their mindsets and their perceptions of mistakes (Dweck, 2006). Students’ tendency towards tolerance of ambiguity is linked with their view of mistakes as developmental. Additionally, teachers who follow the aforementioned approach and instruct students to accept their imperfections, contribute to the levels of SLWTA being increased. Furthermore, in order to ensure high levels of SLWTA, teachers need to assess their students on the basis of efforts made throughout the term taking into account the continuous progress. On the contrary, emphasis on grades as equated with success, may create additional anxiety (e.g. Dahbi, 2015; Qudsyi & Putri, 2016) and lower the levels of SLWTA. Similar to SLWSE, encouraging students to embrace mastery-oriented goals, helps them develop positive perspectives of mistakes (Limpo & Alves, 2017), which in turn reflects their ability to face challenges and uncertainty.

A further important implication concerns students’ perception of exams as stressful and their increasing demands for clarity and specific instructions regarding them. Therefore, the teacher should pay special attention to assure students and prepare the class in advance by for example doing mock tests or providing them with past papers. Moreover, it is advisable that teachers explain beforehand the exam specifications and teachers’ expectations such as mark division, pass rate, the number and type of exam questions, word limit and exam duration (Alcala, 2002). During the assessment time, the questions should be clear, simple and straightforward. It is also recommended that the teacher is available to answer any questions that may arise and clarify any doubts.
Finally, it is important to stress the finding that teaching does not necessarily cause learning. Students in this study, on the contrary, interacted differently with the affordances existed in their learning environment and thus they exhibited different learning developmental trajectories. Thus, L2 writing teachers need to be trained to provide and design rich and stimulating materials that expose their students to various modes, styles, ways of L2 writing and which can offer them different affordances, that is, different possibilities for learning different writing skills. Additionally, teachers should be able to allow for the possibility that various perceptions of SLWSE and SLWTA evolve over time, therefore their teaching style needs to be flexible and tailored according to the class expectations. It may be advisable that teachers continuously verify and evaluate the contextual factors in order to adapt their lessons to the students’ needs, which ensures maximum learning outcomes. Furthermore, it is necessary that teachers are constantly trained with regard to their personal development by attending webinars and updating their existing knowledge of SLWSE and SLWTA in order to help students to maximise their learning potential.

Limitations

The current study experienced some limitations that were unavoidable owing to several aspects which affected the scope of this research. These restrictions concerned the research time, participants and methodology. Further details are given below:

1- The development of SLWSE and SLWTA were traced over the period of one academic term and data was collected at five points of time. Because the study took place in a university, one term was the longest period of time possible to investigate the same class before the classmates and the teacher change for next term. Therefore, longer term change was inevitably not able to be seen.
2- Due to the nature of the Saudi educational system, which advocates gender oriented educational institutions, the results of the study were collated solely from female participants. Had there been a possibility of obtaining the answers from males, the results might have been different in terms of the relationship between self-efficacy and tolerance of ambiguity.

3- Considering the fact that participants’ achievements were not precisely measured and instead relied on their perceptions of results, findings from this study should be used with caution in addressing the relationship between the writing achievements and these two studied variables as the actual grades were not obtained by the researcher.

4- Another limitation concerns the use of written journals as the sole source for qualitative data. Cases have been encountered where participants wrote very little or wrote about unrelated subjects. Had it been coupled with interviews or lesson observations, the data would have been more thorough.

5- Finally, as the data collection time points were fairly intensive in terms of academic demands (exam preparation and results), obtaining additional data during a regular term time could have added more insights to our understanding of these two variables as well as students’ behaviour.

**Suggestions for further research**

Findings from this study have posed several questions for further research. As expected, further research is essential to refine and further elaborate the research’s novel outcomes:

1. SE and TA are domain-specific and vary from one domain to another. Therefore, it is recommended to replicate the current study by investigating the dynamicity of the interaction between SE and TA in relation to other language skills such as L2 reading,
speaking and listening. Findings from such studies may help to draw significant implications for the teaching of English as a L2.

2. It is recommended to investigate the dynamic change in SLWSE and/or SLWTA from the participant’s retrodictive perspective. Interviewing participants after finishing their L2 writing course to comment on their developmental trajectories and to discuss their ups and downs may result in rich and deep understanding of the changes in SLWSE and/or SLWTA.

3. Part of the results can be attributed to the specific context of this current study. Periods before the exam were found to be crucial to the interaction between SLWSE and SLWTA. Therefore, replicating this study in another context that is not exam-oriented is strongly recommended.

4. Writing performance in this study was not measured directly as the researcher relied on participants’ perceptions of their progress. Therefore, it is recommended that a new study will be conducted taking into account participants’ achievement, based on grade, and how it relates to SLWSE and/or SLWTA developmental trajectories.

5. Mindset was a crucial factor that appeared to influence participants’ SLWSE and SLWTA at different times of the term. Given the fact that it has not been well researched in L2, a study that investigates the changes in L2 students’ mindsets and/or its relation to the two variables would be beneficial to further academic work.
REFERENCES


APPENDICIES

Appendix A  Questionnaire of English self-efficacy

On a scale from 0 (not confident at all) to 100 (completely confident), show how confident you feel when you perform the following tasks necessary for your work. You may use any number between 0 and 100.

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
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<th>70</th>
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<tbody>
<tr>
<td>Not confident</td>
<td>Completely confident</td>
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</table>

1. Can you understand stories told in English?
2. Can you finish your homework of English reading independently?
3. Can you understand American English TV programs?
4. Can you introduce your school in English?
5. Can you compose messages in English on the internet (face book, twitter, etc.)?
6. Can you give directions from your classroom to your home in English?
7. Can you write English compositions assigned by your teacher?
8. Can you tell a story in English?
9. Can you understand radio programs in English speaking countries?
10. Can you understand English TV programs made in Saudi?
11. Can you leave a message to your classmate in English?
12. When you read English articles, can you guess the meaning of unknown words?
13. Can you make new sentences with the words just learned?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>14. Can you write email messages in English?</td>
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<td>15. If your teacher gives you a tape-recorded English dialogue about</td>
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<td>school life, can you understand it?</td>
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<td>16. Can you understand the English news on the Internet?</td>
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<td>17. Can you ask questions to your teacher in English?</td>
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<td>18. Can you make sentences with English phrases?</td>
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<td>19. Can you introduce your English teacher in English?</td>
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<td>20. Can you discuss in English with your classmates some topics in which</td>
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<td>all of you are interested?</td>
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<td>21. Can you read English short novels?</td>
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<td>22. Can you understand English movies without Arabic subtitles?</td>
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<td>23. Can you answer your teachers’ questions in English?</td>
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<td>24. Can you understand English songs?</td>
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<td>25. Can you read English newspapers?</td>
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<td>26. Can you find the meaning of new words by using English–English</td>
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<tr>
<td>dictionaries?</td>
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<td>27. Can you understand numbers spoken in English?</td>
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<td>28. Can you write diaries in English?</td>
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<td>29. Can you understand English articles about Saudi culture?</td>
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<td>30. Can you introduce yourself in English?</td>
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<td>31. Can you write an article about your English teacher in English?</td>
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<tr>
<td>32. Can you understand new lessons in your English book?</td>
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</table>

Thank you
Appendix B  Second language tolerance of ambiguity scale

Please respond to the statements as they apply to your study of English:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I am reading something in English, I feel impatient when I do not totally understand the meaning.</td>
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<td>2. It bothers me that I do not understand everything the teacher says in English.</td>
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<td>3. When I write English compositions, I do not like it when I cannot express my ideas exactly.</td>
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<td>4. It is frustrating that sometimes I do not understand completely some English grammar.</td>
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<td>5. I do not like the feeling that my English pronunciation is not quite correct.</td>
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<td>6. I do not enjoy reading something in English that takes quite a while to figure out completely.</td>
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</table>
7. It bothers me that even though I study English grammar, some of it is hard to use in speaking and writing.

8. When I am writing in English, I do not like the fact that I cannot say exactly what I want.

9. It bothers me when the teacher uses an English word I do not know.

10. When I am speaking in English, I feel uncomfortable if I cannot communicate my idea clearly.

11. I do not like the fact that sometimes I cannot find English words that mean the same as some words in my own language.

12. One thing I do not like reading in English is having to guess what the meaning is.

**Thank you**
Appendix C    Second language writing self-efficacy scale

On a scale from 0 (not confident at all) to 100 (completely confident), show how confident you feel when you perform the writing tasks necessary for your work. You may use any number between 0 and 100.

<p>| | | | | | | | | | | |</p>
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<td>100</td>
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<tr>
<td>Not confident</td>
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<td></td>
<td></td>
<td></td>
<td>Completely confident</td>
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</table>

1. I can correctly spell all words in an essay.

2. I can correctly punctuate an essay.

3. I can correctly use all parts of speech in an essay.

4. I can write simple sentences with good grammar.

5. I can correctly use singulars and plurals and prepositions and verb tenses

6. I can write a strong paragraph that has a good topic sentence or main idea.

7. I can write paragraphs with details that support the ideas in the topic sentences or main ideas.

8. I can write a proper conclusion.

9. I can write a well-organised and sequenced paper with good introduction, body, and conclusion.

10. I can get ideas across in a clear manner by staying focused without getting off the topic.

11. I can write across different genres with good expressions.

12. When editing my writing drafts, I can identify my mistakes.
13. I can edit drafts written by my classmates.

14. I can get an excellent grade in the next assignment.

Thank you
Appendix D  Second language writing tolerance of ambiguity scale

Please respond to the statements as they apply to you when writing in English:

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</thead>
<tbody>
<tr>
<td>1. When I write English compositions, I do not like it when I cannot express my ideas exactly.</td>
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<tr>
<td>2. It bothers me that even though I study English grammar, some of it is hard to use in writing.</td>
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<td>3. When I am writing in English, I do not like the fact that I cannot say exactly what I want.</td>
<td></td>
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</tr>
<tr>
<td>4. I do not like the fact that sometimes I cannot find English words that mean the same as some words in my own language.</td>
<td></td>
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</tr>
<tr>
<td>5. Sometimes, I do not write more to avoid making mistakes.</td>
<td></td>
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</tr>
<tr>
<td>6. I got my last essay proofread before I submit it.</td>
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<tr>
<td>7. Sometimes, I use vocabulary even if I am not sure they are correct.</td>
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<tr>
<td>8.</td>
<td>I enjoy writing essays in English that take a while to finish completely.</td>
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</tr>
<tr>
<td>9.</td>
<td>I do not like the feeling that my grammar is not correct.</td>
<td></td>
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</tr>
<tr>
<td>10.</td>
<td>I got overwhelmed when I have to write in a new genre.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>11-</td>
<td>it is frustrating when teachers do not give detailed instructions on the assignments such as the number of words and paragraphs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-</td>
<td>I enjoy writing long and complex sentences.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Thank you**
Appendix E  Written journals

Please write a short descriptive essay of 150 words about explaining how confident you are in your ability to write and what makes you comfortable or uncomfortable when you are writing in English. Please explain your answer with examples.
Appendix F  The Arabic version of Questionnaire of English Self-Efficacy

على مقياس يتراوح من 0 (لا يوجد ثقة على الإطلاق) إلى 100 (وائق تماماً)، يرجى توضيح إلى أي حد تشعر بالثقة عندما تقوم بأداء المهام الكتابية التالية. يمكن استخدام أي رقم بين 0 و100.

<table>
<thead>
<tr>
<th>وائق تماماً</th>
<th>100</th>
<th>90</th>
<th>80</th>
<th>70</th>
<th>60</th>
<th>50</th>
<th>40</th>
<th>30</th>
<th>20</th>
<th>10</th>
<th>0</th>
</tr>
</thead>
</table>

لا يوجد ثقة على الإطلاق

<p>| 1 | هل يمكنك فهم القصص التي يتم سردها باللغة الإنجليزية؟ |
| 2 | هل يمكنك أداء واجبات المنزلية بمفردك عندما تتضمن قراءة مصوص باللغة الإنجليزية؟ |
| 3 | هل يمكنك فهم البرامج التلفزيونية الشائعة باللغة الإنجليزية الأمريكية؟ |
| 4 | هل يمكنك التعريض بمدرستك باللغة الإنجليزية؟ |
| 5 | هل يمكنك كتابة رسائل باللغة الإنجليزية على الإنترنت (فيسبوك، تويتر، الخ)؟ |
| 6 | هل يمكنك وصف الطريق من فصلك إلى المكان الذي تتسكن فيه باللغة الإنجليزية؟ |
| 7 | هل يمكنك كتابة تعبيراً باللغة الإنجليزية تم تحديده من قبل معلمك؟ |
| 8 | هل يمكنك سرد قصة قصيرة باللغة الإنجليزية؟ |
| 9 | هل يمكنك فهم برامج الإذاعة في الدول التي تتحدث الإنجليزية؟ |
| 10 | هل يمكنك فهم البرامج التلفزيونية باللغة الإنجليزية والتي أعدت في السعودية؟ |
| 11 | هل يمكنك ترك ملاحظة باللغة الإنجليزية لطالب آخر؟ |
| 12 | عندما تقرأ مقالات باللغة الإنجليزية هل يمكنك تحديد معاني الكلمات الغير معروفة؟ |
| 13 | هل يمكنك تكوين جمل جديدة باستخدام الكلمات التي تعلمها للتو؟ |
| 14 | هل يمكنك كتابة رسالة بريد باللغة الإنجليزية؟ |
| 15 | لو أعطاك معلم اللغة الإنجليزية الخاص بك شريط مسجل لحوار عن شؤون المدرسة اليومية، هل يمكنك أن تفهم؟ |
| 16 | هل يمكنك فهم الأخبار باللغة الإنجليزية على الإنترنت؟ |</p>
<table>
<thead>
<tr>
<th>رقم</th>
<th>سؤال</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>هل يمكنك أن تسأل معلم اللغة الإنجليزية الخاص بك أسئلة باللغة الإنجليزية؟</td>
</tr>
<tr>
<td>18</td>
<td>هل يمكنك تكوين جمل عن طريق استخدام العبارات الإصطلاحية الإنجليزية (idioms)?</td>
</tr>
<tr>
<td>19</td>
<td>هل يمكنك التعرف بمدرس اللغة الإنجليزية الخاص بك باللغة الإنجليزية؟</td>
</tr>
<tr>
<td>20</td>
<td>هل يمكنك مناقشة الموضوع ذات الاهتمام العام مع رفاقك الطلاب باللغة الإنجليزية؟</td>
</tr>
<tr>
<td>21</td>
<td>هل يمكنك قراءة روايات إنجليزية قصيرة؟</td>
</tr>
<tr>
<td>22</td>
<td>هل يمكنك فهم الأفلام الإنجليزية من دون ترجمة؟</td>
</tr>
<tr>
<td>23</td>
<td>هل يمكنك إجابة أسئلة معلم اللغة الإنجليزية الخاص بك باللغة الإنجليزية؟</td>
</tr>
<tr>
<td>24</td>
<td>هل يمكنك فهم الأغاني الإنجليزية؟</td>
</tr>
<tr>
<td>25</td>
<td>هل يمكنك قراءة مقالات الجرائد الإنجليزية؟</td>
</tr>
<tr>
<td>26</td>
<td>هل يمكنك إيجاد معاني الكلمات الجديدة باستخدام القواميس الإنجليزية؟</td>
</tr>
<tr>
<td>27</td>
<td>هل يمكنك فهم الأرقام المنطوقة باللغة الإنجليزية؟</td>
</tr>
<tr>
<td>28</td>
<td>هل يمكنك كتابة مذكرات اليومية باللغة الإنجليزية؟</td>
</tr>
<tr>
<td>29</td>
<td>هل يمكنك فهم المقالات الإنجليزية التي تتحدث عن الثقافة السعودية؟</td>
</tr>
<tr>
<td>30</td>
<td>هل يمكنك التعرف بنفسك باللغة الإنجليزية؟</td>
</tr>
<tr>
<td>31</td>
<td>هل يمكنك كتابة مقالة باللغة الإنجليزية تنتمي فيها عن معلم اللغة الإنجليزية الخاص بك؟</td>
</tr>
<tr>
<td>32</td>
<td>هل يمكنك دروسك الجديدة في كتاب اللغة الإنجليزية؟</td>
</tr>
</tbody>
</table>

شكراً لكم
Appendix G The Arabic version of second language tolerance of ambiguity scale

يرجى الإشارة إلى أي حد تتفق مع الجمل التالية:

<table>
<thead>
<tr>
<th>أصوات باللغة الإنجليزية، أشعر بالضجر</th>
<th>أصوات باللغة الإنجليزية، أشعر بالضجر</th>
<th>أصوات باللغة الإنجليزية، أشعر بالضجر</th>
<th>أصوات باللغة الإنجليزية، أشعر بالضجر</th>
<th>أصوات باللغة الإنجليزية، أشعر بالضجر</th>
</tr>
</thead>
<tbody>
<tr>
<td>عندما أقرأ شيئا باللغة الإنجليزية، أشعر بالضجر</td>
<td>عندما أقرأ شيئا باللغة الإنجليزية، أشعر بالضجر</td>
<td>عندما أقرأ شيئا باللغة الإنجليزية، أشعر بالضجر</td>
<td>عندما أقرأ شيئا باللغة الإنجليزية، أشعر بالضجر</td>
<td>عندما أقرأ شيئا باللغة الإنجليزية، أشعر بالضجر</td>
</tr>
<tr>
<td>يزعجني أنني لا أفهم كل شيء يقوله المعلم باللغة الإنجليزية</td>
<td>يزعجني أنني لا أفهم كل شيء يقوله المعلم باللغة الإنجليزية</td>
<td>يزعجني أنني لا أفهم كل شيء يقوله المعلم باللغة الإنجليزية</td>
<td>يزعجني أنني لا أفهم كل شيء يقوله المعلم باللغة الإنجليزية</td>
<td>يزعجني أنني لا أفهم كل شيء يقوله المعلم باللغة الإنجليزية</td>
</tr>
<tr>
<td>يتضمن عندما لا أستطيع التعبير عن أفكاري بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>يتضمن عندما لا أستطيع التعبير عن أفكاري بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>يتضمن عندما لا أستطيع التعبير عن أفكاري بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>يتضمن عندما لا أستطيع التعبير عن أفكاري بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>يتضمن عندما لا أستطيع التعبير عن أفكاري بالضبط عندما أكتب باللغة الإنجليزية</td>
</tr>
<tr>
<td>من المحيط أنني لا أفهم أحيانا بعض قواعد اللغة الإنجليزية</td>
<td>من المحيط أنني لا أفهم أحيانا بعض قواعد اللغة الإنجليزية</td>
<td>من المحيط أنني لا أفهم أحيانا بعض قواعد اللغة الإنجليزية</td>
<td>من المحيط أنني لا أفهم أحيانا بعض قواعد اللغة الإنجليزية</td>
<td>من المحيط أنني لا أفهم أحيانا بعض قواعد اللغة الإنجليزية</td>
</tr>
<tr>
<td>يتضمن عندما أشعر بأن نطقلي للغة الإنجليزية ليس صحيح تماما</td>
<td>يتضمن عندما أشعر بأن نطقلي للغة الإنجليزية ليس صحيح تماما</td>
<td>يتضمن عندما أشعر بأن نطقلي للغة الإنجليزية ليس صحيح تماما</td>
<td>يتضمن عندما أشعر بأن نطقلي للغة الإنجليزية ليس صحيح تماما</td>
<td>يتضمن عندما أشعر بأن نطقلي للغة الإنجليزية ليس صحيح تماما</td>
</tr>
<tr>
<td>أنا لا أستطيع بقراءة شيء مكتوب باللغة الإنجليزية</td>
<td>أنا لا أستطيع بقراءة شيء مكتوب باللغة الإنجليزية</td>
<td>أنا لا أستطيع بقراءة شيء مكتوب باللغة الإنجليزية</td>
<td>أنا لا أستطيع بقراءة شيء مكتوب باللغة الإنجليزية</td>
<td>أنا لا أستطيع بقراءة شيء مكتوب باللغة الإنجليزية</td>
</tr>
<tr>
<td>يزعجني أنه على الرغم من أنني أدرس قواعد اللغة الإنجليزية في بعضها يصعب استخدامه في التحدث والكتابة</td>
<td>يزعجني أنه على الرغم من أنني أدرس قواعد اللغة الإنجليزية في بعضها يصعب استخدامه في التحدث والكتابة</td>
<td>يزعجني أنه على الرغم من أنني أدرس قواعد اللغة الإنجليزية في بعضها يصعب استخدامه في التحدث والكتابة</td>
<td>يزعجني أنه على الرغم من أنني أدرس قواعد اللغة الإنجليزية في بعضها يصعب استخدامه في التحدث والكتابة</td>
<td>يزعجني أنه على الرغم من أنني أدرس قواعد اللغة الإنجليزية في بعضها يصعب استخدامه في التحدث والكتابة</td>
</tr>
<tr>
<td>لا أحب حقيقة أنني أعجز عن قول ما أريد بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>لا أحب حقيقة أنني أعجز عن قول ما أريد بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>لا أحب حقيقة أنني أعجز عن قول ما أريد بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>لا أحب حقيقة أنني أعجز عن قول ما أريد بالضبط عندما أكتب باللغة الإنجليزية</td>
<td>لا أحب حقيقة أنني أعجز عن قول ما أريد بالضبط عندما أكتب باللغة الإنجليزية</td>
</tr>
<tr>
<td>أشعر بالانزعاج عندما يستخدم المعلم كلمة باللغة الإنجليزية لا أعرفها</td>
<td>أشعر بالانزعاج عندما يستخدم المعلم كلمة باللغة الإنجليزية لا أعرفها</td>
<td>أشعر بالانزعاج عندما يستخدم المعلم كلمة باللغة الإنجليزية لا أعرفها</td>
<td>أشعر بالانزعاج عندما يستخدم المعلم كلمة باللغة الإنجليزية لا أعرفها</td>
<td>أشعر بالانزعاج عندما يستخدم المعلم كلمة باللغة الإنجليزية لا أعرفها</td>
</tr>
</tbody>
</table>
أهلاً بك.

أشعر بالإحراج عندما لا أستطيع إيضاح فكريتي بوضوح عندما أتحدث باللغة الإنجليزية.

لا أحب حقيقة أنني في بعض الأحيان لا أستطيع أن أجد الكلمات الإنجليزية التي لها نفس معنى الكلمات في لغتي الأم.

شيء واحد يجعلني لا أحب القراءة باللغة الإنجليزية وهو حاجتي إلى تخمين المعنى.

شكراً لكم.
Appendix H  The Arabic version of second language writing self-efficacy scale

على مقياس يترواح من 0 (لا يوجد ثقة على الإطلاق) إلى 100 (واثق تماما)، يرجى توضيح أي حد تشعر بالثقة عندما تقوم بأداء المهام الكتابية التالية. يمكنك استخدام أي رقم بين 0 و100.

<table>
<thead>
<tr>
<th>100</th>
<th>90</th>
<th>80</th>
<th>70</th>
<th>60</th>
<th>50</th>
<th>40</th>
<th>30</th>
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<th>10</th>
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<tbody>
<tr>
<td>لا يوجد ثقة على الإطلاق</td>
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<table>
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<tr>
<th>117</th>
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<tbody>
<tr>
<td>لا يوجد في الگلاطهات بحلاوامة مقال ما</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>يمكنني وسط علامات الترقيم لمقال ما بشكل صحيح</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>30</th>
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</thead>
<tbody>
<tr>
<td>يمكنني استخدام جميع أجزاء الكلام (الأسم والفعل وحروف الجر) بشكل صحيح في مقال ما</td>
</tr>
</tbody>
</table>

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>يمكنني كتابة جمل بسيطة باستخدام قواعد سليمة</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>يمكنني استخدام صيغ المفرد وصيغ الجمع وحروف الجر وزمانة الفعل بشكل صحيح</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>80</th>
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</thead>
<tbody>
<tr>
<td>يمكنني أن أكتب فكرة قوية مستخدمة جملة موضوع جيدة (topic sentence) رئيسية جدا</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>يمكنني أن أكتب فقرات تحوي تفاصيل تدعم الفكرة الرئيسية للموضوع</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>أستطيع أن أكتب خاتمة ملهمة</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>أستطيع أن أكتب مقال منظم ومتسلسل الأفكار مع مقدمة، وعرض وخاتمة جيدين</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>يمكنني أن أعبر عن أفكاري بطريقة واضحة من خلال البقاء مركز دون الخروج عن صلب الموضوع</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>يمكنني أن أكتب بتعابير جيدة في أغراض كتابية مختلفة</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>عندما أقوم بتحرير مسودات الكتابة الخاصة بي، أستطيع أن أجد أخطائي</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>يمكنني تصحيح مسودات كتبها زملاني في الفصل</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>يمكنني الحصول على تقدير ممتاز في واجب الكتابة القادم</td>
</tr>
</tbody>
</table>

شكرا لكم.
Appendix I  The Arabic version of second language writing tolerance of ambiguity scale

يرجى الإشارة إلى أي حد تتفق مع الجمل التالية:

<table>
<thead>
<tr>
<th>لا اتفاق</th>
<th>لا اتفاق</th>
<th>لا اتفاق</th>
<th>أتفاق</th>
</tr>
</thead>
<tbody>
<tr>
<td>بشدة</td>
<td>بشدة</td>
<td>بشدة</td>
<td>بشدة</td>
</tr>
</tbody>
</table>

- أتضايق عندما لا أستطيع التعبير عن أفكاري بالضبط عندما أكتب باللغة الإنجليزية.
- يزعجي من الرم من أنه أدرس قواعد اللغة الإنجليزية في بعضها يصعب استخدامه في الكتابة.
- لا أحب حقيقة أنها أعزع عن قول ما أريد بالضبط عندما أكتب باللغة الإنجليزية.
- لا أحب حقيقة أنها في بعض الأحيان لا أستطيع أن أجد الكلمات الإنجليزية التي لها نفس معنى الكلمات في لغتي الأم.
- أحياناً، أنا لا أكتب كثيراً حتى أقل من ارتكابي للخطأ.
- لقد قمت بتصحيح مقالتي الأخير قبل أن أقدمه.
- في بعض الأحيان استخدم مفردات حتى لو كنت ليست متاكدا من أنها صحيحة.
- استمتع بكتابة المقالات باللغة الإنجليزية والتي تحتاج لبعض الوقت لإنهائها بالكامل.
- أتضايق عندما أشعر بأن القواعد التي أستخدمها غير صحيحة.
- أريدك عندما يتوجب علي الكتابة في نوعية جديدة.
لا يمكنني قراءة النص العربي بشكل طبيعي. يرجى تقديم النص باللغة الإنجليزية.
يرجى كتابة مقال وصفي قصير من 150 كلمة تتحدث فيه عن مدى ثقتك في قدرتك على الكتابة وما الذي يجعلك مرتاح أو غير مرتاح عندما تكتب باللغة الإنجليزية. الرجاء دعم اجابتك بذكر الأسباب وذكر بعض الأمثلة والمعواقف التي كان لها اثر عليك.
Appendix K  Participant information sheet for general questionnaires

Study title
Second language writing self-efficacy and tolerance of ambiguity: an investigation of their interactions and developmental change in the Saudi higher education context

Invitation
I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or would like more information.
Take time to decide whether or not to take part.

What will happen
In this study, you will be asked to fill in two questionnaires. It is expected to take from 20 to 30 minutes. Please note that there is no right or wrong answers as I am interested in your personal judgments. Providing sincere answers will maximise the validity of the research.

Participants’ rights
You may decide to stop being a part of the research study at any time without explanation.
You have the right to ask that any data you have supplied to that point be withdrawn/destroyed.
You have the right to omit or refuse to answer or respond to any question that is asked of you.
You have the right to have your questions about the procedures answered if you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.
Benefits and risks

There are no known benefits or risks for you in this study. Although we cannot promise the study will help you, the information we get from the study will help to increase the understanding of the L2 learning.

Cost, reimbursement and compensation

Your participation in this study is voluntary.

Confidentiality/anonymity

All personal information which is collected about you during the course of the research will be kept strictly confidential. Personal data will not be kept for longer than is necessary. All personal and identifiable data will be kept in a locked cabinet and online on a password protected device that is accessed by researcher only to protect them from unauthorised access or accidental loss, damage or destruction. In addition, all questionnaires data will be anonymised in final research publication as well information about the place of the study.

Further information

The researcher will be glad to answer your questions about this study at any time. You may contact her at ********* or email her at ************ If you are interested in the research results, please leave your email address.
Appendix L  Participant consent form

- I have read the information sheet about this PhD study
- I have had an opportunity to ask questions and discuss this study
- I have received satisfactory answers to all my questions
- I have received enough information about this study
- I understand that I am / the participant is free to withdraw from this study and at any time without giving a reason for withdrawing
- I understand that my research data may be used for a further project, journal articles and conference papers, in anonymous form.
- I agree to take part in this PhD study

<table>
<thead>
<tr>
<th>Signed (participant)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name in block letters</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of researcher:</th>
<th>Date</th>
</tr>
</thead>
</table>

| This PhD study is supervised by: |

| Researcher’s contact details: |
| Email/ |
| Mobile number/ |
Appendix M  Reliability of pilot study general questionnaires

Reliability of QESE

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.974</td>
</tr>
<tr>
<td>N of Items</td>
<td>.973</td>
</tr>
<tr>
<td>N of Items</td>
<td>32</td>
</tr>
</tbody>
</table>

Reliability of SLTAS

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.863</td>
</tr>
<tr>
<td>Standardized Items</td>
<td>.865</td>
</tr>
<tr>
<td>N of Items</td>
<td>12</td>
</tr>
</tbody>
</table>
Appendix N  Pilot study longitudinal data analyses

L2 WRITING SELF-EFFICACY

Shan  Jasmen  Diana
Dear Sana

I am pleased to inform you that based on the information provided, the Research Ethics Panel have no objections on ethical grounds to your project.

Yours sincerely

Deborah Woodman

On Behalf of CASS Research Ethics Panel
Appendix P  Participant information sheet for domain-specific questionnaires

Study title
Second language writing self-efficacy and tolerance of ambiguity: an investigation of their interactions and developmental change in the Saudi higher education context

Invitation
I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or would like more information. Take time to decide whether or not to take part.

What will happen
In this study, you will be asked to fill in two questionnaires. It is expected to take from 10 to 20 minutes. Please note that there is no right or wrong answers as I am interested in your personal judgments. Providing sincere answers will maximise the validity of the research. Additionally, you will be asked to write a short essay to explain and justify your answers.

Participants’ rights
You may decide to stop being a part of the research study at any time without explanation. You have the right to ask that any data you have supplied to that point be withdrawn/destroyed. You have the right to omit or refuse to answer or respond to any question that is asked of you.
You have the right to have your questions about the procedures answered. If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.

**Benefits and risks**

There are no known benefits or risks for you in this study. Although we cannot promise the study will help you, the information we get from the study will help to increase the understanding of the L2 learning.

**Cost, reimbursement and compensation**

Your participation in this study is voluntary.

**Confidentiality/anonymity**

All personal information which is collected about you during the course of the research will be kept strictly confidential. Personal data will not be kept for longer than is necessary. All personal and identifiable data will be kept in a locked cabinet and online on a password protected device that is accessed by researcher only to protect them from unauthorised access or accidental loss, damage or destruction. In addition, all questionnaires data will be anonymised in final research publication as well information about the place of the study.

**Further information**

The researcher will be glad to answer your questions about this study at any time. You may contact her at ******** or email her at ******** If you are interested in the research results, please leave your email address.
I am somehow not good at writing, I have a good vocabulary size but I am unable to use them to express my ideas and organise them. Most of the time, I feel reluctant to write essays and wish I could write them properly, move easily from one idea to another. I want to learn new vocabulary and use them in my future writing. Sometimes, when I write I cannot find the correct objectives and verbs for my sentences.

During the first writing class, I felt uncomfortable specially when I did not understand the teacher. This will have a negative effect on my homework. The teacher gave us a homework and I am stressed, because I cannot write.
Appendix R Normality tests for SLSE and SLTA

<table>
<thead>
<tr>
<th>Tests of normality for SLSE and SLTA</th>
<th>Kolmogorov-Smirnov(^a)</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>df</td>
<td>Sig.</td>
</tr>
<tr>
<td>SLSE .090</td>
<td>184</td>
<td>.001</td>
</tr>
<tr>
<td>SLTA .066</td>
<td>184</td>
<td>.052</td>
</tr>
</tbody>
</table>

\(^a\) Lilliefors Significance Correction
Distribution of Saudi SLSE’s scores.
Distribution of Saudi SLTA’s scores.
Appendix S  Normality tests for SLWSE and SLWTA at five points of time.

Tests of normality for SLWSE and SLWTA at five points of time

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov(^a)</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic  df  Sig.</td>
<td>Statistic  df  Sig.</td>
</tr>
<tr>
<td>SETime1</td>
<td>.199  30  .004</td>
<td>.888  30  .004</td>
</tr>
<tr>
<td>SETime2</td>
<td>.101  30  .200(^*)</td>
<td>.967  30  .449</td>
</tr>
<tr>
<td>SETime3</td>
<td>.160  30  .048</td>
<td>.961  30  .329</td>
</tr>
<tr>
<td>SETime4</td>
<td>.164  30  .039</td>
<td>.924  30  .034</td>
</tr>
<tr>
<td>SETime5</td>
<td>.153  30  .070</td>
<td>.906  30  .012</td>
</tr>
<tr>
<td>TATime1</td>
<td>.092  30  .200(^*)</td>
<td>.966  30  .436</td>
</tr>
<tr>
<td>TATime2</td>
<td>.144  30  .112</td>
<td>.937  30  .073</td>
</tr>
<tr>
<td>TATime3</td>
<td>.132  30  .189</td>
<td>.960  30  .304</td>
</tr>
<tr>
<td>TATime4</td>
<td>.108  30  .200(^*)</td>
<td>.966  30  .434</td>
</tr>
<tr>
<td>TATime5</td>
<td>.116  30  .200(^*)</td>
<td>.951  30  .183</td>
</tr>
</tbody>
</table>

\(^*\). This is a lower bound of the true significance.

a. Lilliefors Significance Correction
Appendix T  Participants SLWSE developmental trajectories

SE-Participant 1

SE-Participant 2
SE-Participant 30

1160
950
1200
1320
1360

0
200
400
600
800
1000
1200
1400
1600

1
2
3
4
5
Appendix U  Participants SLWTA developmental trajectories

[Graphs showing developmental trajectories for Participant 1 and Participant 2.]
TA-Participant 3

TA-Participant 4

TA-Participant 5
TA-Participant 25

TA-Participant 26

TA-Participant 27