



An-Najah National University
Faculty of Graduate Studies

**CONTROL-VALUE APPRAISALS, ACHIEVEMENT
EMOTIONS AND ENGAGEMENT; A TASK-VALUE
INTERVENTION SECOND LANGUAGE ACQUISITION**

By
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**This Dissertation is Submitted in Partial Fulfillment of the Requirements for the
Degree of Ph.D. in Learning and Teaching, Faculty of Graduate Studies, An-Najah
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2023

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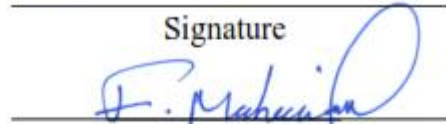
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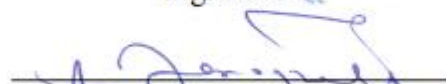
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In accordance with An-Najah National University Deans Council regulations for the award of Doctor of Philosophy, the following paper has been published after its extraction from the dissertation:

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Dedication

I dedicate this thesis to the unwavering love and support of my incredible parents, sister, and brother who have been my pillars of strength throughout this journey. Your endless encouragement, sacrifices, and belief in me have shaped the person I am today. This achievement would not have been possible without your guidance and unwavering faith in my abilities. Thank you for always being there for me.

To my loving husband, you have been my rock and my biggest source of inspiration. Your unwavering support, patience, and understanding have carried me through the challenges of this academic pursuit. Your belief in my dreams and constant encouragement have fueled my determination to succeed. Thank you for being my partner in life.

To my precious children, you are my greatest motivation and the driving force behind my pursuit of knowledge. Your smiles, laughter, and boundless love have given me the strength to persevere during the toughest times. I dedicate this thesis to you with the hope that it serves as a testament to the importance of education, resilience, and the power of dreams. May it inspire you to fearlessly chase your own aspirations.

To my supervisors, whose guidance and expertise have been invaluable throughout this research journey, I extend my deepest gratitude. Your mentorship, constructive feedback, and belief in my potential have played a pivotal role in shaping the outcome of this work. Your dedication to excellence and commitment to my academic growth have been truly inspiring. Thank you for pushing me beyond my limits and for instilling in me a passion for knowledge.

To my dear friends, who have been my constant source of support, laughter, and solace, I am forever grateful for your presence in my life. Your unwavering belief in me, and countless pep talks have made this journey more enjoyable and meaningful. Thank you for being my cheerleaders, my sounding boards, and my pillars of strength. Your friendship has been a cherished gift that I will forever hold dear.

This thesis is dedicated to the extraordinary individuals who have shaped my life in countless ways. Your love, support, and belief in my abilities have been instrumental in reaching this milestone. May this dedication serve as a small token of my immense appreciation for all that you have done. I am forever grateful and blessed to have you by my side.

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To everyone mentioned above and those who have contributed in various ways but may not be named here, I offer my deepest appreciation. This thesis is a collective effort, and I am honored to have had the privilege of working with such exceptional individuals. Thank you for making this achievement possible and for your unwavering support.

Declaration

I, the undersigned, declare that I submitted the dissertation entitled:

CONTROL-VALUE APPRAISALS, ACHIEVEMENT EMOTIONS AND ENGAGEMENT; A TASK-VALUE INTERVENTION SECOND LANGUAGE ACQUISITION

I declare that the work provided in this dissertation, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's Name: Maysa Mahdi Ahmad Abuzant

Signature:

Maysa Abuzant

Date:

27/07/2023

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Abstract

Emotions in second language acquisition have started to gain immense attention in the past few years. One of the main theories that is being used to investigate students' achievement emotions is Pekrun's Control Value Theory of Achievement Emotions. This research, using the Control Value Theory of Achievement Emotions, aims to investigate the relationship between control and value appraisals, achievement emotions and engagement. To achieve these aims, this research was divided into two studies; Study 1 adopted a correlational design to investigate the relationship between appraisals of control and value, their interaction and the effect they have on anxiety, boredom, enjoyment, and engagement in the context of second language acquisition. Data for Study 1 was collected from 515 university students enrolled in an English language course. The data was analyzed using Hayes' PROCESS MACRO. The results indicated that students perceived intrinsic, attainment and utility value interacted differently with students perceived control to affect anxiety, boredom, enjoyment and engagement. The results highlight the role played by intrinsic value in the relationship between control and anxiety, and control and enjoyment. As for study 2, a quasi-experimental design was adopted to investigate the efficacy of a task value intervention on students' appraisals of control and value, and their effect on anxiety, enjoyment and boredom. Participants for Study 2 were 61 university level English language learners who were grouped into a control and an experiment group. Results indicated that students' value appraisals were affected by an intervention that targeted their task value, which led to students experiencing greater levels of enjoyment and lower levels of boredom and anxiety in the language classroom. The results of this study offer insights into the efficacy of a task value intervention in SLA on students' value appraisals and their emotions inside the English language classroom.

Keywords: Emotions, second language acquisition, Control-Value Theory, control appraisals, value appraisals, moderation, interaction, task value intervention.

Chapter One

Introduction, rationale and literature review

This chapter starts by providing an introduction to the topic of emotions in second language acquisition, followed by building grounds for the rationale of this research, then moving to reviewing past research on the topic and providing a theoretical framework for this study. The chapter ends with outlining the research questions and hypotheses.

1.1 Introduction

Second language acquisition (SLA) refers to learning a second language (L2) after the first language (L1) has been learned (Gass et al., 2020). The beginnings of the modern-day study of SLA have their roots in the time where much of the educational research was immersed in the cognitive revolution of linguistics, psychology and patterns of learning (Larsen-Freeman, 2018), SLA research just followed suit.

With the inability of the cognitive and behavioral sciences to explain emotions, feelings, motivations and mood, providing solid ground for the rise of affectivism (Dukes et al., 2021), emotions started to receive attention in education research. That attention came about as emotions are viewed as an interface between the individual and their environment; continually mediating between the responses and the experiences of the individual on one hand and the changing events and social situations on the other (Scherer & Moors, 2019). The importance of emotions stems out of the fact that emotions influence both how individuals interpret the world around them, and which components of that world require their attention and which may be safely discarded (Dukes et al., 2021).

Emotions have only started to make their way into SLA research quite recently. Dewaele and Li (2020) break down the progression of emotion research in SLA into three phases; the Emotions Avoidance phase, the Anxiety Prevailing phase and Positive and Negative Emotions phase. The Emotions Avoidance phase lasted up until the mid-1980s. During that time, the focus was still on the mind and emotions were considered as an irrational explanation of occurrences in SLA. After the 1980s and up until the 2010s, the role emotions played in SLA was more accepted and a link between cognition and emotions was established. However, the focus was mainly on one emotion and its role in language learning, which is anxiety (MacIntyre, 2017). More recently, and with the introduction of

Positive Psychology into SLA research (MacIntyre & Gregersen, 2012), both positive and negative emotions received due attention in SLA research, and were seen as an integral part of language learning. This marked the start of the Positive and Negative emotions phase, a phase that is also known as the *second wave positive psychology* or PP 2.0 (Macintyre et al., 2019), which is currently the focus of SLA research.

Emotions and their relation to SLA have had much interest in the past few years. The main two emotions that had the biggest share of research interest were anxiety and enjoyment, labeled as the right and left feet of every language learning (Dewaele & MacIntyre, 2016). Other emotions that have also been researched in the field of SLA include, but are not limited to, shame and guilt (Teimouri et al., 2019), joy, interest, hope, pride, hate, and sadness (Macintyre & Vincze, 2017). Boredom is also an emerging emotion of interest in SLA (Li et al., 2021; Pawlak et al., 2020), as it has been well researched in educational psychology due to its diverse effects on learning (Li et al., 2021).

Li (2020) classifies the research on emotions in language learning into three categories. The first group of research focuses on the conceptualization and measurement of the emotion using large scale samples (e.g. Dewaele & MacIntyre, 2014; Horwitz et al., 1986; Li et al., 2021). The second category of research focuses on the relationship between the emotions and learner-internal/external and teacher-centered variables (e.g.. Dewaele, 2022; Li, 2021; Saito et al., 2018). And the final category focuses on the reciprocal relationship between the different types of emotions, mostly between foreign language enjoyment and foreign language anxiety, and more recently foreign language boredom (Li & Wei, 2022).

1.2 Research Rationale

With the surge of studies on emotions in SLA and the recent interest in the topic, there has been little effort paid at clarifying the conceptualization of emotion in L2 learning as well as the underlying theories (Dewaele & Li, 2020). With this in mind, it is advised to base the research design on solid theoretical ground. Dewaele & Li, (2020) suggest two theories that could serve that purpose: The broaden-and-build theory (Fredrickson, 2001) and the Control-Value Theory of achievement emotions (CVT) (Pekrun, 2006). In an article by Shao et al., (2019), which was co-authored by Pekrun, they provide a strong

argument for why CVT can be used as the main theory to investigate emotions, their antecedents and outcomes in the SLA. This argument will be more evident in this research as we progress through the literature review section.

The current studies on emotions using the CVT lay the foundation for the employment of this theory in SLA as they validate the transferability of the theoretical underpinnings of the CVT to the SLA research (e.g. Li, 2021; Li et al., 2021; Piniel & Albert, 2018; Shao et al., 2020). However, these studies do not draw a complete picture of the how enjoyment, boredom and anxiety as achievement emotions interact with the other two dimensions of CVT; control-value appraisals as antecedent, and the achievement emotions outcomes. Moreover, the existing studies within the CVT are correlational in nature with no to little use of true or quasi-experimental design (Dewaele & Li, 2020), despite the constant recommendations of the potential efficacy of L2 classroom interventions within CVT, and the documented results of interventions in other fields which have proven successful in increasing both interest and course performance (Hulleman et al., 2017).

Furthermore, although engagement donates itself readily to the center of attention in the field of SLA due to the communicative nature of language learning (Mercer, 2019), it has attracted little attention in SLA research (Khajavy, 2021), and has not been investigated as an outcome of achievement emotions in CVT, apart from one study (Dewaele & Li, 2021). But even in that study, only extrinsic value appraisal was taken into account, dismissing the intrinsic value appraisal and the control appraisal. It has been advocated that to build a more comprehensive research design using CVT that leads to maximizing learning, it is advised to include measurements of both intrinsic and extrinsic value appraisals, as well as control appraisals. This has been empirically supported by Simonton & Garn (2020) and Putwain et al. (2021).

With that being said, this research aims at :1) using the Control-Value Theory of Achievement Emotions (Pekrun, 2006), to investigate the relationship between students' control-value appraisals, anxiety, enjoyment, boredom, and engagement, a relationship that is still unexplored in SLA. 2) to investigate the efficacy of a task-value intervention in enhancing students control-value appraisals, which according to CVT is proposed to positively correlate with positive achievement emotions and negatively correlate with the

negative emotions. If the intervention is successful, enjoyment should increase and boredom and anxiety should decrease which is proposed to have a positive effect on students' engagement. Enjoyment and boredom were chosen for the purpose of this research as they are both classified as activity aroused emotions, enjoyment as an activating emotion while boredom as a deactivating one. Anxiety, on the other hand, was selected as it has a somewhat arguable effect on engagement (Linnenbrink, 2007) between activating and deactivating. Moreover, in line with the second wave of positive psychology into SLA, it has been advised to integrate both negative and positive emotions in the research agenda (Macintyre et al., 2019).

1.3 Literature review

For the purpose of this research three achievement emotions will be under investigation in the context of SLA, namely anxiety (negative deactivating outcome-related emotion), boredom, (negative deactivating activity-related emotion), and enjoyment (a positive activating activity-related emotion). Anxiety in SLA has been reported to be a common occurrence within language learners (Macintyre & Wang, 2022), to the extent that it was labeled as one of the two feet of every language learner (Dewaele & MacIntyre, 2016). It has also proved to have a pervasive effect on language learning (Macintyre & Wang, 2022), and linked to students hesitation to engage with new learning situations (Macintyre & Vincze, 2017). Enjoyment in language learning has been reported to co-occur alongside anxiety (Dewaele & MacIntyre, 2014; J. M. Dewaele & MacIntyre, 2016), and it has been linked to instigating higher levels of engagement in the classroom (Feng et al., 2022; Oga-Baldwin, 2019; Zeng, 2021). Boredom, on the other hand, has been reported to have an aversive effect on engagement (Li et al., 2021). Moreover, it is a relatively new area of research in SLA (Kruk et al., 2022b), hence more light needs to be shed on it.

This section will start by elaborating on the constructs of anxiety, enjoyment and boredom in the context of SLA. Then will move to establishing the control-value theory of achievement emotions as a theoretical underpinning. After that, engagement will be introduced as an outcome of CVT. The section will end with explaining the task value intervention and outlining the theoretical grounds for developing the task value intervention outline that will later be used in the quasi-experimental part of this research.

1.3.1 Anxiety in SLA

Anxiety has had its fair share of interest in SLA research. This interest roughly started in the early 1980s (Macintyre & Wang, 2022) and was given more grounds with the Horwitz, et al. 1986's article that aimed to conceptualize anxiety that is specifically aroused in the contexts of second and foreign language learning. Foreign Language Anxiety (FLA) is defined as "a distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom learning arising from the uniqueness of the language learning process" (Horwitz et al., 1986, p. 128). The use of "distinct" indicates that foreign language anxiety is viewed as state anxiety arising in/from specific situations, in this case from learning a foreign language (Dewaele & Alfawzan, 2018). Later, Horwitz (2017) elaborated on this by stating that learners who experience foreign language anxiety "have the trait of feeling state anxiety" (Horwitz, 2017, p. 33) whenever they are engaged in any form of language use or learning due to them feeling distressed at the restrictions of the foreign language which is preventing them from being themselves and connecting with others in a genuine way.

The early beginnings of research on anxiety in SLA yielded inconsistent findings regarding anxiety's effect on the different aspects of language learning (Macintyre & Wang, 2022; Shao et al., 2019). These inconsistencies were also reported in other educational fields, which has led to an on-going lingering discussion of anxiety having a debilitating or facilitating effect on learning (Horwitz, 2017). According to Macintyre & Wang (2022), these inconsistencies could be explained through the lens of the broaden-and-build theory of positive emotions (Fredrickson, 2001, 2005). The facilitating effect occurs when experiencing a small amount of anxiety during a learning task or situation prompts the learner to evaluate the consequences of failing that task, which in its turn triggers the learner to employ coping strategies to avoid those consequences. However, when anxiety arousal is too high, it could lead to debilitating effects and negatively affect language learning (Macintyre & Wang, 2022).

However, with a better understanding of anxiety, later findings seem to agree that there is a negative correlation between anxiety and learners' achievement, progress and performance in L2 (Dewaele & Li, 2020; Li et al., 2021; Macintyre & Wang, 2022). In a meta-analysis of 97 studies between 1985 and 2017 investigating foreign language anxiety and achievement, (Teimouri et al., 2019) concluded that in SLA research anxiety

is negatively correlated with L2 achievement. Other constructs that were reported to be negatively impacted by foreign language anxiety were cognitive processing and language performance (MacIntyre & Gardner, 1994), motivation (Teimouri, 2017), and engagement (Macintyre & Vincze, 2017).

The causes of foreign language anxiety have been reported to be a result of both learner-internal factors like personality traits and motivational orientations, and learner-external factors like harsh feedback (Macintyre & Wang, 2022). In a study by Su (2022) investigating the sources of foreign language anxiety of 231 Chinese university students, self -factors were reported to account for (70%), followed by teacher factors (25.6%) and peer factors (4.4%).

1.3.2 Enjoyment in SLA

As Positive Psychology made its way into the field of SLA, enjoyment and its effects on language learning started to attract research interest (Chen et al., 2021; Li et al., 2021). In their article, MacIntyre and Gregersen (2012) building on the works of (Fredrickson, 2001, 2005) emphasized the distinctly different but equally important role played by both positive and negative emotions in the language classroom. On the one hand, negative emotions, such as anxiety, could have an adverse effect on language learning. On the other hand, positive emotions, enjoyment in this case, could have the opposite effect by broadening the learner's perspective (Fredrickson, 2005) and fostering engagement (Dewaele, 2022). This has brought attention to the effects of positive emotions, such as joy, pride and happiness, on language learning. Out of these emotions, enjoyment was the one that attracted the most attention (Dewaele & Li, 2020; Li et al., 2021). This could be credited to enjoyment being reported to have a frequent occurrence within language learners (Piniel & Albert, 2018), and its relatedness to students engaging in classroom communications in the target language (Dewaele & MacIntyre, 2022).

Enjoyment refers to emotions experienced by language learners when their psychological needs are being met and they are “experiencing desirable outcomes related to personal success and interpersonal relatedness” (Dewaele & MacIntyre, 2014, p.242). The interest in the effects of enjoyment on SLA was given more solid theoretical underpinnings with the development of the Foreign Language Enjoyment Scale (FLES) by Dewaele and MacIntyre (2014). Since then, findings have emerged reporting evidence for the positive

impact of enjoyment on foreign language acquisition and performance. In a recent meta-analysis of the effects of FL enjoyment, Botes et al. (2022) reported that there were moderate positive correlations between FLE and willingness to communicate, academic achievement, and self-perceived achievement. Other studies have evidenced the positive impact enjoyment has on motivation (Pavelescu, 2019; Saito et al., 2018), flow (Jean–Marc Dewaele & MacIntyre, 2022), and the development of comprehensibility (Saito et al., 2018).

The relationship between foreign language anxiety and foreign language enjoyment has also been examined. In their 2014 study, Dewaele & MacIntyre (2014) revealed that foreign language enjoyment and anxiety were significantly negatively correlated, however, they shared a small size of their variance (12.9%). Accordingly, Dewaele and MacIntyre stated that although anxiety and enjoyment are related, they are independent of each other. This means that they are not at opposite ends of each other; the existence of one does not eradicate the other. In a later study Dewaele & MacIntyre (2016) were able to confirm the dichotomous nature of FLE and FLA. They concluded that foreign language enjoyment and anxiety are the “two feet” of every language learner, emphasizing the role played by both foreign language enjoyment and anxiety in language learning. This relationship has been exhaustively investigated in the literature. In their meta-analysis of 56 studies on foreign language enjoyment, Botes et al. (2022) concluded that across the literature, foreign language enjoyment and anxiety had a moderate negative relationship.

Some demographic variables have been studied in relation to foreign language enjoyment. Dewaele & MacIntyre (2014) revealed that females experienced higher levels of foreign language enjoyment and anxiety, and later Dewaele & MacIntyre (2016) have found that the role of these emotions was more significant in female learners than males. However, other studies have reported no differences in the levels of foreign language enjoyment for both females and males (Su, 2022). The differences were only evident in foreign language anxiety, where females experienced more anxiety than males. When it comes to age, Dewaele and MacIntyre (2014) profiled learners who had lower levels of foreign language anxiety and higher levels of foreign language enjoyment as being older and having more confidence in their L2 linguistic abilities. With that being said, the line is still fuzzy on these variables as not enough research is available yet (Botes et al., 2022).

In regards to the sources of foreign language enjoyment, Su (2022) concluded that foreign language enjoyment was more linked to external-related variables, while foreign language anxiety was more linked to internal-related variables. In a sample of 231 university students, sources that were mostly linked to foreign language enjoyment were classroom activities, teacher support, classroom atmosphere and excellent classroom performance. While foreign language enjoyment was reported to be caused by failure to finish tasks, speaking without preparation and poor English proficiency. In a previous study, Dewaele & MacIntyre (2014) had arrived to the conclusion that FLE is a multifaceted dimension with an external/social component that includes supportive environment, nice teachers and encouraging peers, and an internal/private component that includes feelings of sense of accomplishment, and realization of progress.

1.3.3 Boredom in SLA

Boredom is classified as a negative emotion with a low degree of activation arising from ongoing activities that are under/over challenging for the learner (Li et al., 2021) and a low cognitive stimulation (Li, 2021). It comprises feelings of “dissatisfaction, disappointment, annoyance, inattention, lack of motivation to pursue previously set goals and impaired vitality” (Kruk & Zawodniak, 2018, p.177). Prior studies have reported that boredom has a negative impact on different aspects of learning, including engagement, cognition, motivation, self-regulation, learning strategies, and learning achievement (Dewaele & Li, 2021).

Empirical research has found that boredom is a pervasive emotion in the language classroom (Pawlak et al., 2020, 2022; Zawodniak et al., 2017). However, Boredom is a relatively new emotion of interest in the field of SLA (Dewaele & Li, 2021; C. Li et al., 2021). Hence, a firm understanding of Boredom as an emotion in language learning is still lacking. Recently, Li et al. (2021) has conceptualized the construct of foreign language learning boredom (FLLB), and developed the FLLB scale following the control-value theory by Pekrun (2006). Li et al. (2021) has also reported that a number of negative feelings or symptoms denote FLLB, such as sadness, disengagement, inattention, dislike, mind blankness and desire to escape.

To date, most SLA research on boredom has focused on its antecedents, with a few investigating its outcomes. Li and colleagues (2021) in their efforts to conceptualize

foreign language boredom have concluded that boredom in the language classroom occurs during either overchallenging or underchallenging activities, notably those that students perceived as irrelevant, meaningless and unimportant, which was reported in an earlier study by Li, (2021). Kruk and colleagues (2022b) investigating sources of foreign language boredom in a sample of 37 EFL learners, also corroborate these findings as they were able to categorize sources of foreign language boredom into three types: teacher-induced such as being unfriendly and not providing enough challenge in the classroom, student-induced including being inactive in the classroom and not seeing progress, and finally activity-induced from having unchallenging and uninteresting tasks, not finding the activity useful for the learner, and mismatches between the student proficiency level and the aim of the task. In another study, Dewaele and Li (2021) reported that students' perception of teacher enthusiasm negatively affected FLLB levels, while it had positively affected their foreign language enjoyment levels. In an online context, Derakhshan and colleagues (2021) have indicated that teachers' long, monotonous monologues, lack of student participation, and carelessly chosen, repetitive tasks were reported as the main sources of foreign language boredom. In regards to the outcomes of FLLB on language learning, it has been reported to have an adverse effect on achievement at the early stage of a course (Li & Wei, 2022), and students willingness to communicate (Kruk & Zawodniak, 2018).

Investigating the relationship between foreign language anxiety, enjoyment and boredom, Li & Wei (2022) reported that higher levels of boredom were linked to lower levels of foreign language enjoyment, which was also reported by Kruk et al. (2022a). Contrastingly, higher levels of anxiety were reported to relate to higher levels of boredom (Li & Wei, 2022). A finding that was also corroborated by Alrabai,(2022) using a sample of 328 Arab university students majoring in English.

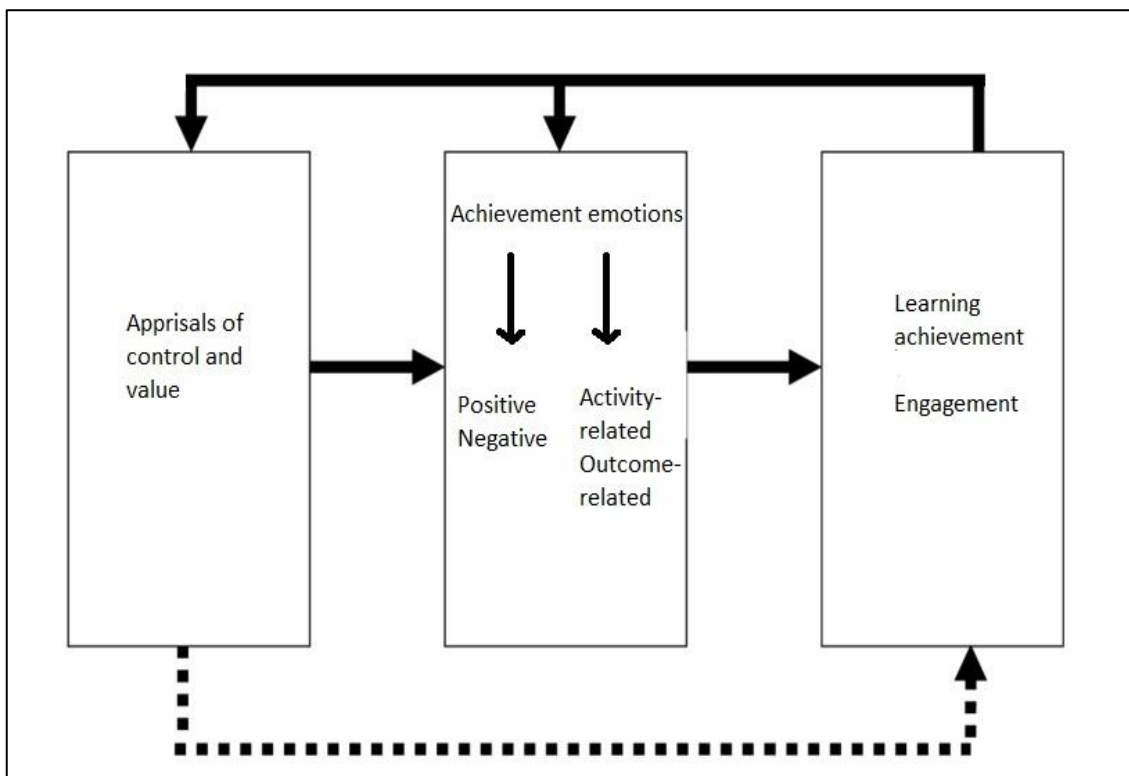
1.3.4 Control-Value Theory of Achievement Emotions

The Control-Value theory of achievement emotions posits an integrative framework of the reciprocal relationships between achievement emotions, their antecedents and outcomes in an educational settings (Pekrun, 2006, 2017; Pekrun et al., 2023). According to the theory, achievement emotions are defined as the emotions that arise out of achievement activities or achievement outcomes and judged according to competence-based standards of quality (Pekrun et al., 2023), placing competence at the center of the

construct of achievement emotions. According to the theory, achievement emotions are placed within a three-dimensional taxonomy that comprises the three fundamental dimensions of achievement emotions. These emotions are affected by a number of factors (antecedents) and could lead to certain outcomes. However, a key aspect of the theory is that the relationships between antecedents, emotions, and outcomes are not one-directional; this means that although antecedents are postulated to affect the achievements emotions, those emotions could also influence the antecedents, and it is the same for the outcomes. Figure 1 below demonstrate the key elements of the control value theory of achievement emotions and the relationships between them.

Figure (1)

Control-value theory of achievement emotions



As proposed by the theory, achievement emotions can be classified using a three-dimensional taxonomy (Pekrun, 2006; Pekrun et al., 2023), based on object focus, valence (positive/negative) and degree of activation. As shown in table 1 below, with regards to object focus, emotions can be categorized into activity-related emotions or outcome-focused emotions. Activity-related emotions are related to the tasks or activities that are on-going, such as enjoyment, boredom and frustration. However, outcome-related

emotions are those that relate to the outcome of the situation or the activity. Outcome-related emotions could be prospective emotions of future outcomes such as hope for success, and retrospective arising from past experiences such as shame experienced after receiving feedback.

Table (1)

Taxonomy of Achievement Emotions

Object focus	Positive		Negative	
	Activating	Deactivating	Activating	Deactivating
Activity	Enjoyment	Relaxation	Anger/ Frustration	Boredom
Outcome/prospective	Hope/ Joy	Relief	Anxiety	Hopelessness
Outcome/retrospective	Joy/ Pride/ Gratitude	Relief/ contentment	Anger/ Shame	Disappointment/ Sadness

As for valence and activation, achievement emotions range from extremely positive (pleasant) to extremely negative (unpleasant) emotions. Positive emotions include emotions such as enjoyment, hope and relief, while negative emotions include emotions such as boredom, anger, anxiety, and shame. Those emotions, whether positive or negative, can be activating or deactivating, which is activation or arousal. Activation is reflected in feelings of energy which are triggered by the physiological systems such as respiration and heart rate (Pekrun et al., 2023). For example, enjoyment is described as a positive activating emotion, while relief is a positive deactivating emotion. On the other hand, anger and boredom are negative emotions, where the former is activating while the latter is deactivating (Pekrun, 2006, 2017).

1.3.5 Control-value appraisals

CVT posits that emotions that arise in academic situations are instigated by two types of cognitive evaluation, which are appraisals of value and control of the ongoing activity or a future outcome. Once these emotions are instigated they lead to certain academic outcomes like motivation, performance and self-satisfaction (Pekrun, 2006). Control appraisals are defined as students' perceived control over activities and outcomes, which include self-concept, self-efficacy, causal attributions, and outcome expectancy (Pekrun, 2006). While value appraisals, having their roots in the expectancy-value theory of motivation (Eccles, 2005; Eccles & Wigfield, 2002), are defined as the subjective value students give to achievement-related activities or outcomes (Pekrun et al., 2011). Student

appraisals of control and value act as proximal antecedents (direct predictors) of achievement emotions (Simonton & Garn, 2020), that then mediate achievement outcomes. The theory also suggests the existence of distal antecedents that affect students control-value appraisals and in turn affect students' achievement emotions. variables such as learner attitudes towards the subject they are learning and teacher-centered variables (Dewaele, 2022).

According to CVT, value appraisals are categorized into intrinsic and extrinsic (Pekrun et al., 2007). Extrinsic value, relates to the perceived instrumental usefulness of achievement-related activities and outcomes in the pursuit of acquiring other goals (Pekrun, 2006), such that of valuing effort and success in learning English because it's in line with the attainment of a future goal (Li, 2021). On the other hand, intrinsic value is the value of the achievement-related activities and outcomes per se, in spite of their instrumental utility (Li, 2021; Pekrun, 2006), such as enjoying an activity because the activity itself is interesting and intriguing to the learner.

Another level could also be added to the categorization of perceived value using Eccles' expectancy-value theory of motivation (Eccles, 2005; Eccles & Wigfield, 2002). According to the expectancy-value theory perceived value is divided into intrinsic, attainment and utility. Attainment value is defined as the perceived importance of task achievement for one's identity or self-worth, while utility value is the perceived instrumental usefulness of the task for one's goals (Eccles, 2005; Eccles & Wigfield, 2002). These definitions indicate that under the umbrella of CVT, attainment and utility value are subcategories of extrinsic value (Putwain et al., 2021).

For the purpose of this research the conceptualization of value will based on Eccles' categorization of perceived value including intrinsic, attainment and utility values (Eccles, 2005; Eccles & Wigfield, 2002; Wigfield & Eccles, 2020). This choice was made based on a number of considerations: first, CVT is built from within the Expectancy-value theory (Pekrun et al., 2002), hence choosing that of Eccles' will not be considered as a diversion from the main assumptions of CVT. Second, CVT postulates that the interplay of the relations between control and value appraisals affects achievement emotions differently (Pekrun et al., 2007; Putwain et al., 2018). Moreover, each type of value can be crucial to a particular achievement emotion (Putwain et al., 2021). Therefore,

investigating students perceived value as attainment, utility and intrinsic will offer a better understanding of how those values affect students' achievement emotions separately, and conjointly. Finally, although there seem to be inconsistencies in the conceptualization and measurement of perceived value in CVT centered research (Simonton & Garn, 2020), a number of studies have adopted Eccles' categorization (e.g. Putwain et al., 2021).

According to CVT, in order to instigate an achievement emotion, appraisals of both control and value are required (Pekrun et al., 2007). More precisely, it is proposed that positive emotions are a result of an interplay between the perceived value and the perceived controllability of academic activities or outcomes. Contrarily, negative achievement emotions are thought to be a simultaneous effect of perceived lack of control and high value. Achievement emotions are assumed to increase in intensity with higher levels of value and control for positive emotions, and lack of control for negative ones. Enjoyment, for instance, is assumed to be a result of the multiplicative evaluation of high level of value and control. While anxiety is a negative emotion that is instigated in situations where a student would value the activity or the outcomes as important, and have uncertain feelings of perceived controllability to prevent failure. This implies that value moderates the effect of control on achievement emotions (Shao et al., 2020); a higher perceived value exerts a stronger influence of control over achievement emotions.

When it comes to Boredom as an achievement emotion, it does not completely fit within the previously stated assumptions (Shao et al., 2020). Boredom is related to lack of value whether negative or positive, and can be induced in activities that either require no sufficient challenge from the student indicating high levels of control, or activities that are overchallenging, indicating low levels of control (Pekrun et al., 2007).

Control-value appraisals have been widely researched in educational contexts. Results of empirical research have confirmed the assumption of CVT that perceived control and value are positively correlated with positive emotions, and negatively with the negative ones (Held & Hascher, 2022). Pekrun & Perry (2014) reported that control and value appraisals were antecedents of enjoyment and boredom, as they positively predict enjoyment and negatively predict boredom. This was confirmed by a later study (Putwain et al., 2018), who also investigated the interaction of control-value appraisals on enjoyment and boredom, reporting that the interaction between control-value appraisals

amplified control appraisals relationship with enjoyment, which otherwise was low. Investigating the reciprocal relations between appraisals of control and value, emotions, and achievement in math classes. Forsblom et al. (2021) has confirmed the reciprocal nature of that relationship, as findings revealed an indirect effect of achievement on emotions mediated by control.

Other studies have examined the effect of the interaction between perceived control and the multidimension of perceived value on emotions. Simonton & Garn (2020) investigating the relationships between control and value appraisals and enjoyment using a sample of 753 university students, reported that only intrinsic value was found to be associated with instigating enjoyment, while extrinsic value did not when accounting for intrinsic value. The researchers explained this by stating that intrinsic value is related to the activity itself regardless of the outcome of that activity, hence it makes sense that it would correlate with enjoyment which is an on-going activity emotion. Contrastingly, while investigating the mediating role of control and value appraisals between students perception of teaching and emotions, Goetz et al. (2020) has reported that extrinsic value related to anxiety, while intrinsic value was relevant to enjoyment and boredom. These discrepancies between these results could be related to the differences in the ages of the two samples used; as for Simonton & Garn (2020) their sample consisted of university students, while Goetz et al. (2020) sample comprised school students.

Putwain and colleagues have conducting two studies to investigate the interplay of control and value appraisals and their effects on achievement emotions (Putwain et al., 2018, 2021). In the first study Putwain et al. (2018) included boredom and enjoyment in his model to test the multiplicative effect of control and value appraisals on these emotions in a longitudinal research design. Using a sample of young school children, the results confirmed control and value appraisals to be antecedents of boredom and enjoyment, with value and control positively correlating with enjoyment and negatively with boredom. Results have also highlighted that high achievement value has intensified the relationship between control and enjoyment. This is explained by the students having to set for high stakes exams at the end of the school year. On the other hand, intrinsic value moderated the relationship between control and boredom. Students who had high levels of intrinsic value experienced low levels of boredom, in spite of their level of control. Contrastingly, control positively predicted boredom at low levels of intrinsic value

In a later study (Putwain et al., 2021) using a sample of 1,298 school students, added anxiety to the previously investigated two emotions, to investigate how control and value appraisals and their interaction would predict enjoyment, boredom, and anxiety. Results reported a strong positive correlation between intrinsic, attainment, utility value and enjoyment, and a negative correlation to boredom. The findings have also revealed that intrinsic and utility value had a moderate negative correlation to anxiety, while attainment value was found to be unrelated to anxiety, which contradicts CVT proposal of anxiety occurring at higher levels of attainment value. Control on the other hand, was found to positively correlate with enjoyment and negatively with boredom and anxiety. On the multiplicative effect of control and value appraisals on emotions, it was reported that having low intrinsic value amplified the relationship between control and enjoyment. However, there was no interaction found between control and utility value, nor control and attainment value that predicted enjoyment. This differs from the findings of the earlier study (Putwain et al., 2018) as achievement value was reported to intensify the relationship between control and enjoyment. This could be explained by a change of the context and outside factors affecting the participants, as for the earlier study they had to sit for high stakes exams, while for this one they did not. Finally, anxiety was not predicted by any of the interactions between control and utility, attainment and intrinsic value.

One important conclusion that is highlighted from those two studies (Putwain et al., 2018, 2021) is the importance of investigating the interaction between control and value and their effect on emotions, as well as focusing on which value moderates the control-emotion relationship and how.

In SLA there are a few studies which examined control and value appraisals as antecedents of L2 emotions. Using a sample of 550 freshman university students Shao et al. (2020) examined CVT's proposed relationships of control and value appraisals and their effects on L2 emotions and language performance. In agreement with CVT, the results confirmed perceived control as a positive predictor of positive emotions and a negative predictor of negative ones. Control was also found to negatively predict boredom in this case, due to the nature of the overchallenging tasks given for first year students (Shao et al., 2020). As for perceived value the positive, negative correlation with positive, negative emotions respectively was confirmed. Moreover, it was reported to positively

correlate with anxiety. This indicates that the higher the value the higher the level of the anxiety. The study has also confirmed that the interplay between perceived control and value predicts achievement emotions. Finally, the results indicated that perceptions of control have a stronger influence on enjoyment, hope, pride and hopelessness than perceptions of value.

Unlike Shao et al. (2020) who focused on 8 different emotions, Li (2021) explored the effects of control and value appraisals only on foreign language boredom using a sample of more than 2000 university students. Results came in line with that of CVT, as extremely high levels of control and value appraisals were reported as antecedents of FLLB. FLLB was also found to be instigated in overchallenging L2 activities due to lack of control. However, when students level of boredom was reduced, they were able to experience positive feelings alongside boredom such as enjoyment. A multiplicative role of control and value on boredom was also reported. Perceptions of high levels of control and value negatively affect boredom in FL settings. However, the effect of value appraisals was stronger than that of control. More specifically, corroborating CVT assumptions, intrinsic value outweighed the effect of control and extrinsic value on boredom.

Other studies have investigated students perceived competency in l2 and their proficiency level (both indicating perception on control) on achievement emotions. Dewaele & Li, (2022) reported that actual and self-perceived competence positively predicted foreign language enjoyment and negatively predicted foreign language anxiety. Interestingly, Su (2022) did not note any differences in enjoyment and anxiety between higher and lower proficiency students.

The above research validates the assumptions of CVT on control and value appraisals within the context of SLA. It also highlights the importance of exploring the independent and joint effect of appraisals of control and value on emotions in SLA. Furthermore, it draws attention to the lack of studies investigating control and value appraisals in the context of SLA. Control-value appraisals are key to understanding achievement emotions. More Importantly, with an understanding of emotional antecedents, control and value appraisals can be targeted by educational interventions designed to positively impact student emotion (Pekrun, 2006, 2017), leading to better educational outcomes.

1.3.6 CVT as a theoretical underpinning in the context of SLA

From what we gathered so far, it is evident that the control value theory of achievement emotions has proved to be a solid framework in investigating and explaining students' emotions, their antecedents and outcomes in different educational fields (please refer back to the presented literature review). With the theory being built upon assumptions drawn from some of the main theories in psychology and educational psychology related to emotions (Shao et al., 2019), CVT provides a tight-net network of functional mechanisms connecting achievement emotions with their antecedents and outcomes that are common across academic disciplines, yet, discipline-specific in their content and strength (Pekrun, 2006; Shao et al., 2019). This shows that the fundamental ideas underpinning the notion of achievement feelings can be applied to several topics, including SLA.

Employing CVT in understanding Anxiety, enjoyment and boredom in the context of SLA provides the framework needed to study these emotions, their triggers and consequences. After all, foreign language anxiety, enjoyment, and boredom are emotional reactions (Macintyre & Wang, 2022), so understanding their antecedents and consequences within the context of SLA is of high importance. Research in SLA has just recently started to turn its attention to the use of the control-value theory in the investigations of L2 emotion. Dewaele & Li (2022) have used the CVT as a framework to investigate how students actual and self-perceived L2 competence relate to FLE and FLA. Results revealed that both actual and perceived self-competence negatively correlate to FLA, and to positively correlate to FLE. Li (2021) adopted CVT to investigate the effects of control and value appraisals on FLLB using a sample of more than 2000 university students. Findings confirmed control and value appraisals to be proximal antecedents of FLLB. In a qualitative, Piniel & Albert (2018) used CVT as a guiding theory for analysis. The results of the study confirmed that students emotions in FL classroom are categorized according to their object focus, valence and activation, which are the three dimensions within the framework of the CVT. In another study based on CVT, Shao et al. (2020), using a latent interaction analysis between control-value appraisals, subsequent achievement emotions, and resulting performance in foreign language learning, concluded that emotions mediated the impact of control value appraisals on L2 learners' performance. These results validate the applicability of CVT in SLA research.

In regards to empirical studies that examined the three emotions under investigation in this thesis, foreign language anxiety, enjoyment, and boredom under the umbrella of CVT, Li & Wei (2022) using a sample of 954 junior secondary EFL learners examined the relationship between FLE, FLLB, and FLA and their independent and joint effect on students' achievement over different time snippets during the semester. The results indicated that higher levels of enjoyment predicted lower levels of boredom. This is also the case with higher levels of anxiety. However, anxiety and enjoyment had no correlation., which indicates that experiencing enjoyment does not mean not having feelings of anxiety. This comes in line with previous findings (Dewaele & MacIntyre, 2014; Dewaele & MacIntyre, 2016). Moreover, the result indicated that enjoyment and anxiety co-predicted achievement Li & Wei (2022). However, the effect of enjoyment was more powerful than that of anxiety. It had proved to be so powerful that by the end of the semester enjoyment was found to be the only predictor of achievement. Boredom, on the other hand, when combined with the other two emotions, had no predictive power over achievement.

(Dewaele et al., 2021) investigated the relationship between foreign language anxiety, enjoyment and boredom's attitudes towards the EFL teacher as a distal antecedent, and their effect on L2 achievement using a sample of 332 multinational FL learners. The findings reported a negative relationship between enjoyment and boredom, and enjoyment and anxiety; lower enjoyment meant higher boredom, as students who feel bored will be disengaged from classroom activities. Moreover, results indicated that higher anxiety levels were related to higher boredom levels. This is explained by those students experiencing lack of control and low engagement. In regard to the external-internal variables tested in this study, teachers use of FL was correlated positively with FLE, while it had no correlation to FLL

B nor FLA. Moreover, students felt more enjoyment and less boredom when the teacher used varied teaching techniques and activities. This was similar for students' attitude towards English as it positively correlated with FLE and negatively with FLLB. Finally, when it comes to the effects of FLE, FLA, and FLLB on achievement, only FLA negatively correlated with achievement.

To my knowledge, there are no other studies in the field of SLA that investigate FLA, FLE, and FLLB under the umbrella of the control value theory of emotions. As a matter of fact Dewaele et al. (2021) stated in their paper that it is the first paper to examine these three emotions. Regardless, and despite the rich findings these studies provide to the field of emotions and SLA, they do not provide a complete picture of the emotions, their proximal antecedents and outcome. In fact, none of these studies have examined the effect of control and value appraisals on anxiety, enjoyment and boredom and engagement as an outcome in the context of SLA. This gap is what this study is aiming to fill, which will be explained more thoroughly in the next section.

1.3.7 Engagement as an outcome of CVT

Engagement is critical for successful learning. When students are engaged, they may devote their whole attention and effort to completing tasks and activities, persevere in the face of challenges, develop positive connections with teachers and classmates, and feel a connection to their school (Wang & Eccles, 2012).

There seem to be various definitions of the construct of engagement in the field of education (Reschly & Christenson, 2012). For the purpose of this research, we will adopt the conceptualization of engagement proposed by (Skinner et al., 2008). Skinner et al. (2008) proposes that Engagement is a multifaceted construct that combines behavioral and emotional dimensions. The behavioral dimensions constitute students' effort, attention, and persistence during an on-going learning activity, while emotional dimensions include enthusiasm, interest and enjoyment of an on-going learning activity. By this, engagement refers to “active, goal-directed, flexible, constructive, persistent, focused, emotionally positive interactions with the social and physical environments (in this case, academic activities)” (Skinner et al., 2008, p.776). This conceptualization of engagement is in the heart of our emotions-focused research, as it relies on the assumption that emotions fuel behaviors in the classroom.

Emotions are considered key predictors of student engagement (Fredrickson, 2005; King & Gaerlan, 2014; Pekrun, 2006); and mediators between students emotions and academic learning and achievement (Pekrun & Linnenbrink-Garcia, 2012) Positive activating emotions such as enjoyment correlate positively with students' engagement, whereas negative deactivating emotions such as anxiety and boredom correlate negatively with

students' engagement (Pekrun et al., 2011). The importance of emotions as predictors of engagement stems from the empirical evidence supporting that students' emotions have a serious effect on students engagement with academic tasks and the effort spent, as well as, influencing mood-congruent retrieval of information learned in class (Pekrun & Linnenbrink-Garcia, 2012).

Different emotions have also been linked differently to the multi-dimensions of engagement. Enjoyment has been found to be key in instigating emotional engagement, and to have a positive influence on behavioral engagement (Kahu et al., 2015) as enjoyment has been found to positively correlate with effort (Pekrun & Linnenbrink-Garcia, 2012). Kahu et al., (2015) has indicated that enjoyment, according to the findings of his qualitative study on emotions and engagement, arises from interest (whether interest in the task or personal interest in the topic) and feelings of competence in the task (Kahu et al., 2015). This is important as it offers more validation on the links between appraisals of control (competence) and value (interest), emotions, and engagement offered by CVT.

In general, anxiety and boredom have been identified as inhibitors of engagement (Kahu et al., 2015). However, negative activating emotions have been found in some cases to positively affect students behavioral engagement as they may energize students effort (Pekrun & Linnenbrink-Garcia, 2012). Kahu et al., (2015) asserted that anxiety in general negatively affected engagement, but some cases with certain amount of anxiety it has led to increasing effort and leading to better behavioral engagement. Linnenbrink (2007) argues that pleasant emotions do not reduce behavioral engagement and may even increase it, particularly if activating positive emotions are triggered. But regardless of activation level, negative emotions seem to impede behavioral engagement.

Engagement is a concept that lends itself readily to the center of language learning, as learning a language is a communicative interactive process that requires learners to willingly engage in the learning process (Mercer & Dörnyei, 2020).In the light of this, the actions taken or the energy spent by students have been highlighted as the essence of engagement in the language classroom (Hiver et al., 2021; Oga-Baldwin, 2019). Oga-Baldwin, (2019) goes to argue that behavioral engagement is the most important construct

of the subconstructs of engagement, coupled with it being the instigator of the other types of engagement in the language classroom.

In spite of the fact that research in SLA aimed at understanding students engagement and other aspects of learner psychology is scarce (Mercer, 2019), there have been a number of studies that aimed to investigate emotions and engagement in the language classroom. Using a sample of 633 EFL school students, Feng et al., (2022) has found that FLE positively relate to behavioral engagement, in contrast to FLA that negatively relate to behavioral engagement. Moreover, females were reported to experience higher levels of FLE and behavioral engagement than males.

In another study, Dewaele & Li (2021) investigated the effects of FLLB and FLE on social behavioral engagement using CVT as a theoretical framework., The results revealed a medium negative correlation between foreign language boredom and students' social-behavioral engagement, in contrast to a strong positive correlation FLE had with social-behavioral engagement. This indicates that higher levels of boredom mean lower levels of engagement (Li, 2021; Li et al., 2021), while higher levels of FLE means higher levels of engagement.

What seems to be missing in the above studies is an understanding of how control and value appraisals affect students emotions and relate to their engagement. Mercer, (2019) has called for the necessity of investigating students' engagement in SLA using a framework that offers a more wholistic understanding of how engagement is connected to its antecedents, and what conditions hinder or foster learning. This research aims to achieve that by adopting CVT as a framework that connects three commonly-occurring FL emotions; namely, FLA, FLE, and FLLB, with control and value appraisals and engagement. The importance of investigating the interplay of relationships between these constructs and engagements does not only stem directly from the assumptions of the CVT itself by positing engagements as an outcome of student emotions, but more importantly, it is embedded within the recent literature conceptualizing engagement in SLA by substantializing the effect appraisals of value and control have on engagement.

1.3.8 Task-value intervention

As discussed earlier, according to the CVT, students' appraisals of control and value are proximal antecedents of achievement emotions and distal antecedents of achievement outcomes (Pekrun, 2006). This holds the underlying assumption that a change in appraisals of control and value should lead to a change in achievement emotions (Pekrun, 2006). Buff (2014) has tested this “change-change” model with focus on enjoyment in math classes. The findings of his empirical research have substantiated that relationship; positive changes in appraisals of control and value did lead to greater enjoyment. More recently the change-change model was confirmed for other emotions alongside enjoyment, including anger, boredom and anxiety (Held & Hascher, 2022).

The above findings are of great educational value as they entail that designing an educational environment in a way that would lead to positive changes in students control and value appraisals could result in positive changes in students emotions and would therefore result in better learning outcomes (Buff, 2014; Held & Hascher, 2022). With the conceptualization of the Expectancy value theory by Eccles and colleagues, there have been many educational interventions aimed at targeting subjective task value (Eccles & Wigfield, 2020). The findings of these interventions were promising; positive changes in students subjective task value were linked to an elevation of students' performance, interest, engagement and choice in these tasks (Eccles & Wigfield, 2020; Wigfield & Eccles, 2020). As a result, there seem to be a consensus on the efficacy of using task-value based interventions at impacting the desired learning outcomes mediated by achievement emotions (Li, 2021; Putwain et al., 2021; Shao et al., 2020; Simonton & Garn, 2020).

Predominantly, task-based interventions are targeted at utility-value (Acee et al., 2018; Rosenzweig et al., 2022). Their popularity seems to be explained by the fact that out of the four types of values, utility value is the one mostly open to classroom interventions due to its external nature (Hulleman et al., 2010). Task value interventions aimed at reappraisal of utility value include specially designed assignments that aim to help students establish a connection between the learning task/content and their lives (Eccles & Wigfield, 2020; Soicher & Becker-Blease, 2020). These assignment consists of written tasks that require students to write about how the material they are learning are relevant to their lives In one of the early studies Hulleman et al. (2010) using a control and an

experiment group, tested the effect of a utility value intervention on enhancing students interest and performance. Results revealed that asking students to write about how course material is relevant to their lives did enhance student's utility value, interest and performance. The same results were also reported 7 years later in a similar study by Hulleman et al. (2017), adding that the more frequently students were asked to make these connections throughout the semester, the better the results.

Results from research on utility value intervention have indicated that utility value intervention could be more effective for students with lower perception of competence and higher risk of performing poorly (Rosenzweig et al., 2022; Wigfield & Eccles, 2020). However, a study by Durik et al. (2015) reported contradicting results where a utility value intervention was found to work better in increasing interest and performance for students with higher perceived competence of math. Similar results were also reported by Canning and Harackiewicz (2015) where both types of self-generated and directly communicated utility value intervention were found to work in increasing interest for students with higher perceived competence of math, while the directly communicated intervention was found to have a deterrent effect on students with lower perceived competence.

There is not much research into the effect of value interventions on attainment and intrinsic value, or on more than one component of task value combined (Wigfield & Eccles, 2020). Adopting a more comprehensive outlook on student's task value reappraisal, Acee et al. (2018) has proposed The Value Reappraisal model to design effective task value interventions. The value reappraisal model consists of elements and strategies that are argued to trigger cognitive-affective reactions that change students' attitudes and subsequently impact academic outcome. In this model the change in students' attitudes refers to how much students attitudes towards the academic task/course have changed over time relative to their initial attitudes. Which include changes in students subjective task value, perceived instrumentality and task engagement.

According to the model effective task value interventions comprise four key parts:

- Task-value message,
- Task value activities,

- The internal structure of the intervention,
- The administrative procedures.

Task value message and task value activities

In order for students to reevaluate the value of the task they need to be presented by a task value message and task value activities. Task value messages work by making students aware of the importance or relevance of a task to their life/specialization, while task value activities work by prompting students to rationalize why a certain task is relevant to them. Combining both task-value activities and messages in an intervention has been proved to be more effective in inducing positive attitude change in students' perceptions of task value, than using only one (Acee et al., 2018; Canning et al., 2018).

The internal structure and administrative procedure

In accordance with the model, a value reappraisal intervention needs to have a clear internal structure indicating the sequence in which task value message and activities are delivered to the students, Moreover, the intervention administrative procedures outlining when the intervention will be implemented during the semester should also be detailed. The internal structure and admirative procedure will be elaborated in the methodology section.

Value reappraisal strategies

To achieve a successful value reappraisal, three empirically-sound strategies have been suggested by the model, which are:

1. Generating rationales,

The first strategy is to encourage students to generate rationales of why tasks/activities are of relevance or importance to them. The use of this strategy is argued to motivate learner to engage in thought process, make relevance linkages and positively reevaluate the utility value of the task/activity.

2. Imaging future selves and situations

The second strategy is to prompt students to imagine future selves and situations. This could be done through asking students to envision themselves in future scenarios where they have acquired the knowledge and abilities in the academic topic. This

strategy is argued to be a potent tool for influencing attitudes and guiding behavior in academic settings.

3. Comparing pros and cons of task engagement

As for the third strategy it is to allow students to compare pros and cons of task engagement, which is said to motivate attitude change through decision-making.

1.4 Research Questions and Hypotheses

In light of the above theoretical grounding, this research was divided into two studies. Study 1 runs a large-scale study to investigate the interplay in interaction between value subscales and control and their relation to anxiety, boredom and enjoyment. Moreover, it investigates effects of control value appraisals on engagement mediated by three achievement emotions proposed by CVT, namely anxiety, boredom, and enjoyment. These emotions are chosen as they have been found to play an integral part in the language classroom. Understanding how these emotions interact within the CVT model and their effect on students' engagement is important in the context of SLA. Since emotions are domain-specific (Goetz et al., 2007; Pekrun, 2006), findings from other domains cannot be generalized to the context of language learning and teaching.

Study 2 comes at the second stage of this research. It aims to investigate the efficacy of a task-value intervention on improving students' control-value appraisals, a distal antecedent of students' engagement, and a proximal antecedent of achievement emotions, according to CVT (Pekrun et al., 2007). The improvement in students' control-value appraisals should affect the positive emotions positively, and negatively affect the negative ones. Study 2 is more personalized with a smaller number of students.

This investigation is guided by the following questions:

Study 1 Questions and Hypotheses

1. How do control-value appraisals interact to affect boredom, anxiety and enjoyment in the language classroom?
2. What is the mediation role played by anxiety, boredom and enjoyment in the relationship between control and value appraisals and engagement?

Directed by the above questions, study 1 will investigate the following hypotheses:

- **Hypothesis 1.** Control and value appraisals of English language learners whose first language is Arabic would correlate positively with enjoyment and engagement, and negatively with anxiety and boredom.
- **Hypothesis 2:** Anxiety, boredom and enjoyment will mediate the relationship between control and value appraisals and students' engagement. More specifically, enjoyment will positively mediate the relationship while anxiety and boredom will have a negative effect.
- **Hypothesis 3:** Value subscales will interact differently with control to moderate the relationship between control and achievement emotions. More specifically, control and value appraisals and their interaction will positively predict enjoyment and negatively predict boredom and anxiety
- **Hypothesis 4:** higher levels of value will amplify the relationship between high levels of control and enjoyment and low levels of control and anxiety, while lower levels of value will amplify the relationship between control and boredom.

Study 2 Questions and Hypotheses

1. How does a task-value intervention affect students' control-value appraisals?
2. How does a task-value intervention affect students' emotions in the language classroom?
3. How does students perceived competency in English affect the results of the intervention?

Study 2 will investigate the following hypotheses:

- **Hypothesis 5.** There will be a difference in the experiment group's levels of intrinsic, attainment and utility value, as well as anxiety, boredom and enjoyment before and after the intervention.
- **Hypothesis 6.** There will be a difference in the control group's levels of intrinsic, attainment and utility value, as well as anxiety, boredom and enjoyment before and after the intervention.

- **Hypothesis 7.** A task-value intervention directed at students' task-value appraisals will increase the level of students' utility, intrinsic, and attainment value.
- **Hypothesis 8.** A task-value intervention will enhance students' perception of value appraisals leading to increasing enjoyment and lowering boredom and anxiety.
- **Hypothesis 9:** A task value intervention will be most effective on students with higher perceived competence in English.

1.5 Study terms and definitions

Second language acquisition (SLA): refers to learning a second language (L2) after the first language (L1) has been learned (Gass et al., 2020).

Achievement Emotions: achievement emotions are defined as the emotions that arise out of achievement activities or achievement outcomes. Achievement emotions can be classified using a three-dimensional taxonomy (Pekrun, 2006; Pekrun et al., 2023), based on object focus, valence (positive/negative) and degree of activation.

Activity-related emotions: they are related to the tasks or activities that are on-going, such as enjoyment, boredom and frustration (Pekrun, 2006; Pekrun et al., 2023).

Outcome-related emotions: are those that relate to the outcome of the situation or the activity. Outcome-related emotions could be prospective emotions of future outcomes such as hope for success, and retrospective arising from past experiences such as shame experienced after receiving feedback (Pekrun, 2006; Pekrun et al., 2023).

Anxiety: is defined as a distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom learning arising from the uniqueness of the language learning process" (Horwitz et al., 1986, p. 128).

Enjoyment: Enjoyment refers to emotions experienced by language learners when their psychological needs are being met and they are "experiencing desirable outcomes related to personal success and interpersonal relatedness" (Dewaele & MacIntyre, 2014, p.242).

Boredom: Boredom is classified as a negative emotion with a low degree of activation arising from ongoing activities that are under/over challenging for the learner (Li et al., 2021) and a low cognitive stimulation (Li, 2021). It comprises feelings of "dissatisfaction,

disappointment, annoyance, inattention, lack of motivation to pursue previously set goals and impaired vitality” (Kruk & Zawodniak, 2018, p.177).

Appraisals of control: students' perceived control over activities and outcomes, which include self-concept, self-efficacy, causal attributions, and outcome expectancy (Pekrun, 2006).

Appraisals of value: the subjective value students give to achievement-related activities or outcomes (Pekrun et al., 2011).

Intrinsic value: is the value of the achievement-related activities and outcomes per se, in spite of their instrumental utility (Li, 2021; Pekrun, 2006), such as enjoying an activity because the activity itself is interesting and intriguing to the learner.

Attainment value: is defined as the perceived importance of task achievement for one’s identity or self-worth (Eccles, 2005; Eccles & Wigfield, 2002).

Utility value: is the perceived instrumental usefulness of the task for one’s goals (Eccles, 2005; Eccles & Wigfield, 2002).

Engagement: engagement is a multifaceted construct that combines behavioral and emotional dimensions. The behavioral dimensions constitute students’ effort, attention, and persistence during an on-going learning activity, while emotional dimensions include enthusiasm, interest and enjoyment of an on-going learning activity. By this, engagement refers to “active, goal-directed, flexible, constructive, persistent, focused, emotionally positive interactions with the social and physical environments (in this case, academic activities)” (Skinner et al., 2008, p.776).

The following chapter will provide the methodology employed to answer the outlined research questions in the above section.

Chapter Two

Methodology

This research aimed to investigate the relationships between appraisals of control and value, anxiety, enjoyment, boredom, and engagement in the language classroom. Moreover, it aimed to investigate the effect of a task-value intervention on students' appraisals of value and their emotions in the language classroom. To achieve these aims, this research was divided into two studies. The first study investigated the relationships between the variables of the study, while study 2 investigated the effects of the intervention. In this section, the research design and methods for both studies will be presented alongside the ethical considerations and research limitations.

The decision to divide this research into two studies was made to first explore the relationships proposed by the control value theory between the variables of the study, more precisely the effects of students' control and value appraisals on instigating students' emotion (anxiety, enjoyment and boredom) inside the language classroom for Arabic native speakers learning English. These relationships, although they have been investigated in other educational fields, are as mentioned earlier still unexplored in the context of English language learners whose native language is Arabic. Consequently, to be able to deliver a task value intervention (study 2) aimed at encouraging students to reappraise their subjective task value and study the effects of that intervention on students emotions, that connection between students appraisals of control and value and students emotions needed to be empirically validated in the context of this research.

2.1 Study 1 methodology

In this section the research design, participants, procedure, instruments and data analysis plan used in study 1 will be explained.

2.1.1 Research design

Study1 followed a cross sectional correlational design (Lau, 2017). This design aims to investigate the relationship between the proposed variables and their strength in the context of SLA in higher education. Understanding these relationships will give better insights to how these relationships play out in this context.

2.1.2 Participants and Procedure

Data for study 1 was collected through purposive sampling, which is a form of nonprobability sampling technique that is used when the researcher has a clear target group in mind (Eichhorn, 2022). An online questionnaire was created and then the link was sent to a number of teachers working at the Language center at An Najah National university. Teachers were asked to forward the link to the questionnaire to their students and students were asked to forward the link to any of their colleagues who are enrolled at any of the English 101 courses offered by the language center for the fall semester of 2022/2023. A total of 515 students filled out the questionnaire. However, after data cleaning and preliminary data analysis, 25 cases were deleted leaving 490 cases for analysis.

The sample consisted of 367 females (%74.9) and 123 males (%25.1) (see fig.2). The sample included 265 students (%54.1) who came from scientific majors, and 225 students (%45.9) who came from Humanities (see fig.3). Out of those students 62 (%12.7) were first year students, 181 (%36.9) were at their second year, 115 (%23.5) were at their third year, and 132 (%26.6) were seniors.

Figure (2)

Female-male sample distribution for study 1

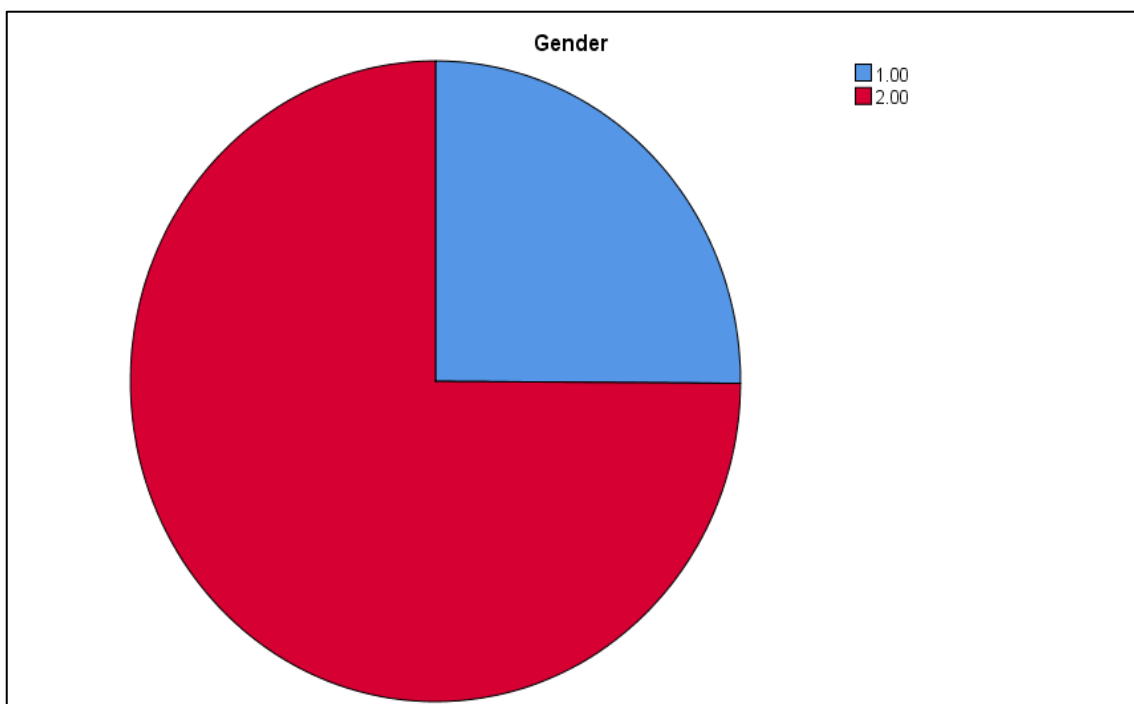
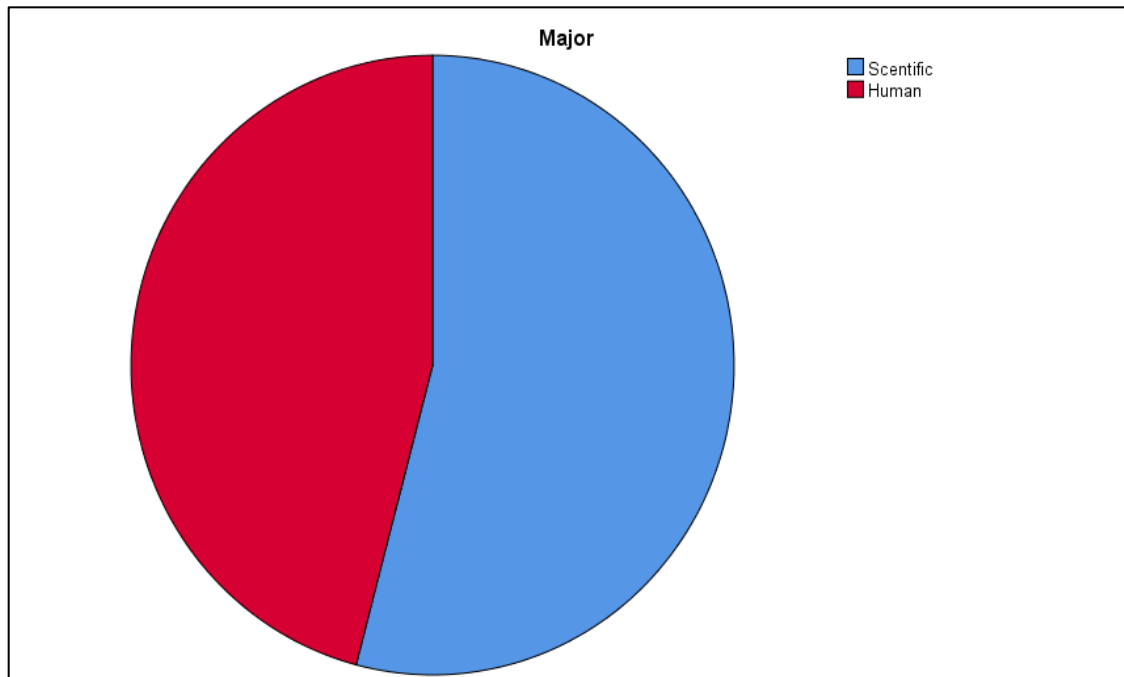


Figure (3)

Major distribution for sample of study 1



At the time of collecting the data, all participants were enrolled at English 101 course offered by the Language Centre at An-Najah National University. This course is mandatory for all undergraduate university students to take as part of their degree completion. All undergraduate students have to enroll in this course and pass it at some point in their undergraduate studies. English 101 is an English language course that aims to enhance students' language skills in English, especially those skills needed for them as university students like academic reading and writing, speaking and listening. A typical class of the E101 course usually includes about 35 students from different university majors like medicine, economics, nursing, education and many others. These students usually have different levels of English language proficiency, but all of them in order to be able to enroll in the course should pass a placement test first, or take a remedial English course in case they have failed the replacement test. Participants for this research were asked to rate their perceived Proficiency level in English, 117 (%23.9) students perceived themselves as beginners, the majority of the participants 314 (%64.1) perceived themselves at an intermediate level of English, while 59 (%12) students perceived themselves as advanced.

2.1.3 Data collection tools

A composite questionnaire of widely used scales have been used to collect data for study 1. The first section of the questionnaire collected demographic information like age, university major and academic year. The second section of the questionnaire consisted of 4 scales assessing control, value, emotions and engagement. All of the measures used a 5 Likert scale with 5 indicating strongly agree and 1 strongly disagree. The questionnaire was originally formed in English and then it was translated to Arabic. The accuracy of the translation was checked by a number of experts through the method of back-translation. Once ready, the questionnaire was pilot tested on a sample of 72 students. Below is a description of the scales used with the internal consistency reported from the pilot study.

Value

To measure students subjective task value, a 12-item scale was adopted from Putwain et al. (2021), which is originally taken from the *Michigan Study of Adolescent Life Transitions scales*. The scale measured utility, intrinsic and attainment value with 4 items for each one of the subscale. For example, the item “I want to show how good I am at English” was used to reflect attainment value, “I find working with English interesting” reflected intrinsic value, while “English will help me later in life” represented utility value. Results from the pilot study revealed a good internal consistency (Taber, 2018) for the whole measure and its subscales, with a Cronbach alpha of $\alpha = .879$ for the whole scale and $\alpha = .780$, $\alpha = .835$, and $\alpha = .873$, for intrinsic, attainment and utility value respectively. The scale has also demonstrated a good construct validity with factor loadings ranging from .720 to .912.

Control

Students perceived control was measured using *The Perceived Academic Control scale* (Perry et al., 2001). The scale consists of eight items related to influencing academic achievement outcomes and uses a 5 Likert scale (1 = strongly disagree, 5 = strongly agree). According to the scale students are designated as either "moderate" or "high" in academic control on the basis of a median split procedure. Examples of items used in the scale include “The more effort I put into my English course, the better I do in it” and “There is little I can do about my performance at English in university.” The scale has a

reasonable internal consistency (Taber, 2018) of Cronbach's $\alpha = .690$, indicating a good reliability, and good construct validity

Emotions

Emotions were assessed using the short version of the *Achievement Emotions Questionnaire (AEQ)* (Bieleke et al., 2021). The AEQ is a well-established instrument for measuring achievement emotions in educational research. Four subscales were used with 4 items each to measure anxiety, enjoyment and boredom. An example of an item measuring anxiety is “I feel nervous in the English class”, enjoyment “I am looking forward to learning a lot in this class”, and boredom “I get bored.” Internal consistency from the pilot study was reported as a Cronbach alpha of $\alpha = .891$, $\alpha = .916$, and $\alpha = .946$ for the subscales respectively, indicating a high reliability of the scale (Leary, 2004). The subscales have good construct validity with factor loadings ranging from .863 to .941.

Engagement

Engagement was measured using the Behavioral and emotional engagements scales from the *Engagement Versus Disaffection with Learning student report* (Skinner et al., 2008). The scale consists of two subscales measuring behavioral and emotional engagement. With 5 items for each, such as “I try hard to do well in the English class” for behavioral engagement, and “When we work on something in the English class, I feel interested” for emotional engagement. The subscales were found to have an internal consistency of $\alpha = .879$ for behavioral engagement and $\alpha = .905$ for emotional engagement, indicating a good internal consistency (Taber, 2018). The subscales also have good construct validity with factor loadings ranging from .741 to .906.

2.1.4 Research procedures

First the composite questionnaire (see appendix A for the final version of the questionnaire) was made using the different scales outlined above. Permission to use the value scale was sought and granted from the main author of (Putwain et al., 2021) via email correspondence (please see appendix B for email correspondence). The other scales were published in their original papers. Once the questionnaire was ready it was translated into Arabic by the researcher using forward translation. Then, the Arabic translation was sent to an expert to ensure of the items were translated correctly from English to Arabic

using backward translation (Beaton et al., 2000), and to check accessibility and clarity of the language used. A number of comments were made and taken into consideration.

Once the questionnaire was ready, it was pilot tested on 77 students enrolled in the E101 course during the second semester of 2021/2022. Construct validity and internal consistency were checked for each of the scales used using spss v.26, the results for the analysis are reported in the above section. Based on the results of the pilot study, no changes were made to the questionnaire and data collection was commenced.

2.1.5 Data analysis

The aim behind this study was to investigate the relationships between the study variables and to test the mediation and moderation of the suggested variables. To this end, data collected was analyzed using Spss v.26 and PROCESS Macro. Correlation analysis was used to uncover the nature of the relationships between appraisals of control and value, achievement emotions and engagement. Mediation and Moderation analysis were carried out using Hayes' PROCESS Macro V4.2. PROCESS is a path analysis tool that uses ordinary least square (OLS) regression (Hayes, 2022) to produce direct and indirect effects in mediation and moderation analysis. PROCESS is a reliable and user-friendly tool that offers a number of mediation and moderation models that are customizable. All mediation and moderation analysis were estimated using a 10,000 bootstrapping sample and %95 interval confidence.

2.2 Study 2 Methodology

In this section the research design, participants, procedure, instruments and data analysis plan used in study 2 will be explained.

2.2.1 Research Design

Study 2 followed a nonequivalent groups pretest post-test quasi-experimental design. Quasi-experimental designs are used in educational settings instead of pure experimental design as when dealing with schools or educational institutions students are already divided into classes or groups (Gopalan et al., 2020). As the name implies, quasi-experimental research designs use nonexperimental (or non-researcher-induced) variation in the primary independent variable of interest, emulating experimental settings where some individuals are randomly exposed to treatment while others are not. Quasi-

experimental designs in educational research enable us to obtain an impartial estimate of the average treatment effect, which in turn enhances our understanding of the causal effects of various educational interventions (Campbell, 1957; Gopalan et al., 2020). In Quasi-experimental research threats to internal validity could be overcome by trying to lessen the effect of selection bias (Gopalan et al., 2020) which will be evident in this research in the following sections.

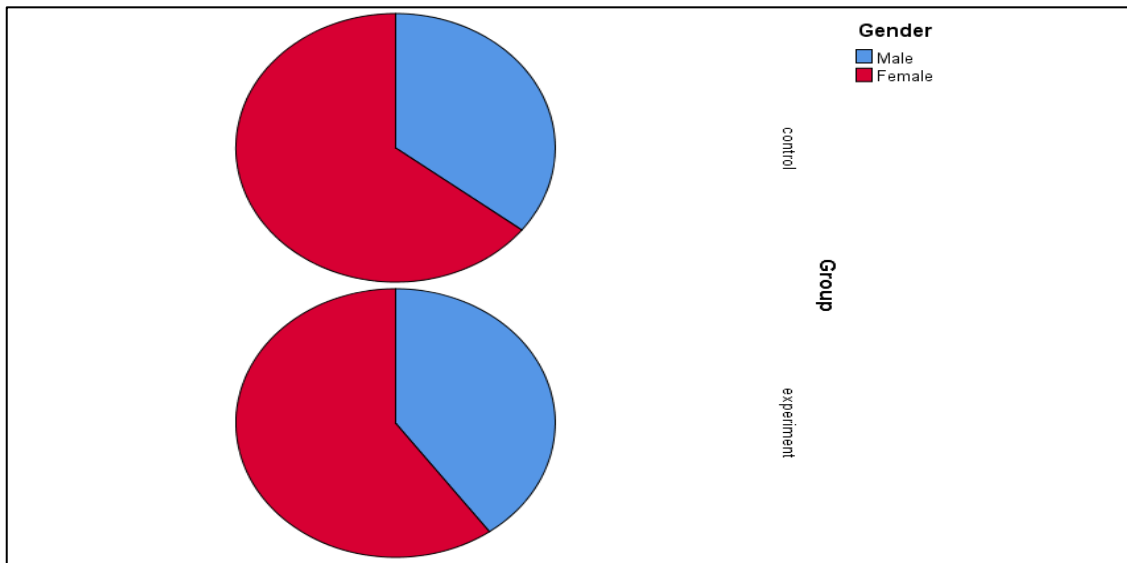
2.2.2 Participants and Procedure

Participants for this study were 61 students enrolled in the course University English 1 for the fall semester 2022/2023. As mentioned earlier An-Najah National University offers these courses to all of its students as mandatory requirement for the completion of their undergraduate's degree. University English 1 is designed to provide students with the language skills needed for them in their academic and professional life. The 61 participants are divided into two sections; control group (31 students) and experimental group (30 students). Due to the nature of the research being conducted in an academic setting, the researcher had no control over selecting the students in the groups. Students are the ones who sign up for the sections. However, the two sections were chosen to have similar characteristics, and the decision for which group underwent the experiment was made randomly before meeting the students to eliminate any possible selection bias.

A number of steps were taken to limit the presence of confounding variables that might affect the results of the intervention. First of all, the two selected section were specifically made sure to include as much of a similar distribution as possible of male to female students and majors. The experiment group had a %40 to %60 male to female ratio with 12 males and 18 females, while the control group had a %35.5 to %64.5 ration with 11 males and 20 females (see figure 4 below).

Figure (4)

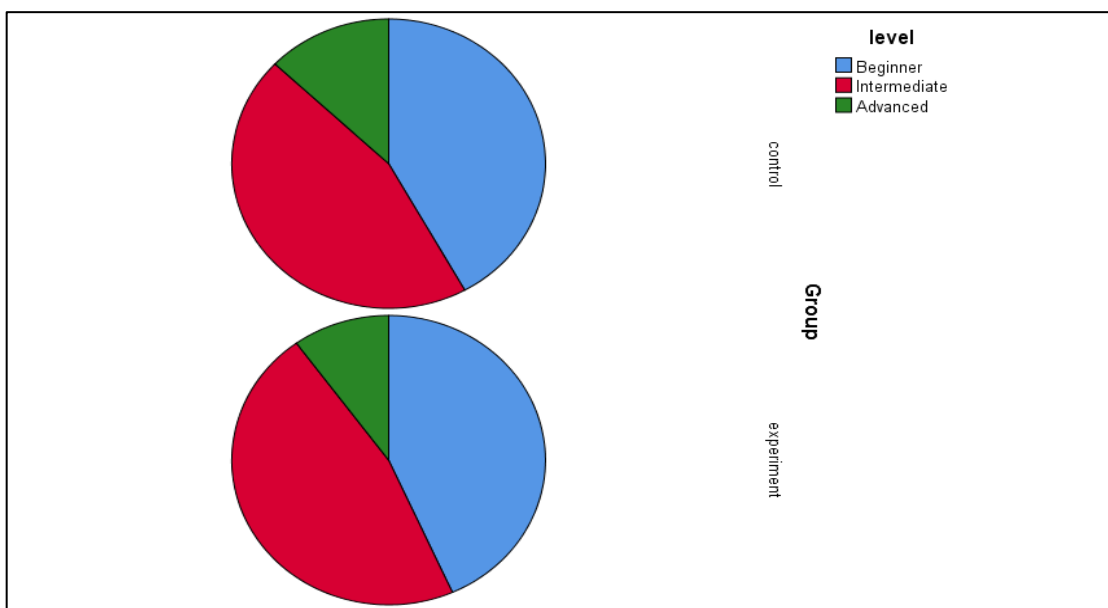
Male-female distribution in study 2



As for participating students' perceived competence in English, in the experiment group %43.3 (13) of the students were beginners, %46.7 (14) were intermediate, and %10 (3) were advanced. Similarly, the control group comprised %41.9 (13) beginners, %45.2 (14) intermediates and %12.9 (4) advanced. Figure 5 below illustrates the distribution of students' level over the experiment and control groups.

Figure (5)

Distribution of students' level over the experiment and control groups in study 2



During the entire semester both groups were given the same course plan, instructions and exams. As for the tasks required from the experiment group as part of the intervention plan, students in the control group took the same exact number of tasks at the same times of the experiment group in the same format; both groups had writing tasks. Also, the intervention sessions were not administered until a month into the beginning of the semester in order to wait for students' emotions and value towards the course to form.

Moreover, results from the pretest survey indicated that students in the control and experiment group had similar levels of the study variables (table 9) before conducting the intervention. For example, for intrinsic value students in the control group had a mean of 3.78 while the experiment group reported a mean of 3.90. The results were similar to other variables as well, such as anxiety with a mean of 2.96 for both groups, boredom with a 2.59 for control group and 2.56 for the experiment group. This ensured that the two groups were as equivalent as possible before the start of the intervention.

At the beginning of the semester students were made aware that they will be taking part in an experimental research design. The consent form was read to them inside the class and later shared with them online for future reference. They were also made aware of what kind of tasks the intervention would entail. Any questions that the students had were dealt with and contact information were given to them for any further questions. The consent form used in this study is found in appendix C.

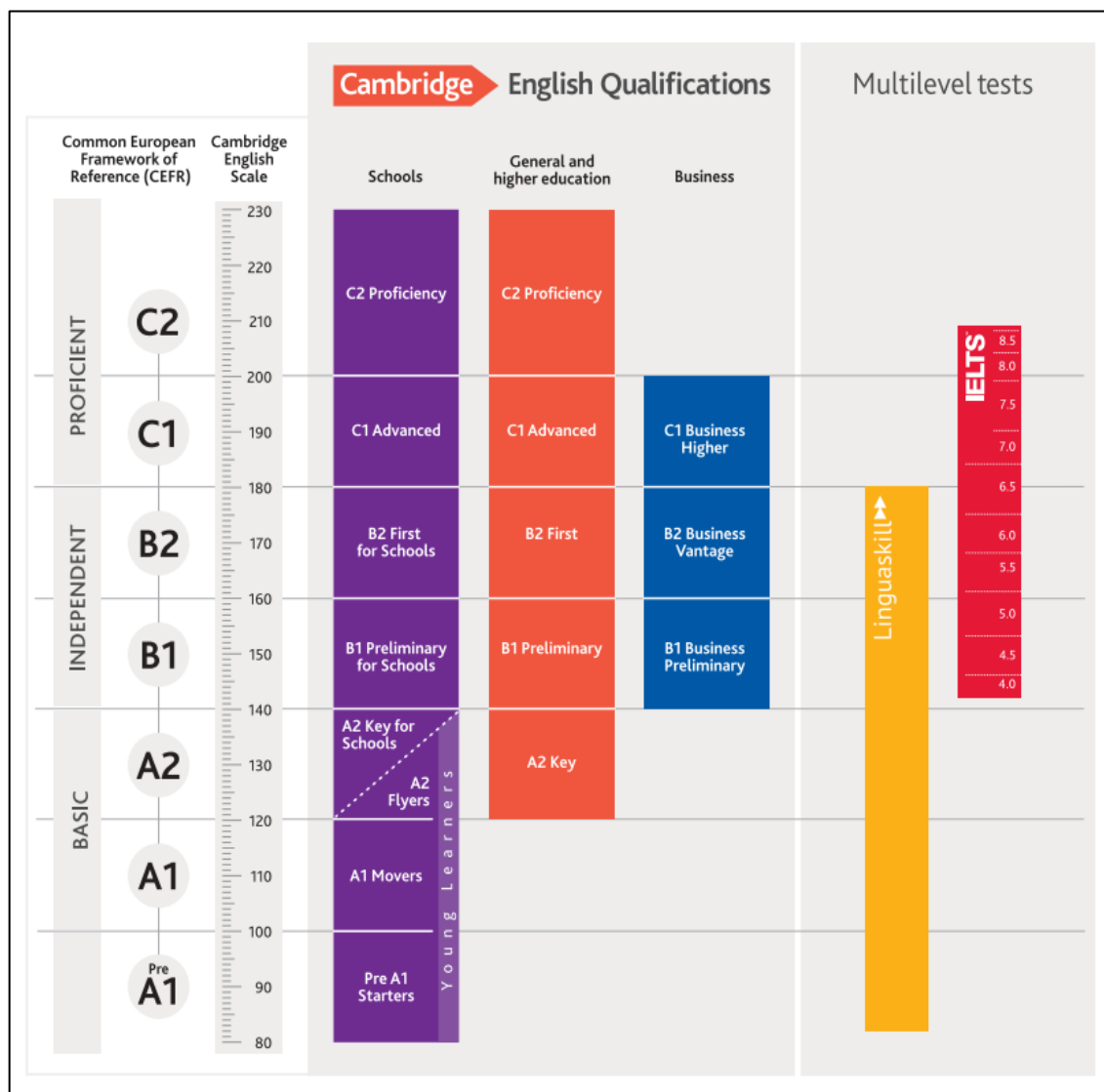
2.2.3 Data collection tools

Data for study 2 was collected using a similar questionnaire to that used in Study 1 but without the engagement scale. Students perceived subjective value was measured using a 12-item scale adopted from Putwain et al. (2021), perceived control was measured using *The Perceived Academic Control scale* (Perry et al., 2001), and students emotions were measured using the short version of the *Achievement Emotions Questionnaire (AEQ)* (Bieleke et al., 2021). A detailed description of those scales, their reliability and validity can be found in section (2.1.3). Moreover, students self-perceived competency level in English was measured using the Common European Framework of Reference for languages (CEFR) (Council of Europe, 2020), which is an international standard for assessing language level. As illustrated in figure 6 below, the CEFR categorizes language proficiency into six levels A1 and A2 as basic users, B1 and B2 as independent users and

C1 and C2, as proficient users of the language. The CEFR is one of the mostly used tools for measuring and establishing a link between students' proficiency level in English and language assessment, curricula and educational policies (Wisniewski, 2017). Perceived competence was measured as it has been reported that student competence could impact the results of the intervention (Acee et al., 2018).

Figure (6)

The Common European Framework of Reference for languages (CEFR)



Both students in the experiment and control group took the questionnaire before the intervention and after the intervention. The questionnaires were administered online using Google forms. The data collected from the questionnaires were kept on a private Google

Drive owned by the researcher and no identifying information was used to link students to their answers.

2.2.4 Intervention structure, content and development

As mentioned earlier, the Value reappraisal model (Acee et al., 2018) was employed to lay the main conceptual foundation for designing the task value intervention used in this study. The intervention was designed and then the intervention plan was sent via email to Dr. Taylor Acee, the lead author in the paper used to introduce and set the foundation for the value reappraisal model, for feedback. Dr. Acee is a Professor in the graduate program in developmental education at the University of Texas. Feedback provided by Dr. Acee ensured the alignment of the intervention plan designed to the value reappraisal model, as he replied with “I read through the information you sent and thought everything looked carefully designed and justified with research.” Dr. Acee had a few questions that were addressed and justified. Appendix D shows the complete interaction between the researcher and Dr. Acee.

Based on that, the final version of the intervention plan was built upon the following elements presented in (Acee et al., 2018). The next section will present the main elements of the intervention plan, but for a full outline of the plan and its activities please see appendix E.

The internal structure and administrative procedure

In accordance with the value reappraisal model, the internal structure of the intervention, and the administrative procedures, are both depicted in table (2) below. For the first four weeks of the semester there were no intervention sessions administered. This step was taken in order to try and limit the effect of the teacher could have on students’ emotions, as it has been reported that some classroom emotions could be teacher specific (Dewaele & Dewaele, 2020). Students took their pre-test questionnaire measuring the constructs of subjective task value (utility, attainment, extrinsic), control, and emotions of anxiety, enjoyment and boredom. On the 5th week of the semester students were subjected to their first intervention session which consisted of a task value message followed by a value activity. The same pattern was repeated on the 8th week and 10th week of the semester. on the 11th week of the semester students retook the questionnaire.

Intervention session #1

The first intervention was administered to students on the 4th week of the semester. During the first session a combination of a task value message and activity were delivered to the students. For the task value message students were asked to read an article discussing the importance of learning English in today's world (782 words). Then they were made aware that by understanding the relevance learning English has to them personally they will be able to shape their attitudes towards it. Once done reading, students engaged in their first value activity which used the strategy of generating rationales. The activity required students to start by writing down their own goals from learning English. Then they were asked to find a connection between a skill or material that they have learned in this course and one or more of their goals. Students were asked to write one to two paragraphs explaining how this skill/knowledge aided into achieving their goal. This activity was started in class but the final written work was submitted to an assignment via Moodle later that day. These assignments were part of the course curriculum and were graded as recommended by (Hulleman & Harackiewicz, 2020). Students received a grade and written feedback a few days after the assignment.

On the other hand, the control group received a placebo assignment which required them to read an article on one of the topics covered this far and then to summarize the main ideas discussed in it. This activity was delivered to students in the same manner of the experiment group. The assignment was graded and students received a grade and written feedback a few days later. Table (2) below demonstrates the administrative procedure, the goals and the activities used to achieve these goals during the first and second weeks of the intervention.

Table (2)*Intervention outline for week 5*

Intervention Goals	Value reappraisal strategies/ Experiment group
To introduce to the students their first task value message and value activity.	Value Strategy: Producing Rationales Value message: Students are presented with an article explaining the importance of learning English in today’s world. Students are told that understanding the importance and relevance of English to them will help in shaping their attitudes towards it.
To make students aware of the relevance of learning English to their goals.	Value activity: Students are asked to write down their goals from learning English. Then they are asked to find a connection between something they have learned so far to one or more of their goals, and write short paragraph on how that skills/knowledge aids in achieving their goal/goals. Students are asked to submit their work to an assignment via Moodle.
To encourage students to produce rationales.	Prompt questions: What are your goals from learning English? What is something that is useful to you that you have learned in this course? How would that skills/knowledge you have acquired in this course help you achieve on or more of your goals?
Placebo treatment/ Control group: Students are presented with an article related to the topics covered in the course. Then they are asked to summaries the main points in it.	

Intervention session #2

On the 8th week of the semester, students received their second intervention session. The session started with a value message through engaging the students in a whole-group discussion on the importance of English language to them as university students and how realizing that importance is key to enhancing their learning experience. The teacher instigated and lead the discussion using prompt questions such as “How is English of value to you as a university student?”. After that, using a value activity adopted from (Acee & Weinstein, 2010), students were asked to write down a list of courses that having knowledge and skills in English will be of use to them in those course. Then they were asked to make a connection between a skill/knowledge they have learned in this course and other courses they are taking or will in the future, rationalizing why that skill/knowledge is useful/relevant. As with the first session, this session started in class and the final written work was submitted online via an assignment on Moodle.

The control group received a synchronous activity as they engaged in a whole group discussion on what they have learned so far from the course. Then they were asked to

write a paragraph on a skill/ knowledge they have learned in this course so far. Table (3) below demonstrates the administrative procedure, the goals and the activities used to achieve these goals during third week of the intervention.

Table (3)

Intervention outline for week 8

Intervention Goals	Value reappraisal strategies/ Experiment group
To present students with their second value reappraisal message and activity.	Value Strategy used: Generating rationales Value message: Students are engaged in a whole-group discussion prompted by the teacher on the importance of English language to university students and how releasing that importance is key in enhancing their learning experience.
To engage students in a discussion on the importance of English for them and for others as students.	Value activity: students are asked to list a number of courses that having a certain level of English language and skills would be of value. Then, students are asked to make a connection between a skill/knowledge they have learned in this course and other courses they are taking or will in the future, rationalizing why that skill/knowledge would be useful/relevant. Students are asked to submit their work to an assignment via Moodle.
To motivate students to generate rationales about the academic relevance of learning English as an L2.	Prompt question: How is learning English relevant to you as a student? How is the content covered in the course so far relate to you personally as a university student? Find a connection between something you have learned in this course and other courses that you are taking or planning to take! i.e. How would something you have learned here help you in other courses?
Placebo treatment/ Control Group: students engage in a whole-group discussion on the content of the book covered this far and ask students to write a paragraph about a skill they have learned in this course.	

Intervention session #3

The third and final intervention session was administered on the 10th week of the semester. It had the same structure as the first two interventions. The task value message was delivered to students through a presentation done by a senior student who has taken the same course. The student communicated to the students from personal experience how realizing the value of this course has impacted how he/she perceived English and the effort she/he puts in learning English. Also, how it impacted his/her life now. Following that, employing two different strategies (imagining future selves, and comparing cons and pros), students were asked to imagine that they have finished with this English course

having acquired the desired skills and knowledge. Then they were asked to think of the obstacles that they might have had to face to arrive to that point. With that in mind, students were asked to write a letter to a freshman student in the same major explaining where they are now and the obstacles they had to face and how they dealt with them.

The control group, on the other hand, were asked to write a letter to a friend summarizing what they have learned thus far. Once the final session of the interventions ended, students in both the experiment and the control group were asked to fill out the post-questionnaire. Table (4) below demonstrates the administrative procedure, the goals and the activities used to achieve these goals during fourth and final week of the intervention.

Table (4)

Intervention outline for week 10

Intervention Goals	Value reappraisal strategies/ Experiment group
To present students with the third and final value activity.	<p>Value Strategy used: Generating rationales</p> <p>Value message: Students are engaged in a whole-group discussion prompted by the teacher on the importance of English language to university students and how releasing that importance is key in enhancing their learning experience.</p>
To encourage students to imagine their future selves and compare pros and cons of task engagement.	<p>Value activity: students are asked to imagine their future selves having done with their English courses with a good level of English language. then they are asked to think of the obstacles they have had to face to arrive to that point.</p> <p>Then, from their future selves, students are asked to write a letter to a freshman student with the same major describing where they are now, the obstacles they had to face to get there, and how they dealt with them. Students are asked to submit their work to an assignment via Moodle.</p>
	<p>Prompt scenario and questions:</p> <p>You have just finished all of your English courses at the university having acquired the desired skills and knowledge from these courses. Write a letter to a freshman student in the same specialization as yours, explaining where you are now with English, what obstacles you had to face to get there, and how you dealt with them.</p>
	<p>Placebo treatment/ control group: students are asked to write a letter to a friend summarizing three things they have learned from the content of the course.</p>

2.2.5 Data Analysis

Data collected was assessed using Paired Sample t-test and two-way between groups analysis of covariance (MANCOVA). Paired Sample t-test is used to compare between the two means of sets of scores that are paired, such as pre-test and posttest results for one group of students (Ravid, 2020). MANCOVA was used to investigate the difference between the scores on the posttest between the experiment and the control groups, controlling for students pretest results. Six dependent variables were used: intrinsic value, attainment value, anxiety, boredom, and enjoyment. Students group (experiment, control) and English language perceived competency level (beginner, intermediate, advanced) were used as independent variables, where students' pretest scores for intrinsic value, attainment value, anxiety, boredom, and enjoyment were used as covariates.

Preliminary assumptions testing was done to check for non-normality, outliers, linearity, and homogeneity of variance covariance metrics. No violations were recorded.

2.2.6 Ethical considerations

This research followed the research ethics guidelines devised by the American Psychological Association (APA, 2017). These guidelines ensured that this research was conducted in a scientific matter that was free of harm or prejudice. First of all, for the study 1, students were informed of the purpose of collecting data using the questionnaire through an introductory paragraph at the beginning of the online questionnaire. The questionnaire was anonymous and students were made aware that the information they share will be treated with high privacy and will only be used for the purpose of this research and future related articles. Moreover, no identifying information will be used in the reporting of the results of the study. As for study 2, which involved the intervention, a number of additional ethical considerations were used:

- An IRB form following the protocol of research on human subjects was prepared and sent to An Najah University institutional review board along with the written consent form for approval. Approval was received prior to the start of data collection. Please see appendix F for the approved IRB form.
- An informed consent form was prepared and read to the students prior to the onset of the study. Students were informed of the research aims and the intervention plan was explained. Oral consents were obtained before the start of the first intervention.

Chapter Three

Results

This section will start by presenting the results for the analysis of the data collected for the first study which is correlational in nature and aims to explore the relationships between students control and value appraisals, emotions and engagement. This will then be followed by presenting the results of the second study which employed a quasi-experimental design to uncover the efficacy of a task value intervention on students control and value appraisals and emotions in SLA.

3.1 Results for study 1

3.1.1 Data cleaning and preliminary analysis

Data was screened for outliers using a boxplot via SPSS V.26. This has resulted in the deletion of 24 cases that were reported as outliers leaving 490 cases for the analysis. Descriptive statistics for the data collected from the questionnaire is shown in table (5). Most variables seem to be within the near normal [$0 - \pm 0.25$], slight [$\pm 0.26 - \pm 0.75$], and moderate [$\pm 0.76 - \pm 1.25$] levels of skewness and kurtosis (Blanca et al., 2013). for example, Control ($M = 3.54$, $SD = 0.58$) is right skewed with skewness of .23 and platykurtic with a kurtosis of -.52, while utility value ($M = 4.51$, $SD = 0.57$) is left skewed (-1.14) and leptokurtic (.80). Having data that deviates from the normal distribution is a common occurrence within research using psychological variables. Blanca et al, (2013) has reported that 94.5% of the samples used in the studies reviewed were outside the range of [$\pm .25$] which indicated a departure from normal distribution. For this reason Process Macro (Hayes, 2022) will be used in the conducting mediation and moderation analysis as it leverages the bootstrapping technique to allow a fewer assumptions about the distribution of the data to be made. Moreover, Process offers user-friendly models for mediation and moderation analysis.

Table (5)*Descriptive statistics and normality tests for study 1*

Variables	M	SD	Range	Min	Max	Sum	Skewness	Kurtosis
Intvalue	4.16	0.60	2.75	2.25	5	2039.75	-0.46	-0.26
ATTvalue	4.39	0.54	2.25	2.75	5	2153.75	-0.65	-0.40
UTLvalue	4.51	0.57	2.50	2.50	5	2212.75	-1.14	0.80
Control	3.54	0.58	2.88	2.13	5	1738.25	0.23	-0.52
Anxiety	2.46	1.10	4	1	5	1210.25	0.46	-0.70
Bored	2.56	1.04	4	1	5	1255.00	0.39	-0.55
Enjoyment	3.95	0.77	3	2	5	1936.25	-0.33	-0.55
Engagement	4.02	0.68	2.70	2.30	5	1972.70	-0.12	-0.78

Descriptive statistics indicate that students have reported very high levels of perceived value with the highest being for utility value ($M = 4.51$, $SD = 0.57$), and high levels of enjoyment and engagement. Meanwhile, students have reported moderate levels of anxiety and boredom.

3.1.2 Hypothesis testing

H1 predicted that control and value appraisals for English language learners whose first language is Arabic would correlate positively with enjoyment and engagement and negatively with anxiety and boredom. A Pearson correlation coefficient was run to test H1. According to Cohen (1988), an effect size of .10 is considered small, 0.30 is considered a medium size effect, while .50 is considered a large effect size. Results revealed that intrinsic value, attainment value, utility value and control had a significant positive moderate correlation with enjoyment, ($r(490) = 0.57$, $p = 0.00$, $r(490) = 0.41$, $p = .00$; $r(490) = 0.36$, $p = 0.00$; $r(490) = 0.34$, $p = 0.00$) respectively. However, all the value subscales and control had a significant negative moderate correlation with both anxiety and boredom as seen in table (6), with control having the strongest correlation to anxiety and boredom out of those variable $r(490) = -0.65$, $p = 0.00$; $r(490) = -0.52$, $p = 0.00$, and utility value having the weakest association to anxiety $r(490) = -0.18$, $p = 0.00$, and boredom $r(512) = -0.16$, $p = 0.00$.

As for engagement results revealed that control and value appraisals had a strong to moderate positive correlation to engagement with the strongest being with intrinsic value $r(490) = .56, p = .00$, and the weakest with control $r(490) = .39, p = .00$. Moreover, out of the three emotions, engagement had the strongest positive correlation with enjoyment and the weakest negative correlation with anxiety.

Table (6)

Significant correlations between the variables of study 1

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Intvalue	--							
(2) ATTvalue	0.45**							
(3) UTLvalue	0.44**	0.43**						
(4) Control	0.51**	0.38**	0.29**					
(5) Anxiety	-0.43**	-0.21**	-0.018**	-0.65**				
(6) Boredom	-0.48**	-0.23**	-0.16**	-0.52**	0.66**			
(7) Enjoyment	0.57**	0.41**	0.36**	0.34**	-0.22**	-0.41**		
(8) Engagement	0.56**	0.44**	0.42**	0.39**	-0.23**	-0.37**	0.84**	--

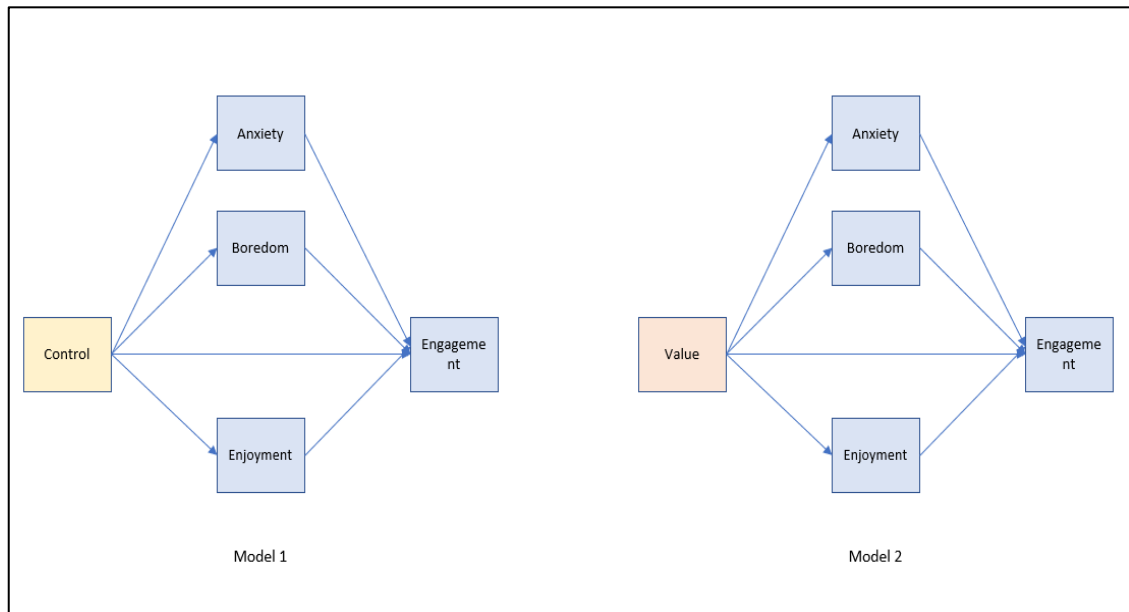
Note. N = 490. **p < .01.

3.1.3 Mediation analysis

H2 predicted that anxiety, boredom and enjoyment will mediate the relationship between control and value appraisals on one side and engagement on the other side. To test this prediction a multiple mediation analysis (model 4) was run through the use of PROCESS macro for the statistical software package SPSS (Hayes, 2022). This tests whether the indirect effect is statistically different from zero using bootstrapping. The result is deemed significant if the confidence intervals of the indirect effect do not contain a zero in between (Hayes & Rockwood, 2017). Two different models were tested one for control as the independent variable (x), and the other one for value. Both models had anxiety, boredom and engagement as the mediators and engagements as the outcome variable (y). Figure 7 below shows the conceptual mediation models for this study.

Figure (7)

Mediation conceptual models



Using a bootstrap analysis with 95% bias-corrected CIs and 10,000 resamples, results revealed that only enjoyment mediated the relationship between control and engagement [95% CI: 0.2339, 0.3904] by having a significant indirect effect ($\beta = 0.31$, $p < 0.001$). Moreover, enjoyment was also found to mediate the relationship between value and engagement ($\beta = 0.6018$, $p < 0.001$; [95% CI: 0.5096, 0.6980]). Neither anxiety nor boredom were found to mediate the relationship between control and value appraisals and engagement (see table 7 below for all resulting indirect effects). These results partially support H2 as enjoyment did positively mediate the relationship between control and value appraisals and engagement.

Table (7)

Indirect effects from the mediation models

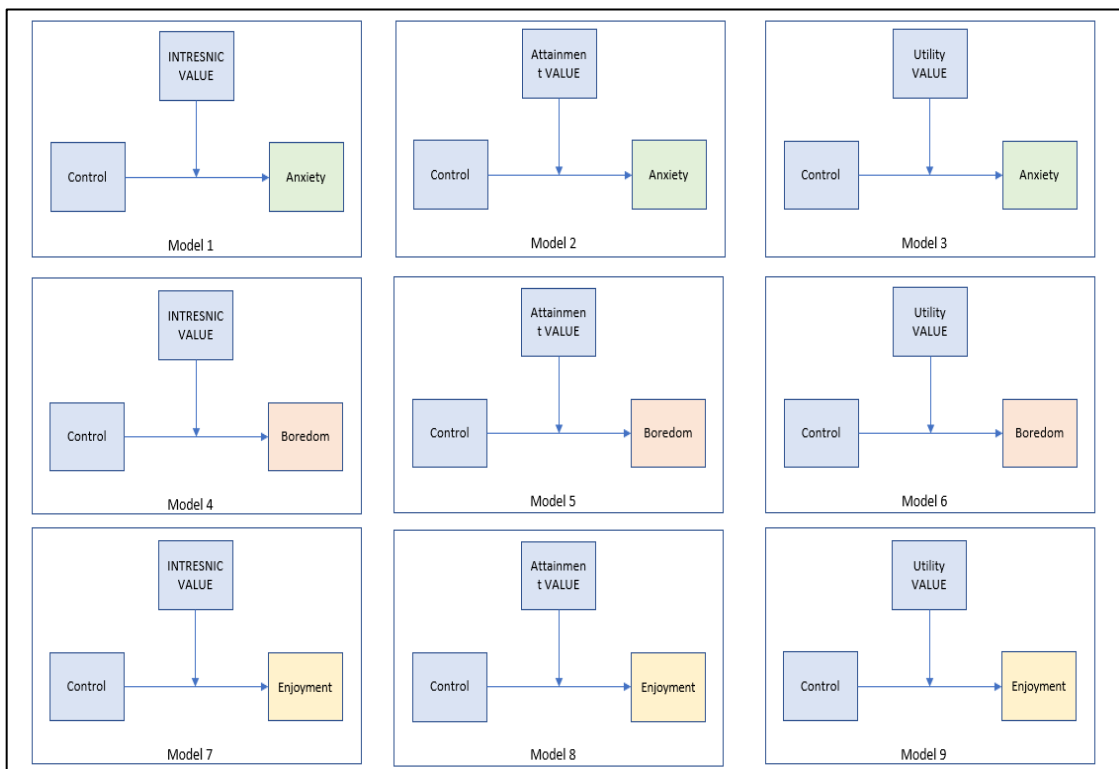
Indirect effect	Effect	Boots CI	
Control - anxiety - engagement	-0.0235	-0.0767	0.0267
Control – boredom – engagement	-0.0064	-0.0521	0.0447
Control – enjoyment – engagement	0.3125	0.2339	0.3904
Value – anxiety – engagement	0.0001	-0.0365	0.0334
Value – boredom – engagement	0.0006	-0.0413	0.0448
Value – enjoyment – engagement	0.6018	0.5096	0.6980

3.1.4 Moderation analysis

To test H3 and H4 a moderation analysis using process macro was used. H3 predicted that control and value appraisals and their interaction will positively predict enjoyment and negatively predict boredom and anxiety, while H4 predicted that high levels of value will amplify the relationship between high levels of control and enjoyment and low levels of control and anxiety, and low levels of value will amplify the relationship between control and boredom. To test this a moderation analysis (Model 1) was used using Process macro (Hayes, 2022), as value is assumed to moderate the relationship between control and achievement emotions. As with mediation analysis, moderation analysis uses bootstrapping with %95 confidence interval to test whether the effect of the independent variable on the dependent variable is different from zero with the existence of the moderator. Nine different regression models were constructed to test the moderating effect of intrinsic value, attainment value and utility value on the relationship between anxiety, boredom, enjoyment. Figure 8 demonstrate the 9 moderation models tested in this study.

Figure (8)

Moderation conceptual regression models



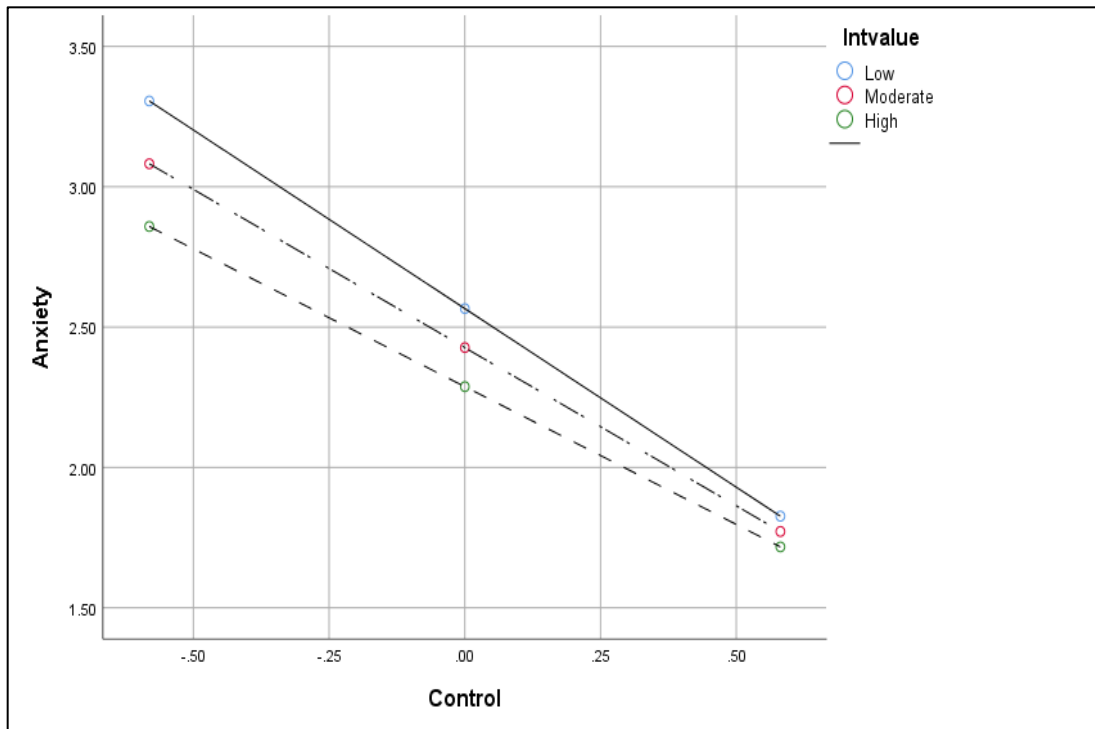
First tested were regression models 1, 2, and 3 for effect of control on Anxiety moderated by value. First all three models were significant at $F(3, 486) = 125.1687, p < 0.001, R^2 = 0.4359$ for intrinsic value, at $F(3, 486) = 117.3162, p < 0.001, R^2 = 0.4200$ for attainment, and at $F(3, 486) = 117.9845, p < 0.001, R^2 = 0.4214$ for utility. Control was found to predict anxiety in all three models ($\beta = -1.1272, t(486) = -14.5498, p < 0.001; [95\% \text{ CI: } -1.2794, -0.9750]$), ($\beta = -1.2831, t(486) = -17.4047, p < 0.001; [95\% \text{ CI: } -1.4280, -1.1383]$), and ($\beta = -1.2725, t(486) = -17.6582, p < 0.001; [95\% \text{ CI: } -1.4141, -1.1309]$). However, only intrinsic value was found to predict anxiety ($\beta = -0.2305, t(486) = -3.1341, p < 0.001; [95\% \text{ CI: } -0.3749, -0.0860]$)

The addition of the interaction of control x intrinsic value for model 1 was found significant and yielded an $F(1, 486) = 4.6531, p = 0.03, \text{ change } R^2 = 0.0054$. Moreover, although utility value was found not to predict anxiety ($\beta = 0.0621, p = 0.40; [95\% \text{ CI: } -0.0582, 0.2099]$), the interaction of control with utility value was found to be significant at $F(1, 486) = 4.6886, p = 0.03, \text{ change } R^2 = 0.0056$. On the other hand, attainment value was not found to moderate the relationship between control and anxiety ($p = .11$).

To answer H4 on higher levels of value amplifying the relationship between control and anxiety, the interaction slopes of control with intrinsic and utility value were examined. Results revealed that moderate and low levels of intrinsic value coincide with stronger negative relation between control and anxiety. Having higher levels of intrinsic value still amplifies the relationship between control and anxiety, but the effect is strongest at low levels of intrinsic value ($\beta = -1.2724, t(486) = -11.1517, p < 0.001$). Figure 9 below demonstrates the interaction slope between control and intrinsic value on anxiety.

Figure (9)

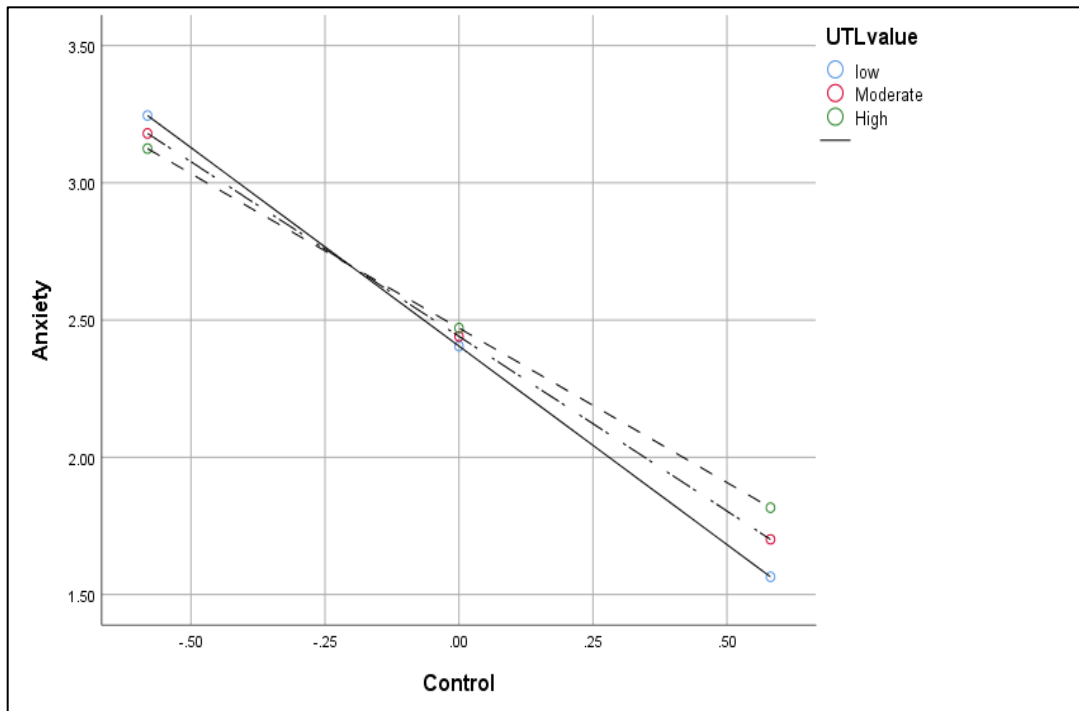
Control x intrinsic value interaction slope on anxiety



As for utility value, the interaction slopes revealed that the interaction between control anxiety is significant at low, moderate and high levels of utility value (demonstrated in Figure 10). However, at low levels of utility value, the negative relationship between control and anxiety is strongest ($\beta = -1.4462$, $t(486) = -11.7247$, $p < 0.001$).

Figure (10)

Control x utility interaction slope on anxiety



The next three models (4,5,6) were used to test the interaction of control and value on boredom. All three models were significant at $F(3, 486) = 84.6626, p < 0.001, R^2 = 0.3432$ for intrinsic value, at $F(3, 486) = 63.314, p < 0.001, R^2 = 0.5301$ for attainment, and at $F(3, 486) = 63.1082, p < 0.001, R^2 = 0.5295$ for utility. It was found that control significantly predicted boredom in all three models ($\beta = -0.6642, p < 0.001; [95\% \text{ CI}: -0.8201, -0.5083]$), ($\beta = -0.9215, p < 0.001; [95\% \text{ CI}: -1.0746, -0.7684]$), and ($\beta = -0.9623, p < 0.001; [95\% \text{ CI}: -1.1122, -0.8124]$) respectively. However, only intrinsic value was found to predict boredom $\beta = -0.5164, p < 0.001; [95\% \text{ CI}: -0.6644, -0.3685]$. but when accounted for the interaction of control and value results revealed that it was not significant for all subscales of value and does not change the model. This indicates that value does not moderate the relationship between control and boredom.

The final set of models (7,8,9) were then tested for moderation effect of value on the relationship between control and enjoyment. All three models were significant at $F(3, 486) = 83.1015, p < 0.001, R^2 = 0.5823$ for intrinsic value, at $F(3, 486) = 44.0418, p < 0.001, R^2 = 0.4623$ for attainment, and at $F(3, 486) = 40.5921, p < 0.001, R^2 = 0.4476$ for utility. Both attainment value and utility value were found to predict enjoyment when accounting for control, ($\beta = 0.4725, p < 0.001; [95\% \text{ CI}: .3481, 0.5969]$), and $\beta = 0.4215,$

$p < 0.001$; [95% CI: 0.3000, 0.5430]). However, neither utility nor attainment value were found to moderate the relationship between control and enjoyment.

On the other hand, control was found not to predict enjoyment when accounted for intrinsic value ($\beta = 0.0605$, $p = 0.3031$; [95% CI: -0.0548, 0.1757]). However, intrinsic value was found to moderate the relationship between control and enjoyment, as the addition of the interaction of control with intrinsic value to model 7 yielded significant results at $F(1, 486) = 7.2916$, $p = 0.03$, change $R^2 = 0.0099$. Interaction slopes for the results (demonstrated in figure 11 in figure I) revealed that at low levels of intrinsic value the interaction between control and enjoyment was negative ($\beta = -0.0775$, $t(486) = -0.8927$, $p < 0.001$), meaning that having lower levels of intrinsic value will affect those with more control to experience less enjoyment. However, at moderate levels of intrinsic value the interaction between control and enjoyment was not significant ($\beta = 0.0605$, $t(486) = 1.0310$, $p = 0.30$). On the other hand at high levels of intrinsic value the interaction between control and enjoyment was positive, with higher levels of intrinsic value having a stronger effect on that interaction ($\beta = 0.1980$, $t(486) = 2.9168$, $p < 0.001$). This means that having moderate to high levels of intrinsic value will cause students with more control to experience more enjoyment.

The results of the analysis of the data collected for study 1 highlight important interactions between appraisals of control and value and their effect on students' emotions and engagement in the language classroom. The next section will further highlight the findings of this study by discussing them in light of other current and previous research.

3.2 Results for study 2

This section will present the results for analyzing the data collected for the quasi-experimental research, which is study 2.

3.2.1 Preliminary analysis

Descriptive statistics for the dependent variables are shown in table 8, which are illustrated across students' English Language Proficiency level (beginner, intermediate, and advanced). Most variables seem to be within the near normal [$0 - \pm 0.25$], slight [$\pm 0.26 - \pm 0.75$], and moderate [$\pm 0.76 - \pm 1.25$] levels of skewness and kurtosis (Blanca et al., 2013). Visual inspection of data histograms and Q-Q plots indicated a near normal distribution of the data. Data was also screened for outliers using box plots and no outliers were detected.

Table (8)*Descriptive statistics for study 2*

Dependent variables	Level	Control				Experiment			
		M	SD	Skewness	Kurtosis	M	SD	Skewness	Kurtosis
Post INT	Beginner	4.19	0.54			4.03	0.45		
	Intermediate	3.80	0.70			4.58	0.45		
	Advanced	3.37	0.94	-0.43	22	4.33	0.62	-0.14	-1.24
	Total	3.91	0.70			4.32	0.52		
Post ATT	Beginner	4.51	0.52			3.67	0.94		
	Intermediate	3.75	0.86			4.71	0.48		
	Advanced	3.56	0.94	-0.52	-1.09	4.58	0.38	-0.73	0.26
	Total	4.04	0.83			4.25	0.86		
Post UTL	Beginner	4.51	0.67			4.03	0.71		
	Intermediate	3.98	0.75			4.85	0.25		
	Advanced	3.43	1.04	-0.36	-1.18	4.66	0.75	-1.14	0.44
	Total	4.13	0.82			4.48	0.64		
Post CONTROL	Beginner	3.55	0.47			3.38	0.53		
	Intermediate	3.20	0.52	0.00		3.58	0.47		
	Advanced	2.87	0.51		-0.79	3.20	0.57	-0.19	-1.16
	Total	3.31	0.53			3.46	0.49		
Post ANXITY	Beginner	2.75	1.03			2.26	0.86		
	Intermediate	2.83	1.16			2.51	1.16		
	Advanced	3.56	0.96	-0.05	-0.71	1.58	0.52	0.12	-1.14
	Total	2.89	1.08			2.31	1.00		
Post BOREDOM	Beginner	2.34	1.17			2.05	1.02		
	Intermediate	2.44	0.93			2.05	1.00		
	Advanced	3.62	1.29	0.45	-0.26	2.41	1.14	0.47	-0.12
	Total	2.55	1.12			2.09	0.92		
Post ENJOYMENT	Beginner	4.25	0.69			3.69	0.75		
	Intermediate	3.78	0.71			4.53	0.44		
	Advanced	2.93	0.31	0.17	-1.2	4.00	0.90	-0.41	-0.77
	Total	3.87	0.77			4.11	0.74		

Note. $N = 61$ (control= 31, experiment = 30), INT is intrinsic value, ATT is attainment value, UTL is utility value.

Visual inspection of scatter plots indicated a linear relationship between variables (appendix G). However, no multicollinearity was detected. Homogeneity of variance was assessed using Levene's test. Results indicated that homogeneity of variance was achieved for all variables with $p > .05$. The Box's M of 6.86 indicates that the homogeneity of covariance matrices across groups is assumed $F(84, 5610) = 1.06, p = 0.32$.

3.2.2 Hypothesis testing

A paired sample t test was conducted to compare students control and value appraisals and their emotions in the control group and the experiment group before and after conducting the intervention on the experiment group (Table 9). Results revealed that for the control group there was not a significant difference in students control and value appraisals and their emotions in the pretest and the posttest results with $p > .05$.

Table (9)

Paired Samples Statistics

	Variables	Control				Experiment			
		M	SD	t(df=30)	Sig	M	SD	t(df=29)	Sig
Pair 1	pre INT	3.78	0.50	-1.10	0.22	3.90	0.51	-2.81	0.00
	post INT	3.91	0.70			4.32	0.52		
Pair 2	pre ATT	4.04	0.75	-0.04	0.96	4.21	0.72	-0.16	0.87
	post ATT	4.04	0.83			4.25	0.86		
Pair 3	pre UTL	4.12	0.73	-0.08	0.93	4.13	0.75	-2.21	0.03
	Post UTL	4.13	0.82			4.48	0.64		
Pair 4	Pre CONTROL	3.26	0.50	-0.36	0.72	3.47	0.48	0.09	0.92
	Post CONTROL	3.31	0.53			3.46	0.49		
Pair 5	Pre Anxiety	2.96	0.94	0.29	0.77	2.96	1.11	2.62	0.01
	Post ANXIETY	2.89	1.08			2.31	1.00		
Pair 6	Pre Boredom	2.59	0.79	0.16	0.87	2.56	1.12	1.83	0.07
	Post Boredom	2.55	1.12			2.09	0.92		
Pair 7	Pre Enjoyment	3.79	0.52	-0.55	0.58	3.65	0.71	-3.15	0.00
	Post Enjoyment	3.87	0.77			4.11	0.74		

Note: N control = 31, N experiment = 30, INT is intrinsic value, ATT is attainment value, UTL is utility value.

As for the experiment group, the paired sample t test revealed that there was a significant difference between students pre-intrinsic value ($M= 3.90$, $SD= 0.51$) and post intrinsic value ($M= 4.32$, $SD= 0.52$); $t(29)=-2.81$, $p= 0.00$, and students pre utility value ($M= 4.13$, $SD= 0.75$) and post utility value ($M= 4.48$, $SD= 0.64$), $t(29)=-2.21$, $p= 0.03$. However, there was no significant difference in students pre- and post-attainment value ($p=87$) or control ($p=0.92$).

As for students' emotions, results revealed that there was a significant difference in students anxiety levels before ($M=2.96$, $SD=1.11$) and after ($M=2.31$, $SD=1.00$) the intervention $t(29)=-2.62$, $p= 0.01$, indicating that students anxiety levels went down after the intervention. Moreover, results revealed that there was a significant difference in students enjoyment levels before ($M=3.65$, $SD=0.71$) and after ($M=4.11$, $SD=0.74$) the intervention $t(29)=-3.15$, $p= .00$, indicating that student enjoyment levels were higher after the intervention. However, no significant difference was detected in students' boredom levels before and after the intervention ($p=0.07$).

A two-way multivariate analysis of covariance MANCOVA was conducted to determine a statistically significant difference between the control group and the experiment group on students control and value appraisals and their emotions controlling for students pretest results. Students group (experiment, control) and perceived English language competency level (beginner, intermediate, advanced) were entered as the independent variables, while students' intrinsic value, attainment value, utility value, control, anxiety, boredom and enjoyment were entered as the dependent variables. As for the covariates, students' scores on the pretests for intrinsic value, attainment value, utility value, control, anxiety, boredom and enjoyment were used.

Table (10)*MANCOVA - Tests of Between-Subjects Effects*

Source	Dependent variables	SS	MS	F	Sig.	partial η^2
Pre INT	Post INT	0.36	0.36	1.06	0.30	0.02
Pre ATT	Post ATT	0.00	0.00	0.02	0.88	0.00
Pre UTL	Post UTL	0.15	0.15	0.38	0.53	0.00
Pre CONTROL	Post CONTROL	0.14	0.14	0.62	0.43	0.01
Pre Anxiety	Post ANXIETY	2.95	2.95	2.49	0.12	0.04
Pre Boredom	Post Boredom	0.08	0.08	0.07	0.78	0.00
Pre Enjoyment	Post Enjoyment	2.02	2.02	5.13	0.02	0.10
	Post INT	2.57	2.57	7.54	0.00	0.13
	Post ATT	3.48	3.48	7.39	0.00	0.13
	Post UTL	3.25	3.25	7.89	0.00	0.14
Group	Post CONTROL	0.65	0.65	2.79	0.10	0.05
	Post ANXIETY	8.36	8.36	7.04	0.01	0.12
	Post Boredom	5.30	5.30	4.66	0.03	0.08
	Post Enjoyment	2.56	2.56	6.50	0.01	0.11
	post INT	1.08	0.54	1.59	0.21	0.06
	Post ATT	0.06	0.03	0.07	0.93	0.00
	Post UTL	1.29	0.64	1.56	0.22	0.06
level	Post CONTROL	1.28	0.64	2.72	0.07	0.10
	Post ANXIETY	0.03	0.02	0.01	0.98	0.00
	Post Boredom	3.72	1.86	1.63	0.20	0.06
	Post Enjoyment	2.95	1.47	3.74	0.03	0.13
	Post INT	3.14	1.57	4.61	0.01	0.16
	Post ATT	8.96	4.48	9.50	0.00	0.28
	Post UTL	6.84	3.42	8.28	0.00	0.25
Group * level	Post CONTROL	0.71	0.35	1.51	0.23	0.05
	Post ANXIETY	4.21	2.11	1.77	0.18	0.06
	Post Boredom	1.51	0.75	0.66	0.51	0.02
	Post Enjoyment	5.61	2.80	7.11	0.00	0.22

Note. INT is intrinsic value, ATT is attainment value, UTL is utility value.

As seen from table 10, results revealed that group had a significant effect on students intrinsic $F(1, 48) = 7.54$, $p = 0.00$, partial $\eta^2 = 0.13$, attainment $F(1, 48) = 7.39$, $p = 0.00$, partial $\eta^2 = 0.14$. and utility value $F(1, 48) = 7.89$, $p = 0.00$, partial $\eta^2 = 0.13$, as well as students anxiety $F(1, 48) = 7.04$, $p = 0.01$, partial $\eta^2 = 0.12$, boredom $F(1, 48) = 4.66$, $p = 0.03$, partial $\eta^2 = 0.08$ and enjoyment levels $F(1, 48) = 6.50$, $p = 0.01$, partial $\eta^2 = 0.11$. However, there was no significant effect of group on control $F(1, 48) = 2.79$, $p = 0.10$, partial $\eta^2 = 0.05$.

Examining the means of the dependent variables for both the experiment and control groups indicate that the results were in favor of the experiment group for all significant variables (table 9) as the means were higher for enjoyment, intrinsic, attainment and utility value. On the other hand, anxiety and boredom had higher means for the control group which indicates that those in the experiment group experienced higher levels of enjoyment and lower levels of anxiety and boredom.

As for students competence level results revealed a significant variation only for students' enjoyment levels after the experiment $F(2, 48) = 3.74$, $p = 0.03$, partial $\eta^2 = 0.13$. A post hoc Tukey test showed that intermediate and advanced learners differed significantly at $p < 0.05$, in favor of intermediate learners; while the beginners did not differ significantly from the other two levels.

Finally, MANCOVA analysis indicated that there was a statically significant interaction between group and students' level on the combined dependent variables, $F(14, 48) = 1.94$, $p = 0.03$; Wilks' $\Lambda = 0.57$. Tests of between subjects' effects indicated that the interaction between group and level had statically significant effect on intrinsic $F(2, 48) = 4.61$, $p = 0.01$, partial $\eta^2 = 0.16$, attainment $F(2, 48) = 9.50$, $p = 0.01$, partial $\eta^2 = 0.28$ and utility value $F(2, 48) = 8.28$, $p = 0.00$, partial $\eta^2 = 0.25$, as well as enjoyment $F(2, 48) = 7.11$, $p = 0.00$, partial $\eta^2 = 0.22$. While for control, anxiety and boredom the interaction did not have any statically significant effect $p > 0.05$.

Interaction plots (see figures 12 -15 in appendix I) indicate that students with intermediate and advanced perceived level of English had higher levels of enjoyment, intrinsic, attainment, and utility value on the experiment group compared with the control group when controlled for the pre-test results. However, beginners had lower levels of enjoyment, intrinsic, attainment and utility value in the experiment group when compared with the control group.

The results of this section corporate the efficacy of a task value intervention in encouraging students to reappraise their value which affects students emotions inside the language classroom. The next section will further discuss these important findings.

Chapter Four

Discussion

This section will start by presenting the discussion of the results for the correlational study (study 1), then it will be followed by presenting the discussion for the quasi-experimental study. This section will end by offering implications and conclusions, and considering the limitations of both studies.

4.1 Discussion for study 1

Directed by the control value theory of achievement emotions, our study aimed to examine the relationships between appraisals of control and value, achievement emotions and engagement. H1 predicted that appraisals of control and value for native Arabic speakers learning English will correlate positively with enjoyment, and negatively with anxiety and boredom. Results came in line with the control-value theory assumptions (Pekrun, 2006) and with previous studies on Language learners (Shao et al., 2020). These results indicate that having a good level of control and value will result in higher enjoyment of the English language classes and activities, as well as lower the levels of their anxiety and boredom. Engagement was found to have the strongest correlation to enjoyment, a predicted correlation as enjoyment is an activity aroused emotion and was reported to be key to enhancing students engagement and motivation in learning tasks (Linnenbrink-Garcia et al., 2016).

The second hypothesis examined whether enjoyment positively mediated the relationship between control and value appraisals, while anxiety and boredom negatively mediated that relationship. Results revealed that enjoyment was the only significant mediator in that relationship. These results do not fully align with the assumption CVT in that negative emotions negatively mediate the relationship between control and value appraisals and engagement. However, this could be explained by and highlight the distinction in the concepts of engagement versus disengagement (Reschly & Christenson, 2012), as there is haziness on whether engagement should be measured as a single continuum or whether engagement and disengagement should be separated. According to Skinner et al. (2008) engagement and disengagement are two separate concepts entailing different indicators. Where enjoyment is viewed as an indicator of engagement, boredom is viewed as an indicator of disengagement. This view is also shared by Martin (2007), as

disengagement is viewed as a maladaptive impeding motivational behavior that is underpinned by anxiety.

On enjoyment mediating the relationship between control and value appraisals and engagement, this is a predicted result as students who value the subject being learned and have more perceived control over their learning, experience more enjoyment and are more likely to stay engaged with classroom tasks and activities (Pekrun et al., 2007). Moreover, enjoyment has been emphasized as the emotion to foster in order to enhance students engagement in the classroom (Linnenbrink-Garcia et al., 2016). What is interesting about these results is that the mediation effect for enjoyment was stronger, almost doubled, between value and engagement, than control and engagement. This is an important implication for future experimental studies or even teachers that aim to increase student's engagement in the English language classroom as strategies that aim at increasing students valuing of the subject may lead to more enjoyment and better engagement. The links between value and engagement has been established in previous research, (Linnenbrink-Garcia et al., 2016) reported that value beliefs strongly predict students activity choice and involvement (see also Green et al., 2007; and Martin, 2007).

H3 and H4 predicted that control and value appraisals will interact differently to affect anxiety, boredom and enjoyment. Results revealed that when it comes to anxiety, control negatively predicted anxiety, while only intrinsic value was found to negatively predict anxiety in the presence of control. Moreover, both intrinsic and utility value was able to moderate the relationship between control and anxiety. The lower the level of intrinsic value perceived by the students; lower levels of control will lead to higher levels of anxiety. Experiencing higher levels of intrinsic value will still moderate the negative relationship between control and anxiety, however the effect size is smaller than those who are experiencing lower levels of intrinsic value. Students who have either high or low levels of intrinsic value and low control will experience more anxiety. Utility value was also found to amplify the negative relationship between control and anxiety at low, moderate and high levels, with the effect being the strongest at low levels of utility value. These findings partially support previous findings from the domain of mathematics as anxiety was found to be predicted by high levels of control and low levels of value (Frenzel et al., 2007).

These results somewhat align with the assumption of CVT that anxiety is instigated when students value the situation as (failure) and they are uncertain about whether they can change the outcomes or avoid failure due to their moderate to low control (Pekrun et al., 2007). Considering the context of this research is very important for this, as there is a certain uniqueness to anxiety experienced in the context of SLA (E. Horwitz et al., 1986). Anxiety, which is assumed to be instigated in situations where the uncertainty about the outcome or the event implies possible danger (Miceli & Castelfranchi, 2005), was reported to be strongly negatively predicted by self-perceived proficiency of Arab learners of English (J.-M. Dewaele & Al-Saraj, 2015). Competence beliefs have been reported to shape students emotions (Linnenbrink-Garcia et al., 2016). This provides supports for the results in that students who have low controllability over the outcomes of the course and their expected grades, anxiety is classified as a prospective outcome emotion (Pekrun et al., 2023), due to uncertainty in their language abilities will experience high levels of anxiety in spite of having low or high levels of interest in the course, or whether the course is of high or low value to them. However, this effect will be stronger for those who have lower interest and value than those who have higher interest and value.

As for boredom, value was not found to moderate the relationship between it and control. This does not come fully in line with previous studies, as Li (2021) reported that intrinsic value was found to interact with control to affect boredom. However, the results indicated that when control shared its variance with value, it had a significant large negative effect on boredom. This could be explained by the fact that having low levels of control coupled with lack of value leads to high level of boredom. In other words, a student who is sitting in the English language class and does not find any value in that course alongside having low perceived control will experience higher levels of boredom than someone who has higher levels of perceived control. This is actually inline with the assumptions of CVT (Pekrun, 2006). The level of perceived control and its effect on boredom is explained by being in an over-challenging setting, as (Pekrun et al., 2023) reported that for undergraduate students boredom is usually the result of an over-challenge and not an under-challenge.

Finally, intrinsic value was found to be the only moderator in the relationship between control and enjoyment while attainment and utility value did not interact with control to predict enjoyment, which is similar to results from other studies in the field of

mathematics (Putwain et al., 2021). Results revealed that at low levels of intrinsic value, the moderation effect was negative, then dissipated at moderate levels of intrinsic value, to come back at high levels of intrinsic value but with a positive effect. This means that students who have low levels of intrinsic value and high levels of control will experience less enjoyment, while those who experience high levels of intrinsic value and high levels of control will experience more enjoyment during the English language course. Intrinsic value has been reported to strongly predict enjoyment (Pekrun et al., 2023) for undergraduate learners, and in field of learning mathematics low levels of intrinsic value was found to amplify the positive relationship between control and enjoyment (Putwain et al., 2021), while other studies in mathematics (Frenzel & Goetz, 2007) reported that enjoyment is instigated when there is high levels of control and domain value, which is the case in this study.

As for the findings of having low levels of intrinsic value and high levels of control resulting in lower levels of enjoyment, this might be due to the context in which the study was conducted. Students who filled out the survey are taking English 101 course as a mandatory requirement for getting their B.A. degree in various fields at the university; They are there not because they want to be there but because they have to. This might result is students experiencing low levels of intrinsic value for the course, especially those who have high competence beliefs (control) and do not feel like they need to take a basic English course. Consequently, those students might experience lower levels of enjoyment than those students who have higher levels of intrinsic value.

This study aimed to explore the relationships between control and value appraisals, anxiety, enjoyment, boredom and engagement in the context of SLA. Results indicated that control and value appraisals correlate negatively with negative emotions and positively with positive emotions. Engagement was found to have a positive association with appraisals of control and value and enjoyment, and a negative association with anxiety and boredom. This indicates that learners in the context of SLA share the same profile of relationships amongst the variables of this study with learners from other fields, such as mathematics (Putwain et al., 2021). Another important finding of this research is that enjoyment is the only achievement emotion out of the ones investigated in this study that is found to mediate the relationship between appraisals of control and value and engagement which supports previous research findings (Linnenbrink-Garcia et al., 2016).

A final group of findings is that intrinsic value was found to interact with control to predict enjoyment and anxiety, while utility value moderated only the relationship between control and anxiety.

4.2 Discussion for study 2

This study aimed to investigate the effect of a task value intervention on students' appraisals of control and value as well as their achievement emotions including anxiety, boredom and enjoyment. When students' scores before and after the intervention were compared together, results indicated that students who underwent the intervention had significantly higher levels of intrinsic value, utility value, and enjoyment, and lower levels of anxiety after the intervention. On the other hand, students who were in the group that did not undergo the intervention had no significant difference on their scores from before and after the intervention for any of the study variables. When the scores collected on the pretest were entered as covariates the results indicated that students who were subjected to the tasks targeting their subjective task value had higher levels of intrinsic value, attainment value, utility value and enjoyment. They have also had lower levels of boredom and anxiety than those students who were not asked to do the tasks.

The above results indicate that a task value intervention built upon the value reappraisal model (Acee et al., 2018) has worked in reappraising students' subjective task value in the context of SLA, which in its turn has increased students levels of enjoyment and lowered students levels of boredom and anxiety based on the links established by the control value theory of achievements emotions (Pekrun, 2006).

The results of this study come in line with previous research targeting students subjective task value in other fields (Acee & Weinstein, 2010). When it comes to utility value, being one of the most targeted types of value by interventions (Rosenzweig et al., 2022), there is a lot of evidence supporting the efficacy of value interventions in enhancing students utility value. Students in the experiment group were asked to reflect on the importance of English language to them in their daily life and for their future goals which has been shown to enhance students' perception of the importance of the what is being learned and placing more value to it (Eccles & Wigfield, 2020). As for attainment and intrinsic value, there is not enough research utilizing interventions to target these constructs (Rosenzweig et al., 2022). However, with previous evidence supporting a positive correlation between

the three dimensions of subjective task value (Wigfield & Eccles, 2020), seeing an increase in all three dimension of students' task value in this study might be a result of that.

Seeing an increasing level in students enjoyment and a decreasing level of students boredom and anxiety as a result of targeting students subjective task value is supported by the original links proposed by the control value theory (Goetz et al., 2023; Pekrun, 2006; Pekrun et al., 2023) and confirmed by contemporary emotions researchers (Scherer & Moors, 2019). Students emotions are not produced in a vacuum; They are the result of students appraising the value of the subject or task at hand and their control. Consequently, any change in students' appraisals of control and value is linked to changes in students achievement emotions. This "change-change" effect was tested and confirmed by (Held & Hascher, 2022), as positive changes in students control and value led to an increase in the level of students enjoyment and a decrease in the levels of students anxiety and boredom.

Although this change-change model was not tested in the field of SLA, a number of correlational studies have confirmed students control and value appraisals to be antecedents of students emotions in SLA (Li, 2021; Shao et al., 2020, 2023). Moreover, research on achievement emotions and SLA have attested to the negative relationship between students enjoyment and anxiety and boredom in the language classroom (Kruk et al., 2022a; Li & Wei, 2022), an outcome that was also evident in the results of the first study in this research paper. This means that when students experience higher levels of enjoyment, they could experience lower levels of boredom and anxiety in the language classroom.

Another dimension to the results of this study comes from students' perceived competence in English. The results have indicated that the intervention has worked best in enhancing students' levels of intrinsic, attainment and utility value for students who had perceived their English language level to be intermediate and advanced. However, students who perceived their English language level to be at a beginner's level did not benefit as much from the intervention. On the contrary, results revealed that students with a perceived level of a beginner who were subjected to the tasks aimed at enhancing their subjective task value levels, had lower levels of intrinsic, attainment and utility value than

those students who were not subjected to the intervention. The results were the same for enjoyment.

Previous research has mostly reported a better benefit of value interventions for those students with lower levels of competence (Rosenzweig et al., 2022; Wigfield & Eccles, 2020), specially for self-generated value tasks. However, other research utilizing both delivering a task-value message, and generating a value task, as it is the case with this study, have indicated that delivering a task value message might have a deterring effect on students with lower perceived competence (Canning & Harackiewicz, 2015). In the context of SLA, positive correlations have been reported between students perceived competence level and task value (Cocks & Watt, 2004). As well as students perceived competence and their willingness to communicate and engage in tasks (Knell & Chi, 2012). This could explain why in this study students who had higher levels of English language competence, had higher levels of task value and enjoyment as a result of doing the tasks of the intervention.

As for students' competency level and enjoyment, targeting students subjective task value has revealed that those with higher perceived level of competence experienced higher levels of enjoyment than those who had lower levels of perceived competence. This is supported by earlier studies in the field of SLA which reported a positive correlation between perceived English language competence and enjoyment (Dewaele & Li, 2022). According to emotions researchers, higher levels of power is linked to a higher level of a tendency to approach the given task or activity (Scherer & Moors, 2019), which could result in higher task enjoyment. However, there were no links made between having a sense of higher power on students actively avoiding the task/activity, which could explain why students' perceived competence level in English did not have an effect on students' anxiety level or boredom.

The results of this study offer insights into the efficacy of a task value intervention in SLA on students' value appraisals and their emotions inside the language classroom. Students value appraisals were affected by an intervention that targeted their task value, which led to students experiencing greater levels of enjoyment and lower levels of boredom and anxiety in the language classroom. Students' self-perceived competency

level in English has also played a pivotal role on the effects of the intervention on students' perceived value and emotions.

4.3 Bringing the two studies together

This research has focused on emotions in SLA with employing the control-value theory of achievement emotions as the underpinning foundation to investigate those emotions. The results from the first study corroborated the assumptions of the CVT in the context of SLA, as students' enjoyment was found to positively correlate to students' control and value appraisals of English language, while their anxiety and boredom was found to negatively correlate with students' control and value appraisals inside the classroom. This has laid foundation for conducting the second study which assumed that a change in students' control and value appraisals will lead to a change in students' anxiety, enjoyment and boredom inside the SLA classroom. Results of the second study have confirmed that as a task value intervention was found to help students reappraise their value beliefs of English language inside the classroom which in its turn helped students to experience higher levels of enjoyment and lower levels of anxiety and boredom. The results of those two studies carry important implications in the field of SLA and language teaching. The next section will discuss these implications, draw conclusions and outline some of the limitations for this research.

4.4 Implications and conclusions

Our findings provide implications for research on emotions in SLA. First, the findings of study 1 provide further evidence to substantiate the transferability of the control and value theory assumptions to the context of SLA, providing solid theoretical underpinning to investigate emotions in the context of SLA as the lack of a theoretical ground is a major issue in SLA research on emotions (Dewaele & Li, 2020). Furthermore, the findings highlight the role perceived control and value and their interaction play in instigating students' achievement emotions. To my knowledge, this is the first study in the field of SLA to investigate the different subscales of value and their interaction with control to predict achievement emotions. This is another area of research that needs to be probed into in the field of SLA as research in other fields has reported some significant findings on the matter (for example, Putwain et al., 2018, 2021; Simonton & Garn, 2020).

The findings of study 1 also bear important implications for educators. First, enjoyment was found to be a mediator between students control and value appraisals and engagement. Moreover, value, especially intrinsic value, was found to correlate with control to foster enjoyment. These findings are of value for educators who aim to foster student's engagement and achievement inside the classroom. This can be done by using techniques and strategies that directly foster student's enjoyment inside the classroom (Forsblom et al., 2021) like using hands-on activities and providing students with the opportunities to engage in inertly interesting activities. Moreover, it was evidenced in this study that student's intrinsic value and control at high levels enhance enjoyment. Educators could target students competence and value beliefs to increase their enjoyment (Linnenbrink-Garcia et al., 2016; Pekrun et al., 2023) through the use of well-designed instructions, informative feedback, relevant tasks and activities, and supporting feelings of belonging and relatedness. These implications could also be useful for designing educational interventions for research purposes.

As for the second study, the findings bear important implications in the context of English language learning and subjective task value. First, students' subjective value of learning English as a second language could be targeted and reevaluated through using a well-structured set of tasks that aim to encourage students to attach more value to English language learning. These tasks combine both delivering students a task value message that aim to make students aware of the importance and relevance of English language learning to them, as well as engaging them in a task value activity that is directed at pushing students to rationalize the relevance of learning English to their own life., which has been proved to be more effective than using only a task value activity (Acee et al., 2018; Canning et al., 2018). Moreover, using varied types of value reappraisal strategies that include encouraging students to generate rationales, imagining future selves and comparing pros and cons of task engagement has proven to be effective in making students reappraise their subjective task value towards English language learning.

The findings also carry important implications for emotion research in second language acquisition. A change in students subjective task value has been accompanied by a change in students emotions in the language classroom. This indicates that students emotions inside the language classroom could be targeted by using strategies that aim to motivate students to reappraise their subjective task value, which is supported by research on

emotions (Held & Hascher, 2022; Pekrun et al., 2023; Scherer & Moors, 2019), and research on language learning (Shao et al., 2019). Researchers who aim to investigate the dynamic changing nature of emotions inside the language classroom could target students value appraisals to instigate a change in achievement emotions inside the classroom.

These findings are also of importance for the teaching of English as a second language. Both positive and negative emotions have been found to play a central role in English language learning (P. MacIntyre & Gregersen, 2012a; Shao et al., 2019). Positive emotions such as enjoyment has been linked to better language performance levels (J. M. Dewaele & Alfawzan, 2018), while anxiety and boredom (Li, 2021) has been showed to have a deterring effect on students language performance. English language teachers who aim to enhance the learning experience for their learners and arrive at better achievement results could actively work to increases students enjoyment level inside the classroom and decrease their levels of anxiety and boredom. As evident from the findings of this research and previous work (Li, 2021; Li et al., 2021; Shao et al., 2020), this could be done by using tasks that target students subjective task value inside the language classroom.

4.5 Limitations

There are a number of limitations for this study 1 that need to be considered. First, this study only investigated three achievement emotions which are anxiety, enjoyment and boredom. Designing research that combine an array of achievement emotions is evidenced to result in better understanding of how each one of these emotions uniquely relates to other variables (Pekrun et al., 2023). Another Limitation for this study is the use of a cross-sectional design and collecting data at only one point in time. Future research needs to longitudinal research designs to investigate emotions as previous studies in SLA have evidenced that achievement emotions and their effect on achievement could have a time limit and change with time (Li & Wei, 2022). A third limitation for this study is the use of self-reports to collect data. Although emotions are indivial experiences and self-reports are considered suitable to unwrap these experience (Goetz et al., 2023), other measures are recommended to be used while studying emotions like observations, ethnographic designs and quantifying typical emotions facial expressions using artificial intelligence. A final limitation for this study is the use of engagement scale items without the disaffection scale items from Skinner et al. (2008),

this might partially explain why boredom was found not be predicted the interaction of control and value, nor to mediate the relationship between control and value appraisals. Future research is recommended to consider the limitations for the conceptualization of engagement used in the study as one construct or two including disengagement (Reschly & Christenson, 2012).

As for the quasi-experimental study, it has a number of limitations. First, as it is the case with most intervention research in educational settings, this research did not have the leverage to randomly select participants and assign them to the experiment and control groups as they were already grouped together as a class. Although great measures have been followed in this research to ensure the two groups had similar characteristics (please see methodology section), this lack of randomization might limit the generalizability of the research findings. Another limitation is that this research has investigated only three achievement emotions, namely enjoyment, anxiety and boredom. According to recent research on emotions (Pekrun et al., 2023), it is recommended to include a wider range of achievement emotions in the investigation of those emotions in an educational setting. A third limitation is the used of only self-reports to measure students appraisals of control and value and emotions. Although self-report measurements are good at detecting the subjective and multicomponential nature of students emotions (Shuman & Scherer, 2014), other instruments such as observations and interviews are recommended to be used to unwrap these emotional experiences (Goetz et al., 2023).

List of Abbreviations

Abbreviation	Meaning
SLA	: Second Language Acquisition
L1	: First Language
L2	: Second Language
CVT	: Control-Value Theory of Achievement Emotions
FLA	: Foreign Language Anxiety
FLE	: Foreign Language Enjoyment
FLLB	: Foreign Language Boredom
FL	: Foreign Language
FLLS	: Foreign Language Enjoyment Scale
AEQ	: Achievement Emotions Questionnaire (AEQ)
CEFR	: Common European Framework of Reference for languages (CEFR)

References

- Acee, T. W., & Weinstein, C. E. (2010). Effects of a value-reappraisal intervention on statistics students' motivation and performance. *Journal of Experimental Education*, 78(4), 487–512. <https://doi.org/10.1080/00220970903352753>
- Acee, T. W., Weinstein, C. E., Hoang, T. V., & Flagg, D. A. (2018). Value Reappraisal as a Conceptual Model for Task-Value Interventions. *Journal of Experimental Education*, 86(1), 69–85. <https://doi.org/10.1080/00220973.2017.1381830>
- Alrabai, F. (2022). Modeling the relationship between classroom emotions, motivation, and learner willingness to communicate in EFL: applying a holistic approach of positive psychology in SLA research. *Journal of Multilingual and Multicultural Development*, May, 1–19. <https://doi.org/10.1080/01434632.2022.2053138>
- APA. (2017). *APA Ethical Principles of Psychologists and Code of Conduct*. [https://www.apa.org/ethics/code#:~:text=3.04 Avoiding Harm,it is foreseeable and unavoidable.](https://www.apa.org/ethics/code#:~:text=3.04%20Avoiding%20Harm,it%20is%20foreseeable%20and%20unavoidable.)
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the Process of Cross-Cultural Adaptation of Self-Report Measures. *Spine*, 25(24), 3186–3191. <https://doi.org/10.1097/00007632-200012150-00014>
- Bieleke, M., Gogol, K., Goetz, T., Daniels, L., & Pekrun, R. (2021). The AEQ-S: A short version of the Achievement Emotions Questionnaire. *Contemporary Educational Psychology*, 65, 101940. <https://doi.org/10.1016/j.cedpsych.2020.101940>
- Blanca, M. J., Arnau, J., López-Montiel, D., Bono, R., & Bendayan, R. (2013). Skewness and kurtosis in real data samples. *Methodology*, 9(2), 78–84. <https://doi.org/10.1027/1614-2241/a000057>
- Botes, E., Dewaele, J.-M., & Greiff, S. (2022). Taking stock: A meta-analysis of the effects of foreign language enjoyment. *Studies in Second Language Learning and Teaching*, 12(2), 205–232. <https://doi.org/10.14746/ssllt.2022.12.2.3>
- Buff, A. (2014). Enjoyment of learning and its personal antecedents: Testing the change-change assumption of the control-value theory of achievement emotions. *Learning*

- and Individual Differences*, 31, 21–29. <https://doi.org/10.1016/j.lindif.2013.12.007>
- Campbell, D. T. (1957). Factors relevant to the validity of experiments in social settings. *Psychological Bulletin*, 54(4), 297–312. <https://doi.org/10.1037/h0040950>
- Canning, E. A., & Harackiewicz, J. M. (2015). Teach it, don't preach it: The differential effects of directly-communicated and self-generated utility-value information. *Motivation Science*, 1(1), 47–71. <https://doi.org/10.1037/mot0000015>
- Canning, E. A., Harackiewicz, J. M., Priniski, S. J., Hecht, C. A., Tibbetts, Y., & Hyde, J. S. (2018). Improving performance and retention in introductory biology with a utility-value intervention. *Journal of Educational Psychology*, 110(6), 834–849. <https://doi.org/10.1037/edu0000244>
- Chen, Z., Zhang, P., Lin, Y., & Li, Y. (2021). Interactions of trait emotional intelligence, foreign language anxiety, and foreign language enjoyment in the foreign language speaking classroom. *Journal of Multilingual and Multicultural Development*, 0(0), 1–21. <https://doi.org/10.1080/01434632.2021.1890754>
- Cocks, R. J., & Watt, H. M. G. (2004). Relationships among perceived competence, intrinsic value and mastery goal orientation in English and maths. *Australian Educational Researcher*, 31(2), 81–111. <https://doi.org/10.1007/BF03249521>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Routledge. <https://doi.org/https://doi.org/10.4324/9780203771587>
- Council of Europe. (2020). *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*.
- Derakhshan, A., Kruk, M., Mehdizadeh, M., & Pawlak, M. (2021). Boredom in online classes in the Iranian EFL context: Sources and solutions. *System*, 101(February). <https://doi.org/10.1016/j.system.2021.102556>
- Dewaele, J.-M. (2022). The Interplay between Learner-Internal Variables and Levels of Anxiety and Enjoyment among Spanish EFL Learners. In K. Kersten & A. Winsler (Eds.), *Understanding variability in second language acquisition, bilingualism, and cognition: A multi-layered perspective* (p. 374). Routledge.

<https://www.routledge.com/Understanding-Variability-in-Second-Language-Acquisition-Bilingualism/Kersten-Winsler/p/book/9780367726386>

- Dewaele, J.-M., & Al-Saraj, T. M. (2015). Foreign Language Classroom Anxiety of Arab learners of English: The effect of personality, linguistic and sociobiographical variables. *Studies in Second Language Learning and Teaching*, 5(2), 205–228. <https://doi.org/10.14746/ssllt.2015.5.2.2>
- Dewaele, J.-M., & Li, C. (2020). Emotions in Second Language Acquisition: A critical review and research agenda. *Foreign Language World*, 196(1), 34–49.
- Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237–274. <https://doi.org/10.14746/ssllt.2014.4.2.5>
- Dewaele, J. M., & Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching*, 8(1), 21–45. <https://doi.org/10.14746/ssllt.2018.8.1.2>
- Dewaele, J. M., & Dewaele, L. (2020). Are foreign language learners' enjoyment and anxiety specific to the teacher? An investigation into the dynamics of learners' classroom emotions. *Studies in Second Language Learning and Teaching*, 10(1), 45–65. <https://doi.org/10.14746/ssllt.2020.10.1.3>
- Dewaele, J. M., & Li, C. (2021). Teacher enthusiasm and students' social-behavioral learning engagement: The mediating role of student enjoyment and boredom in Chinese EFL classes. *Language Teaching Research*, 25(6), 922–945. <https://doi.org/10.1177/13621688211014538>
- Dewaele, J. M., & MacIntyre, P. D. (2016). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of the language learner. *Positive Psychology in SLA*, April, 215–236. <https://doi.org/10.21832/9781783095360-010>
- Dewaele, Jean-marc, Botes, E., & Greiff, S. (2021). *Sources and effects of Foreign Language Enjoyment , Anxiety and Boredom : A Structural Equation Modelling Approach*. 1–36.

- Dewaele, Jean–Marc, & Li, C. (2022). Foreign Language Enjoyment and Anxiety: Associations With General and Domain- Specific English Achievement. *Chinese Journal of Applied Linguistics*, 45(1), 32–48. <https://doi.org/10.1515/CJAL-2022-0104>
- Dewaele, Jean–Marc, & MacIntyre, P. (2022). “You can’t start a fire without a spark”. Enjoyment, anxiety, and the emergence of flow in foreign language classrooms. *Applied Linguistics Review*, 13. <https://doi.org/https://doi.org/10.1515/applirev-2021-0123>
- Dukes, D., Abrams, K., Adolphs, R., Ahmed, M. E., Beatty, A., Berridge, K. C., Broomhall, S., Brosch, T., Campos, J. J., Clay, Z., Clément, F., Cunningham, W. A., Damasio, A., Damasio, H., D’Arms, J., Davidson, J. W., de Gelder, B., Deonna, J., de Sousa, R., ... Sander, D. (2021). The rise of affectivism. *Nature Human Behaviour*, 5(7), 816–820. <https://doi.org/10.1038/s41562-021-01130-8>
- Durik, A. M., Shechter, O. G., Noh, M., Rozek, C. S., & Harackiewicz, J. M. (2015). What if I can’t? Success expectancies moderate the effects of utility value information on situational interest and performance. *Motivation and Emotion*, 39(1), 104–118. <https://doi.org/10.1007/s11031-014-9419-0>
- Eccles, J. S. (2005). Subjective Task Value and the Eccles et al. Model of Achievement-Related Choices. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (First, pp. 105–121). Guilford Publications.
- Eccles, J. S., & Wigfield, A. (2002). Motivational Beliefs, Values, and Goals. *Annual Review of Psychology*, 53(1), 109–132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>
- Eccles, J. S., & Wigfield, A. (2020). From expectancy-value theory to situated expectancy-value theory: A developmental, social cognitive, and sociocultural perspective on motivation. *Contemporary Educational Psychology*, 61(May), 101859. <https://doi.org/10.1016/j.cedpsych.2020.101859>
- Eichhorn, J. (2022). Survey Research and Sampling - The SAGE Quantitative Research kit. In *Jurnal Penelitian Pendidikan Guru Sekolah Dasar* (Vol. 6, Issue August).

SAGE Publications Ltd.

- Feng, E., Hong, G., Kaid, J., & Ali, M. (2022). *Engagement Mediates the Relationship Between Emotion and Achievement of Chinese EFL Learners*. 13(July), 1–12. <https://doi.org/10.3389/fpsyg.2022.895594>
- Forsblom, L., Pekrun, R., Loderer, K., & Peixoto, F. (2021). Cognitive appraisals, achievement emotions, and students' math achievement: A longitudinal analysis. *Journal of Educational Psychology*. <https://doi.org/10.1037/edu0000671>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218–226. <https://doi.org/10.1037/0003-066X.56.3.218>
- Fredrickson, B. L. (2005). ★ The broaden-and-build theory of positive emotions. In *The Science of Well-Being* (pp. 216–239). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198567523.003.0008>
- Frenzel, A. C., & Goetz, T. (2007). *2007-Girls and mathematics – A “hopeless” issue A control-value approach to gender differences in emotions towards mathematics.pdf*. XXII(April 2005), 497–514.
- Frenzel, A. C., Pekrun, R., & Goetz, T. (2007). Girls and mathematics - A “hopeless” issue? A control-value approach to gender differences in emotions towards mathematics. *European Journal of Psychology of Education*, 22(4), 497–514. <https://doi.org/10.1007/BF03173468>
- Gass, S. M., Behney, J., & Plonsky, L. (2020). *Second Language Acquisition*. Routledge. <https://doi.org/10.4324/9781315181752>
- Goetz, T., Frenzel, A. C., Pekrun, R., Hall, N. C., & Lüdtke, O. (2007). Between- and Within-Domain Relations of Students' Academic Emotions. *Journal of Educational Psychology*, 99(4), 715–733. <https://doi.org/10.1037/0022-0663.99.4.715>
- Goetz, T., Frenzel, A. C., Stockinger, K., Lipnevich, A. A., Stempfer, L., & Pekrun, R. (2023). Emotions in Education. In R. J. Tierney, F. Rizvi, & K. Ercikan (Eds.), *International Encyclopedia of Education* (4th ed., pp. 149–161). Elsevier Science.

<https://doi.org/10.1016/b978-0-12-818630-5.14032-1>

- Goetz, T., Keller, M. M., Lüdtke, O., Nett, U. E., & Lipnevich, A. A. (2020). The dynamics of real-time classroom emotions: Appraisals mediate the relation between students' perceptions of teaching and their emotions. *Journal of Educational Psychology, 112*(6), 1243–1260. <https://doi.org/10.1037/edu0000415>
- Gopalan, M., Rosinger, K., & Ahn, J. Bin. (2020). Use of Quasi-Experimental Research Designs in Education Research: Growth, Promise, and Challenges. *Review of Research in Education, 44*(1), 218–243. <https://doi.org/10.3102/0091732X20903302>
- Green, J., Martin, A. J., & Marsh, H. W. (2007). Motivation and Engagement Motivation and Engagement in English , Mathematics and Science High School Subjects : Towards an Understanding of Multidimensional Domain Specificity Jasmine Green and Andrew J . Martin Faculty of Education and Social Work Univer. *Learning and Individual Differences, 17*(3), 269–279. <https://doi.org/10.1016/j.lindif.2006.12.003.1>
- Hayes, A. F. (2022). *Introduction to Mediation, Moderation and Conditional Process Analysis* (3rd ed.). Guilford press. <https://www.guilford.com/books/Introduction-to-Mediation-Moderation-and-Conditional-Process-Analysis/Andrew-Hayes/9781462549030>
- Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy, 98*, 39–57. <https://doi.org/10.1016/j.brat.2016.11.001>
- Held, T., & Hascher, T. (2022). Testing effects of promoting antecedents of mathematics achievement emotions: A change-change model. *Learning and Individual Differences, 93*(March 2021), 102112. <https://doi.org/10.1016/j.lindif.2021.102112>
- Hiver, P., Al-Hoorie, A. H., Vitta, J. P., & Wu, J. (2021). Engagement in language learning: A systematic review of 20 years of research methods and definitions. *Language Teaching Research, March*. <https://doi.org/10.1177/13621688211001289>

- Horwitz, E., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, 70(2), 125–132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>
- Horwitz, E. K. (2017). On the misreading of Horwitz, Horwitz and Cope (1986) and the need to balance anxiety research and the experiences of anxious language learners. *New Insights into Language Anxiety: Theory, Research and Educational Implications*, 31–47. <https://doi.org/10.21832/9781783097722-004>
- Hulleman, C., & Harackiewicz, J. M. (2020). *The Utility-Value Intervention*. July.
- Hulleman, C. S., Godes, O., Hendricks, B. L., & Harackiewicz, J. M. (2010). Enhancing Interest and Performance With a Utility Value Intervention. *Journal of Educational Psychology*, 102(4), 880–895. <https://doi.org/10.1037/a0019506>
- Hulleman, C. S., Kosovich, J. J., Barron, K. E., & Daniel, D. B. (2017). Making connections: Replicating and extending the utility value intervention in the classroom. *Journal of Educational Psychology*, 109(3), 387–404. <https://doi.org/10.1037/edu0000146>
- Kahu, E., Stephens, C., Leach, L., & Zepke, N. (2015). Linking academic emotions and student engagement: mature-aged distance students' transition to university. *Journal of Further and Higher Education*, 39(4), 481–497. <https://doi.org/10.1080/0309877X.2014.895305>
- Khajavy, G. (2021). Modeling the Relations Between Foreign Language Engagement, Emotions, Grit and Reading Achievement. In P. Hiver, A. H. Al-Hoorie, & S. Mercer (Eds.), *Student Engagement in the Language Classroom* (pp. 241–259). Multilingual Matters.
- King, R. B., & Gaerlan, M. J. M. (2014). High self-control predicts more positive emotions, better engagement, and higher achievement in school. *European Journal of Psychology of Education*, 29(1), 81–100. <https://doi.org/10.1007/s10212-013-0188-z>
- Knell, E., & Chi, Y. (2012). The Roles of Motivation, Affective Attitudes, and

- Willingness to Communicate among Chinese Students in Early English Immersion Programs. *International Education*, 41(2), 66–87.
<http://search.proquest.com/docview/1140137535?accountid=14391>
- Kruk, M., Pawlak, M., Shirvan, M. E., Taherian, T., & Yazdanmehr, E. (2022a). A longitudinal study of foreign language enjoyment and boredom: A latent growth curve modeling. *Language Teaching Research*.
<https://doi.org/https://doi.org/10.1177/13621688221082303>
- Kruk, M., Pawlak, M., Shirvan, M. E., Taherian, T., & Yazdanmehr, E. (2022b). Potential sources of foreign language learning boredom: A Q methodology study. *Studies in Second Language Learning and Teaching*, 12(1), 37–58.
<https://doi.org/10.14746/ssllt.2022.12.1.3>
- Kruk, M., & Zawodniak, J. (2018). Boredom in practical English language classes: Insights from interview data. In L. Szymański, J. Zawodniak, A. Łobodziec, & M. Smoluk (Eds.), *Interdisciplinary views on the English language, literature and culture* (pp. 177–191). Uniwersytet Zielonogórsk.
- Larsen-Freeman, D. (2018). Looking ahead: Future directions in, and future research into, second language acquisition. *Foreign Language Annals*, 51(1), 55–72.
<https://doi.org/10.1111/flan.12314>
- Lau, F. L. (2017). Methods for Correlational Studies. In F. Lau & C. Kuziemsky (Eds.), *Handbook of eHealth Evaluation: An Evidence-based Approach 2017*. University of Victoria.
- Leary, M. R. (2004). *Introduction to Behavioral Research Methods* (Fourth). Pearson Education New Zealand.
- Li, C. (2021). A Control–Value Theory Approach to Boredom in English Classes Among University Students in China. *Modern Language Journal*, 105(1), 317–334.
<https://doi.org/10.1111/modl.12693>
- Li, C., Dewaele, J. M., & Hu, Y. (2021). Foreign language learning boredom: Conceptualization and measurement. *Applied Linguistics Review*.

<https://doi.org/10.1515/applirev-2020-0124>

- Li, C., & Wei, L. (2022). Anxiety, enjoyment, and boredom in language learning amongst junior secondary students in rural China: How do they contribute to L2 achievement? *Studies in Second Language Acquisition*, 1–16. <https://doi.org/10.1017/S0272263122000031>
- Linnenbrink-Garcia, L., Patall, E. A., & Pekrun, R. (2016). Adaptive Motivation and Emotion in Education: Research and Principles for Instructional Design. *Policy Insights from the Behavioral and Brain Sciences*, 3(2), 228–236. <https://doi.org/10.1177/2372732216644450>
- Linnenbrink, E. A. (2007). The Role of Affect in Student Learning. A Multi-Dimensional Approach to Considering the Interaction of Affect, Motivation, and Engagement. *Emotion in Education*, 107–124. <https://doi.org/10.1016/B978-012372545-5/50008-3>
- MacIntyre, P. D. (2017). An Overview of Language Anxiety Research and Trends in its Development. In *New Insights into Language Anxiety* (pp. 11–30). Multilingual Matters. <https://doi.org/10.21832/9781783097722-003>
- MacIntyre, P. D., & Gardner, R. C. (1994). The Subtle Effects of Language Anxiety on Cognitive Processing in the Second Language. *Language Learning*, 44(2), 283–305. <https://doi.org/10.1111/j.1467-1770.1994.tb01103.x>
- Macintyre, P. D., Gregersen, T., & Mercer, S. (2019). Setting an Agenda for Positive Psychology in SLA: Theory, Practice, and Research. *Modern Language Journal*, 103(1), 262–274. <https://doi.org/10.1111/modl.12544>
- Macintyre, P. D., & Vincze, L. (2017). Positive and negative emotions underlie motivation for L2 learning. *Studies in Second Language Learning and Teaching*, 7(1), 61–88. <https://doi.org/10.14746/ssl.2017.7.1.4>
- Macintyre, P. D., & Wang, L. (2022). Anxiety. In S. Li, P. Hiver, & M. Papi (Eds.), *The Routledge Handbook of Second Language Acquisition and Individual Differences* (p. 546). Routledge. <https://www.routledge.com/The-Routledge-Handbook-of->

Second-Language-Acquisition-and-Individual-Differences/Li-Hiver-
Papi/p/book/9781032219141

- MacIntyre, P., & Gregersen, T. (2012a). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2(2), 193. <https://doi.org/10.14746/ssl.t.2012.2.2.4>
- MacIntyre, P., & Gregersen, T. (2012b). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2(2), 193. <https://doi.org/10.14746/ssl.t.2012.2.2.4>
- Martin, A. J. (2007). Examining a multidimensional model of student motivation and engagement using a construct validation approach. *British Journal of Educational Psychology*, 77(2), 413–440. <https://doi.org/10.1348/000709906X118036>
- Mercer, S. (2019). *Language Learner Engagement: Setting the Scene*. 1–19. https://doi.org/10.1007/978-3-319-58542-0_40-1
- Mercer, S., & Dörnyei, Z. (2020). *Engaging Language Learners in Contemporary Classrooms*. Cambridge University Press. <https://doi.org/10.1017/9781009024563>
- Miceli, M., & Castelfranchi, C. (2005). Anxiety as an “epistemic” emotion: An uncertainty theory of anxiety. In *Anxiety, Stress and Coping* (Vol. 18, Issue 4). <https://doi.org/10.1080/10615800500209324>
- Oga-Baldwin, W. L. Q. (2019). Acting, thinking, feeling, making, collaborating: The engagement process in foreign language learning. *System*, 86, 102128. <https://doi.org/10.1016/j.system.2019.102128>
- Pavelescu, L. M. (2019). Motivation and emotion in the EFL learning experience of Romanian adolescent students: Two contrasting cases. *Studies in Second Language Learning and Teaching*, 9(1), 55–82. <https://doi.org/10.14746/ssl.t.2019.9.1.4>
- Pawlak, M., Kruk, M., & Zawodniak, J. (2022). Investigating individual trajectories in experiencing boredom in the language classroom: The case of 11 Polish students of English. *Language Teaching Research*, 26(4), 598–616. <https://doi.org/10.1177/1362168820914004>

- Pawlak, M., Zawodniak, J., & Kruk, M. (2020). *Boredom in the Foreign Language Classroom*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-50769-5>
- Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, *18*(4), 315–341. <https://doi.org/10.1007/s10648-006-9029-9>
- Pekrun, R. (2017). Emotion and Achievement During Adolescence. *Child Development Perspectives*, *11*(3), 215–221. <https://doi.org/10.1111/cdep.12237>
- Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). The Control-Value Theory of Achievement Emotions. In *Emotion in Education* (pp. 13–36). Elsevier. <https://doi.org/10.1016/B978-012372545-5/50003-4>
- Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement Emotions Questionnaire (AEQ). *Contemporary Educational Psychology*, *36*(1), 36–48. <https://doi.org/10.1016/j.cedpsych.2010.10.002>
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, *37*(2), 91–105. https://doi.org/10.1207/S15326985EP3702_4
- Pekrun, R., & Linnenbrink-Garcia, L. (2012). Academic Emotions and Student Engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of Research on Student Engagement* (pp. 259–282). <https://doi.org/10.1007/978-1-4614-2018-7>
- Pekrun, R., Marsh, H. W., Elliot, A. J., Stockinger, K., Perry, R. P., Vogl, E., Goetz, T., van Tilburg, W. A. P., Lüdtke, O., & Vispoel, W. P. (2023). A three-dimensional taxonomy of achievement emotions. In *Journal of personality and social psychology* (Vol. 124, Issue 1). <https://doi.org/10.1037/pspp0000448>
- Pekrun, R., & Perry, R. P. (2014). Control-value theory of achievement emotions. In R.

- Pekrun & L. Linnenbrink-Garcia (Eds.), *International handbook of emotions in education* (pp. 120–141). Routledge/Taylor & Francis Group.
- Perry, R. P., Hladkyj, S., Pelletier, S. T., & Pekrun, R. H. (2001). Academic control and action control in the achievement of college students: A longitudinal field study. *Journal of Educational Psychology, 93*(4), 776–789. <https://doi.org/10.1037/0022-0663.93.4.776>
- Piniel, K., & Albert, Á. (2018). Advanced learners' foreign language-related emotions across the four skills. *Studies in Second Language Learning and Teaching, 8*(1), 127–147. <https://doi.org/10.14746/ssllt.2018.8.1.6>
- Putwain, D. W., Pekrun, R., Nicholson, L. J., Symes, W., Becker, S., & Marsh, H. W. (2018). Control-Value Appraisals, Enjoyment, and Boredom in Mathematics: A Longitudinal Latent Interaction Analysis. *American Educational Research Journal, 55*(6), 1339–1368. <https://doi.org/10.3102/0002831218786689>
- Putwain, D. W., Schmitz, E. A., Wood, P., & Pekrun, R. (2021). The role of achievement emotions in primary school mathematics: Control–value antecedents and achievement outcomes. *British Journal of Educational Psychology, 91*(1), 347–367. <https://doi.org/10.1111/bjep.12367>
- Ravid, R. (2020). *Practical Statistics for Educators* (6th ed.). Rowman & Littlefield Publishers. <https://rowman.com/ISBN/9781475846829/Practical-Statistics-for-Educators-6th-Edition>
- Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of Research on Student Engagement* (pp. 3–19). Springer Science + Business Media. <https://doi.org/10.1007/978-1-4614-2018-7>
- Rosenzweig, E. Q., Wigfield, A., & Eccles, J. S. (2022). Beyond utility value interventions: The why, when, and how for next steps in expectancy-value intervention research. *Educational Psychologist, 57*(1), 11–30. <https://doi.org/10.1080/00461520.2021.1984242>

- Saito, K., Dewaele, J.-M., Abe, M., & In'nami, Y. (2018). Motivation, Emotion, Learning Experience, and Second Language Comprehensibility Development in Classroom Settings: A Cross-Sectional and Longitudinal Study. *Language Learning*, 68(3), 709–743. <https://doi.org/10.1111/lang.12297>
- Scherer, K. R., & Moors, A. (2019). The Emotion Process: Event Appraisal and Component Differentiation. *Annual Review of Psychology*, 70, 719–745. <https://doi.org/10.1146/annurev-psych-122216-011854>
- Shao, K., Pekrun, R., Marsh, H. W., & Loderer, K. (2020). Control-value appraisals, achievement emotions, and foreign language performance: A latent interaction analysis. *Learning and Instruction*, 69(May), 101356. <https://doi.org/10.1016/j.learninstruc.2020.101356>
- Shao, K., Pekrun, R., & Nicholson, L. J. (2019). Emotions in classroom language learning: What can we learn from achievement emotion research? *System*, 86(August). <https://doi.org/10.1016/j.system.2019.102121>
- Shao, K., Stockinger, K., Marsh, H. W., & Pekrun, R. (2023). Applying control-value theory for examining multiple emotions in L2 classrooms: Validating the Achievement Emotions Questionnaire – Second Language Learning. *Language Teaching Research*, 136216882211444. <https://doi.org/10.1177/13621688221144497>
- Shuman, V., & Scherer, K. R. (2014). Concepts and structures of emotions. In Reinhard Pekrun & L. Linnenbrink-Garcia (Eds.), *International handbook of emotions in education* (pp. 13–53). Routledge/Taylor & Francis Group.
- Simonton, K. L., & Garn, A. C. (2020). Control–value theory of achievement emotions: A closer look at student value appraisals and enjoyment. *Learning and Individual Differences*, 81, 101910. <https://doi.org/10.1016/j.lindif.2020.101910>
- Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and Disaffection in the Classroom: Part of a Larger Motivational Dynamic? *Journal of Educational Psychology*, 100(4), 765–781. <https://doi.org/10.1037/a0012840>

- Soicher, R. N., & Becker-Blease, K. A. (2020). Utility value interventions: Why and how instructors should use them in college psychology courses. *Scholarship of Teaching and Learning in Psychology*. <https://doi.org/10.1037/stl0000240>
- Su, H. (2022). Foreign Language Enjoyment and Classroom Anxiety of Chinese EFL Learners With Intermediate and Low English Proficiency. *Journal of Language Teaching and Research*, *13*(1), 101–109. <https://doi.org/10.17507/JLTR.1301.12>
- Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, *48*(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Teimouri, Y. (2017). L2 SELVES, EMOTIONS, AND MOTIVATED BEHAVIORS. *Studies in Second Language Acquisition*, *39*(4), 681–709. <https://doi.org/10.1017/S0272263116000243>
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019). SECOND LANGUAGE ANXIETY and ACHIEVEMENT. *Studies in Second Language Acquisition*, *41*(2), 363–387. <https://doi.org/10.1017/S0272263118000311>
- Trautwein, U., Marsh, H. W., Nagengast, B., Lüdtke, O., Nagy, G., & Jonkmann, K. (2012). Probing for the multiplicative term in modern expectancy-value theory: A latent interaction modeling study. *Journal of Educational Psychology*, *104*(3), 763–777. <https://doi.org/10.1037/a0027470>
- Wang, M. Te, & Eccles, J. S. (2012). Adolescent Behavioral, Emotional, and Cognitive Engagement Trajectories in School and Their Differential Relations to Educational Success. *Journal of Research on Adolescence*, *22*(1), 31–39. <https://doi.org/10.1111/j.1532-7795.2011.00753.x>
- Wigfield, A., & Eccles, J. S. (2020). 35 years of research on students' subjective task values and motivation: A look back and a look forward. In Andrew J. Elliot (Ed.), *Advances in Motivation Science* (1st ed., Vol. 7, pp. 161–198). Elsevier Inc. <https://doi.org/10.1016/bs.adms.2019.05.002>
- Wisniewski, K. (2017). Empirical Learner Language and the Levels of the Common

- European Framework of Reference. *Language Learning*, 67(S1), 232–253.
<https://doi.org/10.1111/lang.12223>
- Zawodniak, J., Kruk, M., & Chumas, J. (2017). Towards conceptualizing boredom as an emotion in the EFL academic context . *Ksj*, 5(4), 425–441.
<https://doi.org/10.30438/ksj.2017.5.4.3>
- Zeng, Y. (2021). A Review of Foreign Language Enjoyment and Engagement. *Frontiers in Psychology*, 12(August), 1–5. <https://doi.org/10.3389/fpsyg.2021.737613>

Appendices

Appendix (A)

Final version of questionnaire

Section 1 – General information	القسم الأول – معلومات عامة
Gender Male Female	النوع الاجتماعي ذكر انثى
Major Faculty of science and veterinary medicine Faculty of economics and social sciences Faculty of Educational sciences and teachers training Faculty of engineering and information technology Faculty of fine arts faculty of humanities Faculty of Islamic law Faculty of law Faculty of medicine and health sciences Faculty of science	التخصص كلية العلوم والطب البيطري كلية الاقتصاد والعلوم الاجتماعية كلية العلوم التربوية وتدريب المعلمين كلية الهندسة وتكنولوجيا المعلومات كلية الفنون الجميلة كلية العلوم الإنسانية كلية الشريعة الإسلامية كلية الحقوق كلية الطب والعلوم الصحية كلية العلوم
Academic year 1 st 2 nd 3 rd 4 th 5 th Others	السنة الدراسية: أولى ثانية ثالثة رابعة خامسة أخرى
Proficiency level Please indicate your proficiency level in English, as A indicates a basic language user, B an independent user, and C a proficient user, noting that 2 is higher than 1. A1 A2 B1 B2 C1 C2	مستوى الإتقان للغة الإنجليزية يرجى الإشارة إلى مستوى إجادتك للغة الإنجليزية، حيث يشير A إلى مستخدم لغة أساسي، ويشير B إلى مستخدم مستقل، ويشير C إلى مستخدم متمرس بحيث 2 أعلى مستوى من 1. A1 A2 B1 B2 C1 C2

Section 2: the scales	
Value (Trautwein et al. 2012)	
1. I'm really keen to learn a lot in English. (attainment)	لدي الكثير من الحماسة لتعلم اللغة الانجليزية
2. English is important to me personally. (attainment)	اللغة الإنجليزية مهمة بالنسبة لي شخصيًا.
3. It is important to me personally to be good at English. (attainment)	من الهمية لي أن أكون جيدًا في اللغة الإنجليزية.
4. I enjoy puzzling over English problems. (intrinsic)	أستمتع بالتعامل مع قضايا تتعلق باللغة الانجليزية .
5. I would like to have more English lessons. (intrinsic)	لدي الرغبة بالالتحاق بالمزيد من دروس اللغة الإنجليزية.
6. When I'm working on an English problem, I sometimes don't notice time passing. (intrinsic)	أشعر بان الوقت يمضي بسرعة أثناء التعامل مع مسألة تخص اللغة الانجليزية
7. I always look forward to English lessons. (intrinsic)	دائمًا ما اطلع لحضور دروس/ محاضرات اللغة الإنجليزية.
8. If I can learn something new in English, I'm prepared to use my free time to do so. (intrinsic)	في حالة سنحت الفرصة لي لتعلم شيء جديد باللغة الإنجليزية، فأنا على استعداد لاستخدام/ استثمار وقت فراغي للقيام بذلك.
9. I'll need good English skills for my later life (training, studies, work). (utility)	ساكون بحاجة لمهارت جيدة باللغة الانجليزية لحياتي المستقبلية (التدريب، الدراسة، العمل).
10. Good grades in English can be of great value to me later. (utility)	احراز علامات جيدة في اللغة الإنجليزية يمكن ان يكون ذا فائدة كبيرة بالنسبة لي لاحقًا.
11. I'd have to sacrifice a lot of free time to be good at English. (cost)	أعتقد انني بحاجة لتكريس الكثير من وقت فراغي لأكون جيدًا في اللغة الانجليزية.
12. I'd have to invest a lot of time to get good grades in English. (cost)	سأضطر إلى تكريس الكثير من الوقت للحصول على درجات جيدة في اللغة الإنجليزية.
Control (Perry et al., 2001)	
13. I have a great deal of control over my academic performance in my English course.	أمتلك قدر كبير من السيطرة على أدائي الأكاديمي في مساق اللغة الانجليزية.
14. The more effort I put into my English course, the better I do in it.	كلما بذلت المزيد من الجهد في مساق اللغة الانجليزية، كلما كان ادائي أفضل.
15. No matter what I do, I can't seem to do well in my English course.	بغض النظر عن الجهود التي أبذلها في مساقات اللغة الانجليزية ، فانني لا أبلي بلاء حسناً

16. I see myself as largely responsible for my performance throughout my college career.	أتحلى بقدر كبير من المسؤولية عندما يتعلق الأمر بأدائي طوال مسيرتي الجامعية
17. How well I do in my English course is often the "luck of the draw."	يعتمد ادائي في مساق اللغة الإنجليزية على الحظ.
18. There is little I can do about my performance in university.	ليس هناك الكثير مما يمكنني فعله بشأن تحسين أدائي في الجامعة.
19. When I do poorly in a course, it's usually because I haven't given it my best effort	عندما يكون أدائي ضعيفاً في مساق اللغة الانجليزية يكون ذلك بسبب أنني لم أبذل قصارى جهدي
20. My grades are basically determined by things beyond my control and there is little I can do to change that.	يتم تحديد درجاتي من خلال أشياء خارجة عن إرادتي وليس هناك الكثير مما يمكنني فعله لتغيير ذلك.
Anxiety (Bieleke et al., 2021)	
21. I feel nervous in the English class.	أشعر بالتوتر في محاضرات اللغة الإنجليزية.
22. Even before class, I worry whether I will be able to understand the material.	حتى قبل بدء المحاضرة، أشعر بالقلق بشأن ما إذا كنت سأتمكن من فهم المادة.
23. Because I'm so nervous I would rather skip the English class.	بسبب مستوى التوتر الذي أواجهه أثناء تعلم اللغة الانجليزية عادة أفضل عدم حضور المحاضرة.
24. I get tense in the English class	اشعر ان اعصابي مشدودة في محاضرة اللغة الإنجليزية.
Boredom (Bieleke et al., 2021)	
25. I get bored.	اشعر بالملل.
26. The English lecture bores me.	عادة ما تجعلني محاضرة اللغة الانجليزية أشعر بالملل
27. I think about what else I might be doing rather than sitting in this boring English class.	أفكر فيما ما يمكنني فعله بدلاً من الجلوس في محاضرة اللغة الانجليزية المملة.
28. I get restless because I can't wait for the English class to end.	أشعر بعدم الراحة لأنني لا أستطيع الانتظار حتى تنتهي محاضرة اللغة الانجليزية.
Enjoyment (Bieleke et al., 2021)	
29. I enjoy being in the English class.	استمتع بحضور محاضرة اللغة الإنجليزية.
30. I am looking forward to learning a lot in this class.	اتطلع لتعلم الكثير من محاضرة اللغة الانجليزية
31. I am motivated to go to this class because it's exciting.	اشعر بالدافعية لحضور محاضرات اللغة الانجليزية لأنها ممتعة.
32. I enjoy participating so much that I get energized.	استمتع بالمشاركة في محاضرة اللغة الانجليزية بكل طاقتي.

Behavioral Engagement (Skinner et al., 2008).	
33. I try hard to do well in the English class.	أحاول جاهدا أن أؤدي بلاء حسنا في محاضرة اللغة الإنجليزية.
34. In the English class, I work as hard as I can.	أعمل بجد قدر المستطاع في محاضرة اللغة الإنجليزية.
35. When I'm in the English class, I participate in class discussions.	عندما أكون في محاضرة اللغة الإنجليزية، أشارك في المناقشات الصفية
36. I pay attention in the English class.	عندما أكون في محاضرة اللغة الإنجليزية فانني اعيرها الكثير من الانتباه.
37. When I'm in the English class, I listen very carefully.	عندما أكون في محاضرة اللغة الإنجليزية، أستمع جيدا.
Emotional Engagement (Skinner et al., 2008).	
38. When I'm in the English class, I feel good.	عندما أكون في محاضرة اللغة الإنجليزية، تتابني مشاعر جيدة
39. When we work on something in the English class, I feel interested.	عندما نعمل على شيء ما في محاضرة اللغة الإنجليزية، أؤدي قدراً عالياً من الاهتمام
40. The English class is fun.	محاضرة اللغة الإنجليزية ممتعة
41. I enjoy learning new things in the English class.	أستمتع بتعلم أشياء جديدة في محاضرة اللغة الإنجليزية.
42. When we work on something in the English class, I get involved.	أقوم بالمشاركة عندما تنفيذ احدي في محاضرة اللغة الإنجليزية

Appendix (B)

Email correspondence with Prof David Putwain


subjective task value scale External ▸ Inbox x

Maysaa Abuzant <m.abuzant@najah.edu> Feb 21, 2022, 10:23 PM ☆ ↶ ⋮
to D.W.Putwain ▾

Dear Prof Putwain,

I hope this email finds you well. I am Maysa, a PhD candidate at An Najah National University. I am currently in the process of doing my thesis on emotions and second language acquisition. While looking for a proper scale to use in order to assess students' subjective task value, I have come across your article titled *The role of achievement emotions in primary school mathematics: Control-value antecedents and achievement outcomes*. The article was very interesting to read, and I was wondering if you can send me the scale you have used in that research project to assess students' subjective task value?

Regards,
Maysa
--

 **Maysa Abuzant**
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@ m.abuzant@najah.edu
<https://www.researchgate.net/profile/Maysa-Abuzant-2>

Putwain, David <D.W.Putwain@ljmu.ac.uk> Feb 22, 2022, 10:55 AM ☆ ↶ ⋮
to me ▾

Please find attached.

All the best, Dave

Prof. David Putwain FBPS C.Psychol,
School of Education,
Liverpool John Moores University,
Room 4.04,
The Education Building,
Maryland St,
Liverpool,
L1 9DE.
d.w.putwain@ljmu.ac.uk
0151 231 5270
https://www.researchgate.net/profile/David_Putwain

Honorary Professorial Research Fellow,
The University of Manchester

Appendix (C)
Research consent form

Consent form

*I am asking you to participate in a research study titled “**Title of Research: Control-value appraisals, achievement emotions and engagement; A task-value intervention in SLA.**” I will describe this study to you and answer any of your questions. This study is being led by Maysa Abuzant, Faculty of graduate studies under the supervision of Prof Wajeeh Daher and Dr. Fayez Mahamid, Faculty of Educational Sciences and Teacher Training/ An Najah national University.*

What the study is about

The purpose of this research is to investigate the effects of a task-value intervention on students perceived appraisals of value and control and its impact on three achievement emotions; anxiety, enjoyment and boredom.

What we will ask you to do

I will ask you to participate in three activities spread out across the semester. Each activity will start inside the classroom and end with submitting a written paragraph to an online assignment via Moodle.

Risks and discomforts

I do not anticipate any risks from participating in this research.

Benefits

The main benefits of this research will be for students to understand the relevance and importance of learning English to them personally.

I also hope that this research will help in understanding how students perceived value and control of tasks affect their emotions in the context of language learning.

Incentives for participation

The activities will be part of the course credit, as they are strongly tied to the course material. Students in the control group will do other activities that will allow them to earn the same credit allocated for that one.

Privacy/Confidentiality/Data Security

- *Identifying information will not be used in the reporting of the results of this research.*
- *Only the researchers will have access to any identifying information.*
- **Data may exist on backups and server logs beyond the timeframe of this research project.**


If you have questions

If you have questions or concerns you may contact Maysa Abuant at m.abuzant@najah.edu.

Appendix (D)

Email interaction

Email interaction between the researcher and Dr. Acee on the design of the intervention


 **Maysa Abuzant** <m.abuzant@najah.edu> Sep 15, 2022, 2:43 PM ☆ ↶ ⋮
to Taylor ▾

Dear Prof Acee,

I am sorry to bother you again. I was just wondering if you have any feedback on my intervention plan that I have sent earlier as I need to proceed with preparing for the implementation process.

Regards,
Maysa


...

 **Acee, Taylor W** <aceet@txstate.edu> Sep 15, 2022, 4:17 PM ☆ ↶ ⋮
to me ▾

Hi Maysa,

I read through the information you sent and thought everything looked carefully designed and justified with research. Nice job! The only question I had was about how you defined subjective task value. Expectancy value theory mentions utility, intrinsic, attainment value, and cost as subjective task value components whereas self determination theory uses extrinsic and intrinsic goals or motivation or perhaps more precisely for your interests autonomous and controlled motivation. In any case, I think measuring utility and attainment value and related constructs (e.g., intrinsic value, autonomous and controlled motivation) at pre and post makes a lot of sense. I just wouldn't have subsumed extrinsic value under subjective task value because subjective task value is typically specific to e-v theory. I hope all goes smoothly. Please keep me posted about your findings, I am intrinsically interested in your work:-)!!!

Take care,
Taylor

 **Maysa Abuzant** <m.abuzant@najah.edu> Sep 15, 2022, 4:50 PM ☆ ↶ ⋮
to Taylor ▾

Dear prof Acee,

Thank you for the valuable feedback. I am basing my research within the expectancy value theory as my whole thesis (consisting of two studies) is built around The Control Value theory of Achievement Emotions by Pekrun (2006).

I do appreciate your feedback, thank you so much. Once ready, I will share the findings with you.

Regards,
Maysa

...

 **Acee, Taylor W** <aceet@txstate.edu> Sep 15, 2022, 4:59 PM ☆ ↶ ⋮
to me ▾

Sounds good! Wishing you the best with your study! Taylor

...




Appendix (E)
Intervention outline

Administrative procedure	Delivery mood	Duration	Intervention Goals	Value reappraisal strategies/ Experiment group	Placebo treatment/Control group
Week 4	Online	30 min	To measure students' appraisals of value and control and their effects on students' emotions before administering the intervention	Collect pre-test data using the questionnaire	Collect pre-test data using the questionnaire
Week 5	In-class and online	45 min for in class activity	<p>To introduce to the students their first task value message and value activity.</p> <p>To make students aware of the relevance of learning English to their goals.</p> <p>To encourage students to produce rationales.</p>	<p>Value Strategy: Producing Rationales</p> <p>Value message: Students are presented with an article explaining the importance of learning English in today's world. Students are told that understanding the importance and relevance of English to them will help in shaping their attitudes towards it.</p> <p>Value activity: Students are asked to write down their goals from learning English. Then they are asked to find a connection between something they have learned so far to one or more of their goals, and write short paragraph on how that skills/knowledge aids in achieving their goal/goals.</p> <p>Students are asked to submit their work to an assignment via Moodle.</p> <p>Prompt questions: What are your goals from learning English? What is something that is useful to you that you have learned in this course?</p>	Students are presented with an article related to the topics covered in the course. Then they are asked to summaries the main points in it.

				How would that skills/knowledge you have acquired in this course help you achieve on or more of your goals?	
Week 8	In class/ online	45 min for in class activity	<p>To present students with their second value reappraisal message and activity.</p> <p>To engage students in a discussion on the importance of English for them and for others as students.</p> <p>To motivate students to generate rationales about the academic relevance of learning English as an L2.</p>	<p>Value Strategy used: Generating rationales</p> <p>Value message: Students are engaged in a whole-group discussion prompted by the teacher on the importance of English language to university students and how releasing that importance is key in enhancing their learning experience.</p> <p>Value activity: students are asked to list a number of courses that having a certain level of English language and skills would be of value. Then, students are asked to make a connection between a skill/knowledge they have learned in this course and other courses they are taking or will in the future, rationalizing why that skill/knowledge would be useful/relevant.</p> <p>Students are asked to submit their work to an assignment via Moodle.</p> <p>Prompt question: How is learning English relevant to you as a student? How is the content covered in the course so far relate to you personally as a university student? Find a connection between something you have learned in this course and other courses that you are taking or planning to take! i.e. How would something you have learned here help you in other courses?</p>	students engage in a whole-group discussion on the content of the book covered this far and ask students to write a paragraph about a skill they have learned in this course.

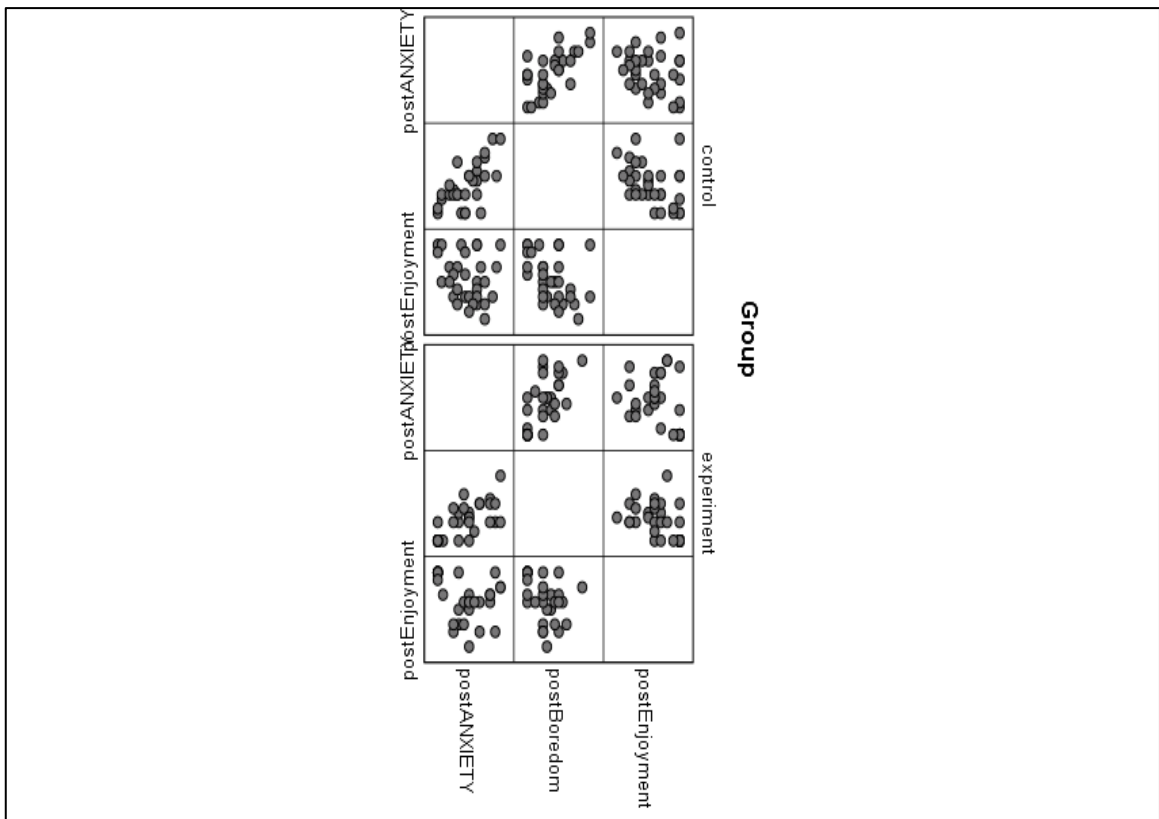
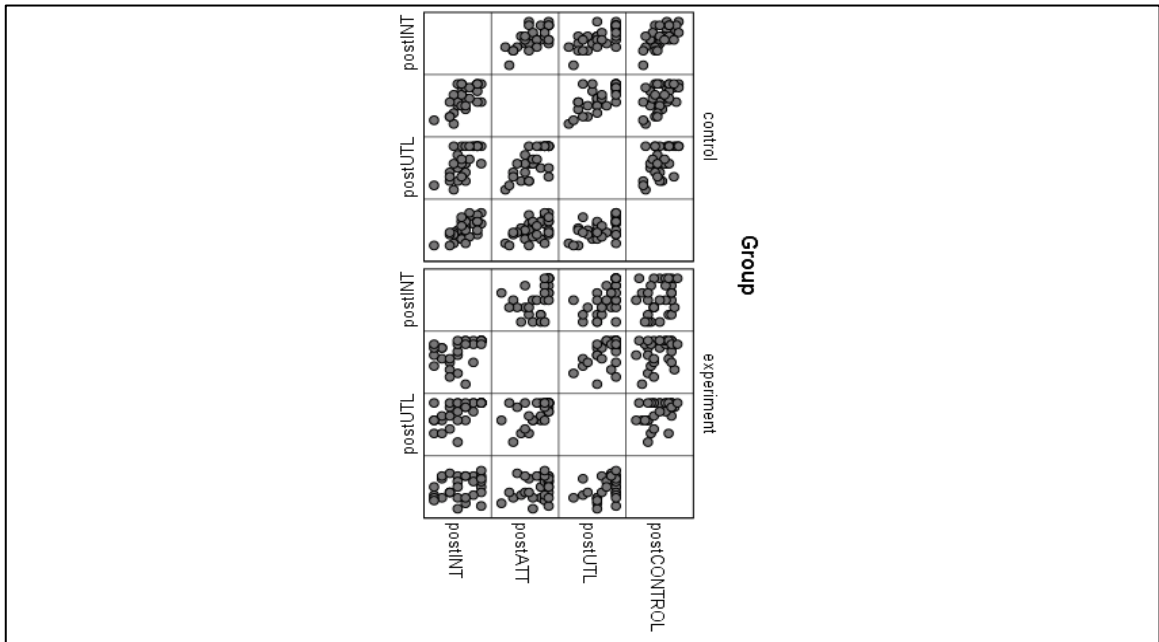
Week 10	In class/ online	60 min	<p>To present students with the third and final value activity.</p> <p>To encourage students to imagine their future selves and compare pros and cons of task engagement.</p>	<p>Value strategy: imagining future selves/ comparing pros and cons</p> <p>Value message: Students listen to a short presentation by a senior student on his personal experience in how realizing the value and importance of this course and other English courses that he/she studied during university have changed the way he engaged in these courses and affected his/her life after graduation.</p> <p>Value activity: students are asked to imagine their future selves having done with their English courses with a good level of English language. then they are asked to think of the obstacles they have had to face to arrive to that point.</p> <p>Then, from their future selves, students are asked to write a letter to a freshman student with the same major describing where they are now, the obstacles they had to face to get there, and how they dealt with them.</p> <p>Students are asked to submit their work to an assignment via Moodle.</p> <p>Prompt scenario and questions: You have just finished all of your English courses at the university having acquired the desired skills and knowledge from these courses. Write a letter to a freshman student in the same specialization as yours, explaining where you are now with English, what obstacles you had to face to get there, and how you dealt with them.</p>	students are asked to write a letter to a friend summarizing three things they have learned from the content of the course.
Week 11	Online	30 min	To measure change of students' appraisals of control and value and their effect on emotions post intervention.	Administer post-test questionnaire	Same

Appendix (F)
Approved IRB form

<p>An-Najah National University Faculty of Medicine & Health Sciences Institutional Review Board</p>		<p>جامعة النجاح الوطنية كلية الطب وعلوم الصحة لجنة الاخلاقيات البحث العلمي</p>
<p>Ref: Int.R . May. 2023/1</p>		
<p>IRB Approval Letter</p>		
<p>Title of Research: <i>Control-value appraisals, achievement emotions and engagement; A task-value intervention in SLA</i></p>		
<p>Submitted by: Maysa Abuzant</p>		
<p>Supervisor: Wajeeh Daher: Fayez Mahamid</p>		
<p>Approved: 3rd May. 2023</p>		
<p>Your Study Title "<i>Control-value appraisals, achievement emotions and engagement; A task-value intervention in SLA</i>" reviewed by An-Najah National University IRB committee and was approved on 3rd . 2023</p>		
<p> Hasan Fitian, MD IRB Committee Chairman</p>		
<hr/> <p>Nablus - P.O Box :7 or 707 Tel (970) (09) 2342902/4/7/8/14 Faximile (970) (09) 2342910 E-mail : IRB@najah.edu</p>		

Appendix (G)

Scatter plots for variables of study 2



Appendix (H)

Certificate of acceptance of the research extracted from the dissertation

Research title:

Control-value appraisals and achievement emotions: a moderation analysis.



Appendix (I)

Figures

Figure (11)

Control x intrinsic value interaction slopes on enjoyment

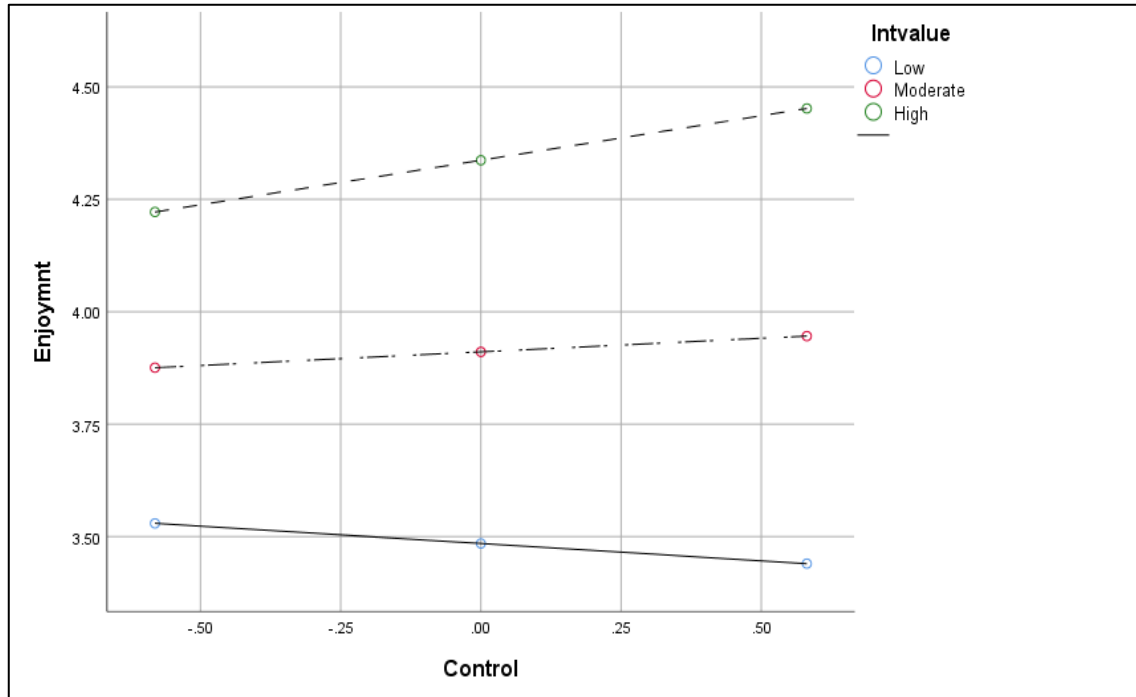


Figure (12)

Interaction plot intrinsic value

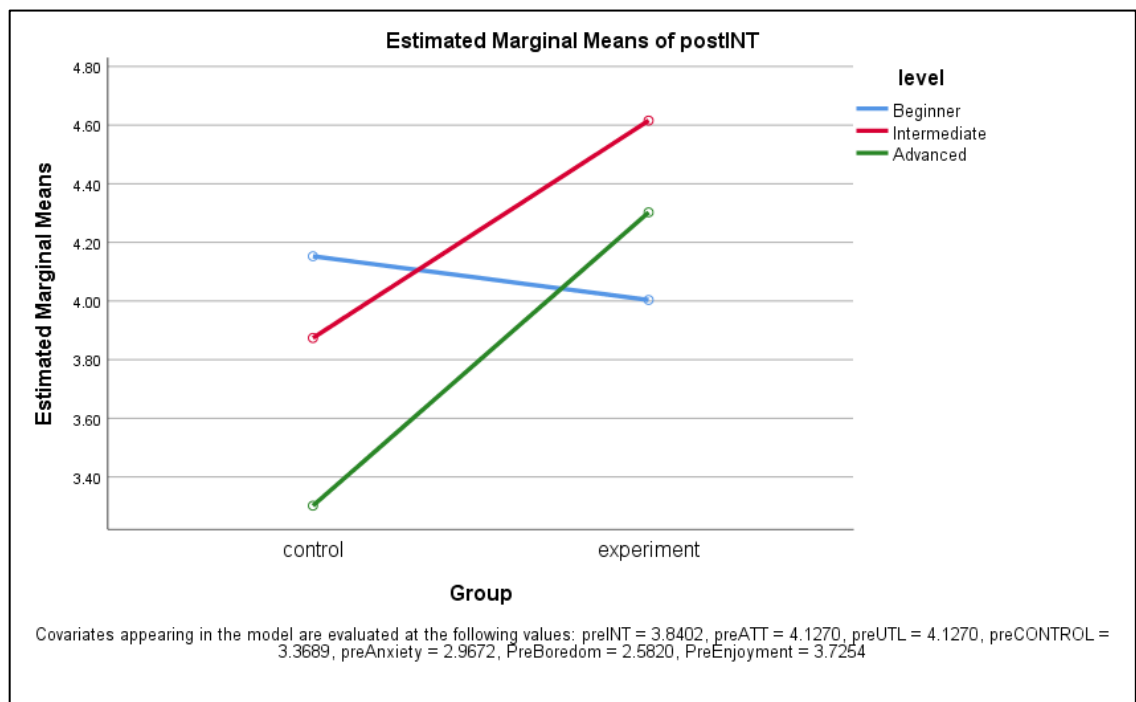


Figure (13)

Interaction plot attainment value

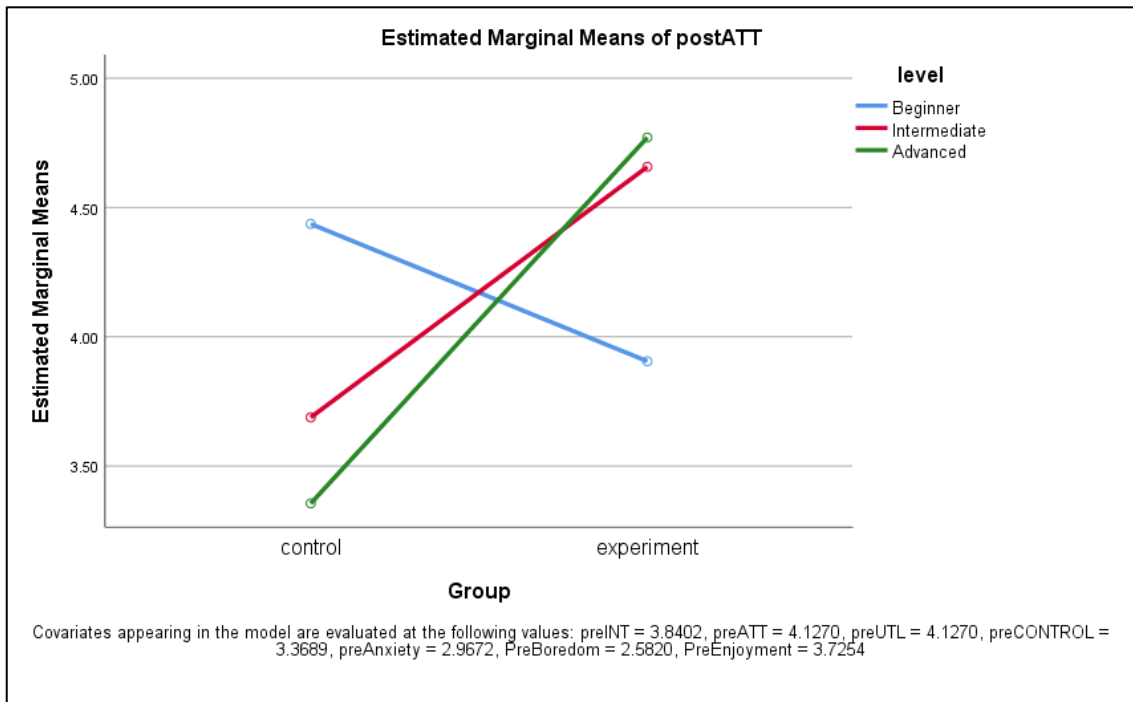


Figure (14)

Interaction plot utility value

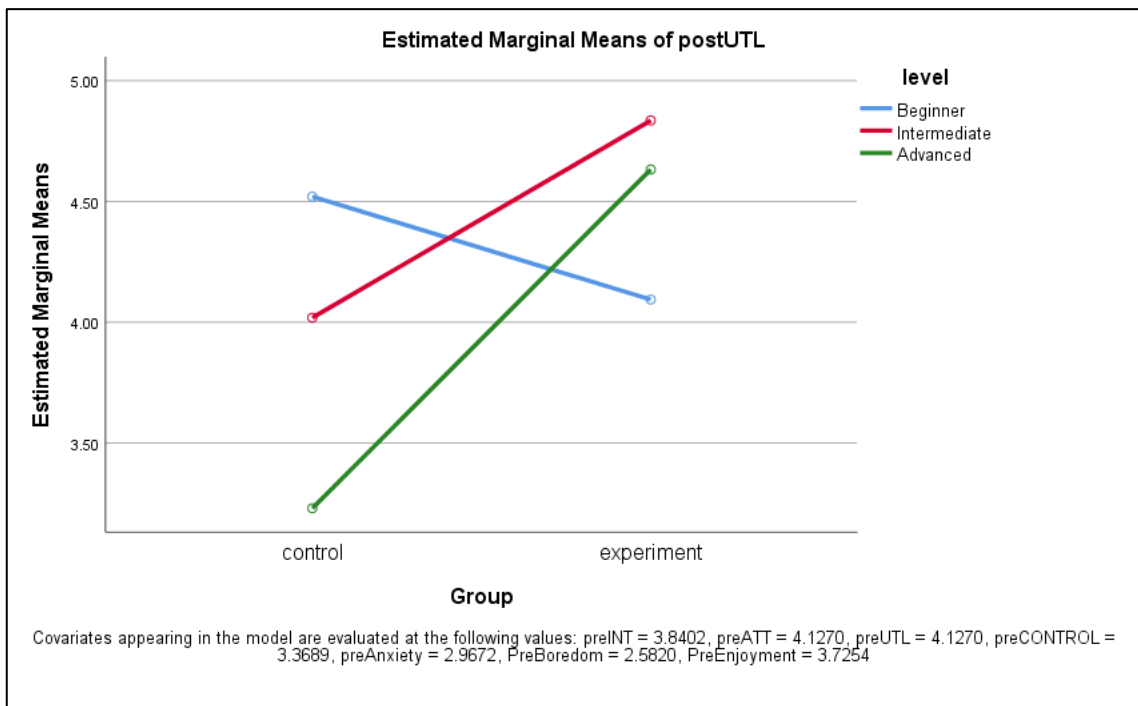
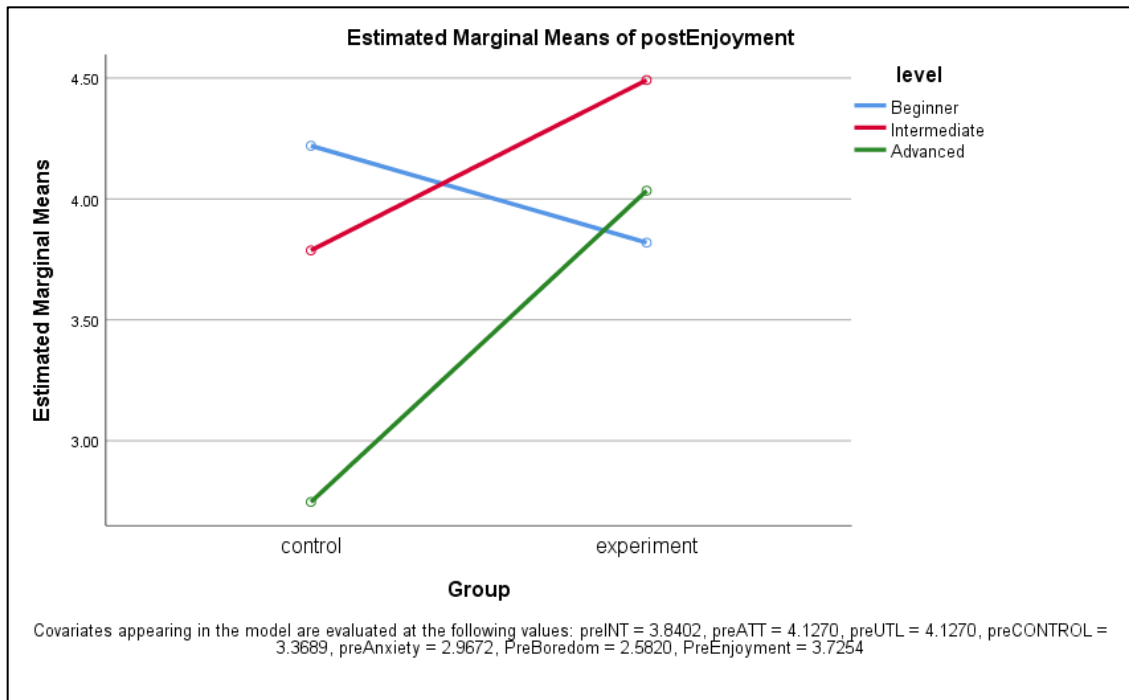


Figure (15)

Interaction plot enjoyment





جامعة النجاح الوطنية
كلية الدراسات العليا

نظرية الضبط والقيمة، عواطف الإنجاز، والانخراط:
استخدام تدخل رفع قيمة المهمة في سياق تعلم اللغة الثانية

إعداد

ميساء مهدي أبوزنط

إشراف

أ. د. وجيه الظاهر

د. فايز محاميد

قدمت هذه الأطروحة استكمالاً لمتطلبات درجة الدكتوراه في التّعلم والتّعليم، كلية الدراسات العليا، جامعة النجاح الوطنية، نابلس، فلسطين.

2023

نظرية الضبط والقيمة، عواطف الإنجاز، والانخراط: استخدام تدخل رفع قيمة المهمة في سياق تعلم اللغة الثانية

اعداد

ميساء مهدي أبوزنط

اشراف

أ. د. وجيه ضاهر

د. فايز محاميد

الملخص

في السنوات القليلة الماضية حظيت المشاعر باهتمام تدريجي في مجال تعلم اللغة الإنجليزية كلفة ثانية، إحدى النظريات الرئيسية التي يتم استخدامها لدراسة مشاعر الطلاب في مجالات مختلفة هي نظرية القيمة والتحكم بمشاعر الإنجاز لمؤسس النظرية بيكرن Pekrun. يهدف هذا البحث، باستخدام نظرية القيمة والتحكم بعواطف الإنجاز، إلى معرفة العلاقة بين القيمة التي يوليها الطلاب لتعلم اللغة ومقدرتهم على التحكم بمهاراتهم اللغوية ومخرجاتها، ومشاعر الطلبة التي تشمل التوتر والمتعة والملل وعلاقتها بتفاعل الطلاب داخل الصف. لتحقيق ذلك، تم تقسيم هذا البحث إلى دراستين، اعتمدت الدراسة الأولى تصميمًا ارتباطيًا لبحث العلاقات بين هذه المتغيرات وتفاعلها وأثرها على تفاعل الطلاب داخل الصف. تم جمع بيانات الدراسة الأولى عبر استبيان تم تعبئته من قبل 515 طالب جامعي مسجلين في مساقات اللغة الإنجليزية في مركز اللغات. تم تحليل البيانات باستخدام برنامج التحليل الاحصائي Hayes PROCESS MACRO حيث أشارت النتائج إلى أن القيمة التي يحملها الطلاب للغة تتفاعل بشكل مختلف مع قدرة الطلاب على التحكم بمهاراتهم اللغوية والمخرجات التعليمية بناء على نوع هذه القيمة، وبالتالي يؤثر هذا التفاعل على القلق والملل والمتعة والمشاركة بشكل مختلف، أما بالنسبة للدراسة الثانية، فقد تم اعتماد التصميم الشبه تجريبي للتحقق من فاعلية تدريب مبني على زيادة مستوى القيمة التي يمتلكها الطلاب للغة الإنجليزية وتأثيره على مشاعر القلق والمتعة والإنجاز. المشاركون في الدراسة الثانية كانوا

61 متعلماً للغة الإنجليزية في جامعة النجاح الوطنية بحيث تم تقسيمهم الى مجموعة ضابطة ومجموعة تجريبية. تقدم نتائج هذه الدراسة دليلاً حول فعالية التدريب المبني على زيادة مستوى القيمة في مجال اكتساب اللغة الثانية وعلى مشاعر الطلاب داخل صف اللغة الانجليزية.

الكلمات المفتاحية: مشاعر الطلاب، اكتساب اللغة الثانية، نظرية الضبط والقيمة، تدخل رفع القيمة، تعليم اللغة الإنجليزية.