QUALITY OF MOTIVATION, WELL-BEING AND ACHIEVEMENT IN PREPARATORY PROGRAMS FOR ENGLISH LANGUAGE: IMPLICATIONS FOR CURRICULUM AND INSTRUCTION

A MASTER'S THESIS

BY

ASLIHAN TUĞÇE GÜLER

THE PROGRAM OF CURRICULUM AND INSTRUCTION İHSAN DOĞRAMACI BILKENT UNIVERSITY ANKARA

SEPTEMBER 2018



DEDICATION

This thesis is dedicated to the memory of my mother, $T\ddot{u}lay\ G\ddot{U}LER$, whom I still miss every moment of my life.

QUALITY OF MOTIVATION, WELL-BEING AND ACHIEVEMENT IN PREPARATORY PROGRAMS FOR ENGLISH LANGUAGE: IMPLICATIONS FOR CURRICULUM AND INSTRUCTION

The Graduate School of Education

of

İhsan Doğramacı Bilkent University

by

Aslıhan Tuğçe GÜLER

In Partial Fulfilment of the Requirements for the Degree of

Master of Arts

in

Curriculum and Instruction

Ankara

September, 2018

İHSAN DOĞRAMACI BILKENT UNIVERSITY GRADUATE SCHOOL OF EDUCATION

Quality of Motivation, Well-Being and Achievement in Preparatory Programs for English Language: Implications for Curriculum and Instruction

Aslıhan Tuğçe GÜLER September 2018

I certify that I have read this thesis and have found that it is fully adequate, in scop and in quality, as a thesis for the degree of Master of Arts in Curriculum and Instruction.			
Asst. Prof. Dr. Aikaterini Michou (Supervisor)			
I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts in Curriculum and Instruction.			
Assoc. Prof. Dr. Erdat Çataloğlu (Examining Committee Member)			
I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts in Curriculum and Instruction.			
Asst. Prof. Dr. Athanasios Mouratidis (TED University, External Examining Committee Member)			
Approval of the Graduate School of Education			

Prof. Dr. Alipaşa Ayas (Director)

ABSTRACT

QUALITY OF MOTIVATION, WELL-BEING AND ACHIEVEMENT IN PREPARATORY PROGRAMS FOR ENGLISH LANGUAGE: IMPLICATIONS FOR CURRICULUM AND INSTRUCTION

Aslıhan Tuğçe GÜLER

M.A. in Curriculum and Instruction

Supervisor: Asst. Prof. Dr. Aikaterini Michou

September 2018

This thesis investigates Turkish students' autonomous and controlled motivation in preparatory programs for English language and their correlates. Specifically, the study examined (a) to what extent preparatory school students' autonomous and controlled motivation for their English courses in preparatory school (specific level) can be predicted by their motivations to study for their disciplinary courses in a university department (contextual level). Also, this research examined (b) the relation between autonomous and controlled motivation for English courses and students' academic achievement and vitality in preparatory English classes. In order to analyze the relations between the variables, a cross-sectional correlational research design was applied. The study was conducted in fourteen universities in Turkey with 121 participants. (Mean $_{age} = 20.04$; SD = 1,319).

The results of the two-step hierarchical regression analyses revealed that students' autonomous or controlled motivation at a specific level (English classes) was

iii

significantly predicted by their autonomous or controlled motivation at a contextual level (disciplinary courses). Also, the regression analysis indicated that specific controlled motivation of the participants was high when they prolonged their studies in preparatory school in addition to a low level of proficiency in English. On the other hand, the achievement scores were negatively and positively associated with specific controlled and autonomous motivation, respectively. Finally, the findings revealed that vitality was positively related with specific autonomous motivation, while both vitality and achievement was lower both for students with low level of proficiency in English and for students who failed to complete English studies in their first year.

Keywords: Self-determination Theory, Quality of Motivation, Autonomous Motivation, Controlled Motivation, Academic Achievement, Vitality, Well-being

ÖZET

İNGİLİZCE HAZIRLIK OKULLARINDA MOTİVASYONUN NİTELİĞİ, İYİ OLMA VE BAŞARI: EĞİTİM PROGRAMLARI VE ÖĞRETİM İÇİN ÇIKARIMLAR

Aslıhan Tuğçe GÜLER

Yüksek Lisans, Eğitim Programları ve Öğretim Tez Yöneticisi: Dr. Öğretim Üyesi Aikaterini Michou

Eylül 2018

Bu çalışmanın amacı Türk öğrencilerin İngilizce hazırlık okullarındaki otonom ve kontrol motivasyonlarını ve bunların korelasyonlarını incelemektir. Bu çalışma, özellikle, hazırlık okulu öğrencilerinin İngilizce derslerine karşı olan (spesifik düzeyde) otonom ve kontrol motivasyonlarının ne derecede bölüm derslerine karşı (bağlamsal düzeyde) olan otonom ve kontrol motivasyonları tarafından yordandığını araştırmıştır. Ayrıca, bu çalışma (b) hazırlık okulu öğrencilerinin İngilizce derslerine olan motivasyonları ile akademik başarıları ve iyi olmaları arasındaki korelasyonu araştırmaktatır. Bu çalışmada, her bir katılımcı için her bir değişkenin kısa süre içerisinde bir kez ölçüldüğü kesitsel yöntem kullanılmıştır ve bu değişkenler arasındaki korelasyonu analiz etmek için kesitsel korelasyon çalışması uygulanmıştır. Çalışma farklı illerdeki 14 farklı vakıf ve devlet üniversitesinden 121

gönüllü katılımcıyla (Ortalama*yaş* = 20,04; *Standart Sapma* = 1,319) gerçekleştirilmiştir.

İki adımlı hiyerarşik regresyon analizinin sonuçları öğrencilerin spesifik düzeydeki (İngilizce derslerindeki) otonom ve kontrol motivasyonlarının bağlamsal düzeydeki (bölüm derslerindeki) otonom ve kontrol motivasyonları tarafından yordandığını göstermektedir. Ayrıca, regresyon analizi katılımcıların hazırlık okullarında çalışma süreleri arttıkça spesifik düzeydeki kontol motivasyonlarının arttığını ve akademik başarılarının düştüğünü göstermiştir. Bunun yanı sıra, katılımcıların spesifik düzeydeki kontrol motivasyonları ve spesifik düzeydeki otonom motivasyonları ile başarıları arasında ise sırasıyla pozitif ve negatif bir korelasyon bulunmuştur. Son olarak, bu çalışmanın bulguları, katılımcıların İngilizce derslerindeki iyi olma durumlarının yine öğrencilerin spesifik düzeydeki otonom motivsyonlarını pozitif yordadığını, akademik başarının ise hazırlık okulunun ikinci yılında düştüğünü göstermiştir.

Anahtar Kelimeler: Öz-Belirlenim Kuramı, Motivasyonun Niteliği, Akademik Başarı, Otonom Motivasyon, Kontrol Motivasyon, Yaşam Enerjisi, İyi Olma

ACKNOWLEDGEMENTS

I, first, would like to start expressing my deepest gratitude with my supervisor, Asst. Prof. Dr. Aikaterini Michou, who admitted me as a supervisee after the middle of the semester, while I had no idea what to do and how to do it. I also thank her for being calm and wise enough when I felt frustrated or nervous when things got too complicated for me. She was the one who calmed me down when necessary or pushed me when I could not put enough effort on this work. She was not only my supervisor, but also my guide, role model and supporter during the whole process and I am sure it would not have been possible to finalize this work without her.

As well as my supervisor, I would like to thank my committee members Assoc. Prof. Dr. Erdat Çataloğlu and Asst. Prof. Dr. Athanasios Mouratidis for making my defense an invaluable educational experience with their thoughts and suggestions.

In addition to these valuable people, I could never forget thanking the students who took part in my study to help me in the data collection process, and it would have been so much harder for me if it had not been for them.

Also, I feel the need to thank my father, Durmuş GÜLER, my sister, Ece GÜLER, for their endless patience while listening to me for hours even at times they had no idea what I was complaining about.

Last but not least, I must acknowledge my fiancé and best friend, Abdulkadir GÜLLÜ, without whose patience, help, encouragement and unconditional love, I would not have finished this thesis.

TABLE OF CONTENTS

ABSTRACTiii
ÖZETv
ACKNOWLEDGEMENTSvii
TABLE OF CONTENTSviii
LIST OF TABLESxi
LIST OF FIGURESxii
CHAPTER 1: INTRODUCTION1
Introduction1
Background2
Self-determination theory2
Types of motivation3
Intrinsic vs. extrinsic motivation
Controlled vs. autonomous motivation5
Perspectives of motivation6
Quality vs. quantity of motivation6
Problem7
Purpose8
Research questions
Significance8
Definition of key terms9

CHAPTER 2: REVIEW OF RELATED LITERATURE11
Introduction11
The relation of autonomous and controlled motivation in different domains 13
The correlation between autonomous and/or controlled motivation and academic
achievement/performance16
The correlation between autonomous and controlled motivation and students'
vitality/well-being17
Concluding statement 18
CHAPTER 3: METHOD20
Introduction20
Research design 20
Correlational research
Cross-sectional correlational research
Context
Participants
Instrumentation
Students' demographic information questionnaire
Autonomous and controlled motivation
Subjective vitality scale
Data collection
Data analysis

CHAPTER 4: RESULTS	28
Introduction	28
Preliminary analysis	29
Main analysis	35
CHAPTER 5: DISCUSSION	44
Introduction	44
Overview of the study	44
Major findings and conclusions	46
Implications for practice	50
Implications for further research	52
Limitations	53
REFERENCES	55
APPENDICES	60
APPENDIX A: Students' Demographic Information Questionnaire	60
APPENDIX B: Comprehensive Relative Autonomy Index (C-RAI)	61
APPENDIX C. Turkish Version of the Motivational Scale	65

LIST OF TABLES

Table		Page
1	Gender of participants.	22
2	Departments of participants	23
3	Descriptive statistics of the measured variables	29
4	Bivariate correlations among the measured variables	34
5	The hierarchical regression for specific autonomous motivation	37
7	The hierarchical regression for specific controlled motivation	38
8	The hierarchical regression for achievement	40
9	The hierarchical regression for vitality	42

LIST OF FIGURES

Figure		Page
1	Vallerand's hierarchical model of intrinsic and extrinsic motivation	14

CHAPTER 1: INTRODUCTION

Introduction

Motivation is essential for effective learning, which is why it has been a central concern and prominent interest in education as well as other areas. Individuals tend to be more responsible, engaged and energetic when they are motivated, whereas lack of motivation among individuals leads to a passive state of mind and apathy towards life. A motivated behavior is an act starting with a planned purpose or a reason, and therefore, it is overwhelming to complete any given task without motivation either as a part of daily routine or to achieve a goal in order to be more prosperous in one's career.

Learner motivation on a particular subject is based on a variety of factors including personal goals or significant others' demands. The motives of each learner, therefore, may vary as a result of dynamics in and out of the learning environment. Especially for adult learners, the reasons for which they participate in a learning environment seem to play an important role for their academic achievement and learning experience. If an adult learner participates in an English language course to comply with the demands of others, or if s/he does so to attain the personal goal to study abroad, this can make a difference in learner's final academic achievement. For this reason, any attempt to fully understand differences in educational outcomes needs to take into consideration students' quality of motivation.

The preparatory programs in Turkey are particular examples of a wide range of differences regarding learning outcomes. While most students that are admitted to

the programs with low competence can make a progress by acquiring the necessary skills in a reasonable amount of time without repeating their classes, there are also students with a higher competence but struggling to progress smoothly. Most of those students fail and are to repeat their classes, so they feel frustrated as they cannot continue their studies in their departments as they are expected to. What makes these students follow different pathways during their English classes in preparatory schools?

The present study aims to investigate to what extent quality of motivation of Turkish students in preparatory school programs towards studying in a specific discipline is related to their motivation in learning English as well as to their vitality and academic achievement in these English class before they start taking their disciplinary courses.

Background

The theory suggested for definition and constructs of motivation in the present study is Self-determination theory (SDT; Ryan & Deci, 2017) as it is considered as one of the most prominent motivational theories with extensive empirical research.

Self-determination theory

Self-determination Theory (SDT) has been one of the multidimensional views that has been a ground for human motivation and personality. Its main focus is on inner sources and behavioral self-regulation of human beings. The theory is a broad framework constituting six mini theories, namely Cognitive Evaluation Theory (CET), Organismic Integration Theory (OIT), Causality Orientations Theory (COT), Basic Psychological Needs Theory (BPNT), Goal Contents Theory (GCT), and

Relationships Motivation Theory (RMT). The empirical part of the Self-Determination Theory examines the innate psychological needs such as competence, relatedness and autonomy that are required and essential for personal growth, integration, social development, and personal well-being (Ryan, Kuhl, & Deci, 2017).

SDT defines and inquires the concept of motivation from different aspects such as its orientations, levels, focuses and perspectives. With its broadest definition, motivation is an impulse to act towards a goal with an effort, direction and persistence (Arnold, 2000). Motivation is a concept that exists in a variety of studies including Maslow's Hierarchy of Needs, Herzberg's Two Factor Model, Vroom's Expectancy Theory and such. However, each theory defines its components differently, while defining motivation in the same way. In a similar way, Ryan and Deci (2000) categorized motivation in two types in terms of its orientation that are intrinsic and extrinsic motivation.

Types of motivation

Intrinsic vs. extrinsic motivation

According to SDT, intrinsic motivation can be defined as the likelihood of doing or repeating an action due to doing an activity for its pure interest or inherent satisfaction rather than for some separable consequences (Ryan & Deci, 2000).

Although the classification of motivation regarding its types has varied widely among different scholars and educationists, the most common classification is acknowledged as intrinsic and extrinsic motivations.

Intrinsic motivation was first used as a term in behavioral studies on animals with showing curiosity-driven acts towards specific stimuli without any given reward or reinforcement (White, 1959). With its simplest explanation, intrinsic motivation is the underlying reason of why some sorts of acts tend to be done continuously even in the absence of any gain in return; therefore, it is inclined to last longer. According to Cognitive Evaluation Theory, one of the sub-theories of self-determination theory, any intrinsic motivation is enhanced and promoted by psychosocial needs like autonomy, relatedness and competence (Ryan & Deci, 2000).

On the other hand, extrinsic motivation may have differentiating focuses, sources or consequences depending on its variables and it is grounded more on the result of an act rather than the act itself. This type of motivation is extant when the orientation of an impulse towards a goal is variable-centered rather than person-centered (Magnusson, 1998).

Extrinsic motivation can be defined as a continuum that has different processes and regulatory styles. On the far left side of the continuum, there is the least internalized behavioral regulation, the *external regulation*. A behavior instigated by external rewards or threats of punishments are examples of external regulation.

Next to external regulation on the continuum is *introjected regulation*. Introjected regulation is boosted by self-esteem or pride. Furthermore, one can be introjectedly regulated to refrain themselves from guilt. An act completed with introjected regulation may tend to be internalized to some extent, but such an act is still hard to be counted as a personal goal.

Identified regulation, consists more of consciously valued goals in comparison with introjected and external regulation. Nevertheless, these goals are inclined to be adapted due to external benefits and they are not internalized as much as integratedly regulated behaviors.

Integrated regulation, on the far right on the continuum of extrinsic motivation that Organismic Integration Theory identifies, can be accepted as highly self-determined since it is consisted of one's personal values.

Controlled vs. autonomous motivation

Extrinsic motivation is a broad concept which has different forms contingent upon several internal and external regulations. While a temporary, substantial reward, an external demand or a punishment can be counted as external regulation, integrating any environmental stimuli with the self and consequently valuing it willingly turns that action into internally regulated behavior. When a behavior becomes internally regulated, the locus of causality is also perceived as internal. On the other hand, the locus of causality is meant to be external when a behavior is dependent upon environmental factors (Deci, Vallerand, Pelletier, & Ryan, 1991). Consequently, these causes may play a significant role in boosting or diminishing extrinsic motivation. For this reason, self-determination theory proposes identified and integrated regulations as intrinsic motivation, since they are characterized by and internal locus of causality to be considered as *autonomous motivation*. On the other hand, external and introjected regulations, as they characterized by and external locus of causality, are considered to constitute *controlled motivation*.

Perspectives of motivation

Quality vs. quantity of motivation

Self-determination theory values the perspective of motivation as an asset as well.

SDT proposes that discussing motivational profiles requires to identify the quality and quantity of motivation and their effects on motivational outcomes. No matter how much motivation one can have, the quantity of motivation does not matter unless it is of good quality.

Quality of motivation counts since it enables learning to be at an optimum level provided that it is high. Thus, learners with a better quality of motivation, such as autonomous motivation, are expected to show more deep level learning (Grolnick & Ryan, 1987) and interest. Poor quality of motivation, however, is inclined to bring undesirable outcomes such as less determination and procrastination (Senecal, Julien, & Guay, 2003), lack of interest towards learning and maladaptive coping strategies (Ryan & Connell, 1989).

The quantity of motivation means having an amount of motivation regardless of quality or type. However, research showed that high quantity of controlled motivation, which is considered as poor quality of motivation, is related to undesirable educational outcomes. It seems, therefore, that the quality of motivation matters to a higher extent compared to the quantity of motivation (Vansteenkiste, Soenens, Sierens, Luyckx & Lens, 2009). Therefore, the dimensions of motivation are of great importance in terms of profiles of motivation among individuals.

Problem

As in most of the expanding cycle countries including Turkey, learning English is of great importance in educational life. Although second language teaching education starts in primary schools, it gains a momentum and reaches its highest level of importance in tertiary level education. As a result, following their admission to colleges, university students are required to take a full year of English language classes in preparatory schools and they need to complete their education in preparatory schools with success in order to continue their studies at a specific discipline.

Throughout the preparatory year, the academic achievement of students is evaluated continuously. During the process, the quality of motivation among these students plays an important role for their success in preparatory year which will enable them to continue their studies in their departments.

According to some educationists, studying for their English classes at preparatory school so as to move on studying in a specific discipline in the following year is a great source of motivation for students that keep them fresh during their first years and create an urge to study English in their first year of university education. On the other hand, some other educationists are of the opinion that English is not more than a handicap to overcome for most students and leads students to get disappointed about university education and losing their hopes as well as vitality and in the end; expectations for academic achievement.

Purpose

The main purpose of the current study is to investigate to what extent preparatory school students have autonomous or controlled motivation in terms of studying English for the sake of studying further for their departments in the following years. This study also aims to investigate to what extent the autonomous or controlled motivation of the students is related to their academic achievement as well as vitality in their English classes.

Research questions

In this study, questions below will be addressed;

- 1. To what extent students' autonomous or controlled motivation in an English class is predicted by their autonomous or controlled motivation to study a specific subject?
- 2. To what extent students' academic achievement and vitality in English is predicted by their autonomous or controlled motivation in an English class?

Significance

Learning is a long journey ensuring several end goals and depending on many variables. In this sense, it is an undeniable fact that motivation has a great effect on learning as it is required at the beginning, during and at the end of the learning process. The concept of extrinsic motivation and its types, regulations and amount is certainly an interesting theoretical framework to study to get a closer look for which some students fail in preparatory programs while others are able to meet the required standards in English language and continue their studies in disciplinary courses. This study is of great significance in terms of understanding to what extent autonomous or controlled motivation to study a specific discipline could be related to

better quality of motivation in English classes and therefore, to higher vitality and academic achievement during learning English. Alternatively, this study is important in order to understand to what extent controlled motivation to study at a contextual level could be related to the quality of motivation at a specific level in line with vitality and academic achievement in English classes. This study will shed some light to some of the reasons that make students to succeed or fail in preparatory year programs. If students' motivation related to their career choices is related to their success or failure in preparatory programs, then measures related to career orientation in high school or even earlier should be taken by the stakeholders and policy makers.

Definition of key terms

Autonomous Motivation: The type of motivation which reflects personal interests or personal goals or and values (Ryan & Deci, 2002).

Controlled Motivation: The type of motivation which reflects something one feels compelled to do or forced by external or internal pressures (Ryan & Deci, 2002).

Vitality: "The positive feeling of having energy available to the self" (Nix, Ryan, Manly, & Deci, 1999, p.266).

Academic Achievement: In this study, 'academic achievement' refers to students' scores in the English preparatory program in a Turkish university.

Preparatory School: The academic department responsible for teaching English as a foreign language in universities before enrolled students study for the specific discipline they choose.

Disciplinary/departmental Courses: The field specific courses that the students are supposed to take once they complete their preparatory school year. These include all the courses a student has to take to complete their bachelor's degree.

CHAPTER 2: REVIEW OF RELATED LITERATURE

Introduction

In any educational setting, it is common to have prerequisite courses to take in order to have sufficient knowledge and experience for some other courses. These prerequisite courses are to be offered by the administrations of the institutions to all registered students and they have to be completed successfully beforehand for the students to be able to move on with a specific discipline in tertiary level education in some countries including Turkey. For instance, departmental students of English Language Teaching are to take contextual grammar courses before they start their methodology or linguistics classes. As another example, in most universities in Turkey the medium of instruction is English, therefore, the students are to take one year of English language education in their preparatory year in advance.

On the one hand, it is a unique chance for students to have such a fundamental education spread over a year for a life skill that they will need to utilize throughout their careers after graduation. On the other hand, thinking from the point of view of students', it may be tiresome and frustrating for students to have obligatory English classes for a year especially when they are psychologically prepared to study for their departmental courses. As a natural result of this, the quality of their motivation for English and their vitality towards English classes are expected to be different than the quality of their motivation for disciplinary courses. It is also expected that the quality of their motivation in the English classes will be related to their academic achievement in preparatory school.

It was found that autonomous motivation is positively related with academic achievement; that is, the more the students are autonomously motivated, the higher academic achievement is observed among them (Velki, 2011). In addition to this, Dincer, Yesilyurt and Takkac (2012) indicated that autonomy-supporting teacher behaviors and autonomous environment were significantly and positively correlated with engagement and achievement in English speaking lessons with the data they collected through a learning climate questionnaire and perceived competence scale they applied in Turkish school context.

The purpose of the current study is to investigate the type of motivation that preparatory school students have towards their English classes and its relation with their academic achievement as well as their vitality in English classes as an indicator of well-being. The study also inquires the relationship between the types of motivation towards their English classes and their motivation towards the specific disciplines that they will study for after completing their English language education at preparatory school.

For this reason, this chapter aims to review the literature related to research findings in the framework of a contemporary motivational theory: the self-determination theory (Ryan & Deci, 2000). Specifically, this chapter reviews findings about the relation of controlled and autonomous motivation in different domains. Then the chapter continues with the reviewing of the literature regarding the relation of motivation types and academic achievement as well as student's well-being.

Research findings indicate that quality of motivation is field-dependent; in other words, subject-specific. Motivational activities that individuals perform are inclined to vary from one class to another and/or even across the activities and techniques within one class (Green, Martin, & Marsh, 2007). Guay, Mageau and Vallerand

The relation of autonomous and controlled motivation in different domains

writing and reading, found that correlation of autonomous motivation from subject to subject was lower than correlation of controlled motivation from subject to subject.

(2003), investigating the relation of quality of motivation among mathematics,

Chanal and Guay (2015) also found that autonomous motivation varies from subject to subject to a higher extent compared to controlled motivation.

If the quality of motivation varies from subject to subject, what is the relation of the quality of motivation between different levels of generality? Vallerand (1997) introduced a hierarchical model of intrinsic and extrinsic motivation suggesting that motivation at a specific subject (e.g. learning English) is related to motivation at a contextual level (e.g., motivation toward studying in a specific university department) as well as to motivation at a global level (e.g. toward university studies in general).

Hiearchical Levels of Motivation

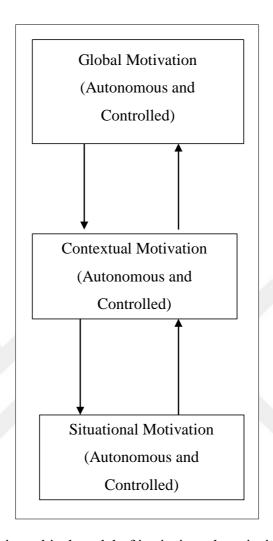


Figure 1. Vallerand's hierarchical model of intrinsic and extrinsic motivation

Indeed, Denault and Guay (2017) found that autonomous motivation of students towards extra-curricular activities (which was handled as a specific domain) was positively related to the students' overall school motivation taken as a global domain. In the study carried out on 276 participants in a high-school context in the disadvantaged neighborhoods of Quebec, Canada, it was found that the autonomy support that participants had from their activity leaders positively predicted both their activity-based intrinsic and identified regulations (autonomous motivation) and school-based identified regulations during the same school year. Briefly, the study

emphasizes that overall autonomous motivation towards school can be predicted, as well as easily promoted, by autonomy supportive behaviors in one specific domain.

Lavigne and Vallerand (2010) examined the dynamic psychological processes that can change throughout the same course resulting from different situational and contextual motivational factors. Also as reported by Vallerand (1997), constant fluctuations influencing situational motivation towards science-related activities were observed to constitute a great deal of the changes in contextual motivation in science classes. In this longitudinal study on high-school students in Montreal, Canada, 268 participants first completed a questionnaire by Ryan and Connell (1989) measuring their contextual motivation towards Science classes. Then the participants were given a conference on enthusiasm and interest on scientific work, followed by the completion of the second questionnaire. After that, the participants completed the third questionnaire one week later. The forth questionnaire was completed after a movie on scientific careers and the fifth and last questionnaire was filled out one week later than that. The results duplicated that motivation is a dynamic process that changes with situational factors, and contextual factors in the end (Vallerand, 1997). The study further revealed that contextual motivation towards science also predicted the participants' situational motivations towards science.

Despite this relation between contextual and situational motivation found by Lavigne and Vallerand (2010), in a more recent study, Chanal and Guay (2015) argued that the strength of this relation can vary as a function of the quality of motivation. Specifically, Chanal and Guay (2015) found that controlled motivation at the contextual level (i.e. at school in general) was stronger correlated to controlled

motivation at the specific level (i.e. at a specific subject) than autonomous motivation. This means that controlled motivation seems to be a type of motivation that is pervasive from subject to subject and level to level. On the other hand, autonomous motivation has a higher level of specificity from subject to subject as well as from level to level.

Moreover, Guay and Bureau (2018) found the same patterns in the relation of quality of motivation at the contextual level and achievement at the specific level. While only autonomous motivation at a specific subject predicted achievement at this subject, controlled motivation at both the contextual and the specific level predicted achievement at a specific subject.

Regarding the present study, students' quality of motivation for studying English is considered motivation at the specific level, while their motivation to study at a specific department is considered at the contextual level. According to the research findings mentioned above, controlled motivation to study in a specific department (contextual level) is expected to be stronger related to controlled motivation in learning English in preparatory School. It is also expected that autonomous motivation at the contextual level will not be strongly related to autonomous motivation in learning English.

The correlation between autonomous and/or controlled motivation and academic achievement/performance

In a meta-analysis carried out by Taylor and associates (2014) investigating the relation of school achievement over time and its relation to different types of motivation by using a self-determination approach, it was found that intrinsic

motivation was the only type of motivation that was consistently related to achievement over time. In the meta-analysis study, the results of cross-sectional and prospective studies were compiled and an investigation of each motivational subtype was assessed in terms of its relation to academic achievement. With the 18 studies from 1991 to 2009 from elementary, high school and colleges used in the meta-analysis (N:6174), Taylor et al. (2014) found that a significant effect size emerged for both intrinsic motivation and identified regulation. Overall, intrinsic motivation as well as identified regulation were moderately positively related to achievement in school while introjected and external regulations had a weaker, inconsistent, but significantly negative relation to academic achievement. The results across three studies also showed that intrinsic motivation was the only consistently positive type of motivation that was associated with academic achievement.

The correlation between autonomous and controlled motivation and students' vitality/well-being

Vitality can be defined as a sort of psychological condition regarding enthusiasm and spirit towards engaging in life both physically and mentally that, in the end, could be counted as a major factor providing a source for personal well-being (Ryan & Frederick, 1997). Vitality is a complex concept that can be affected by both somatic factors such as diet, exercise, sleep patterns and smoking (Rozanski, Blumenthal, Davidson, Saab, & Kubzansky, 2005), and psychological factors like social events (Ryan & Deci, 2005).

Studies investigating the relation of autonomous and controlled motivation to wellbeing, usually assess well-being through measures of subjective vitality, positive affect and attachment in different contexts. For example, a study carried out in a Turkish context and on 378 university students showed that subjective vitality was partially mediated the relationship between life satisfaction and subjective happiness (Uysal, Satıcı, Satıcı, & Akın, 2014). In other words, the results of a hierarchical regression analysis applied in the study revealed that the increase in life satisfaction brings along the subjective happiness and subjective vitality that plays an important role in this increase.

In another study, in a setting of Spanish Physical Education classes, the correlation prediction between teacher evaluation based on student performance and students' well-being was investigated. According to Cuevas, Ntoumanis, Fernandez-Bustos, and Bartholomew (2018), perceived pressure from evaluations based on student performance was positively associated with controlled motivation and amotivation (complete lack of motivation), and exhaustion. Moreover, the study revealed that there was a negatively weak association between evaluations based on students' performance and vitality, which was in line with the theoretical assumptions in the previous studies in the field. Grounded on the results of the study, one can assume that experience of pressure is in relation to controlled motivation and may be negatively correlated with vitality and well-being of students.

Concluding statement

After reviewing the related literature, research evidence shows that autonomous motivation is inclined to be more subject-specific rather than being contextual or global while controlled motivation is a more pervasive phenomenon extended to both the specific and the contextual level.

On the other hand, studies showed a positive relation between autonomous motivation and academic achievement as well as a negative relation between controlled motivation and achievement.

Finally, vitality as an indicator of well-being is related to autonomous forms of motivation.

According to these conclusions, it is hypothesized that:

- (a) Controlled motivation in learning English (specific level) will be strongly related to controlled motivation in studying in a specific department (contextual level).
- (b) Autonomous motivation in learning English (specific level) will not be strongly associated to autonomous motivation in studying in a specific department (contextual level).
- (c) Autonomous and controlled motivation in learning English (specific level) will be predicted by autonomous and controlled motivation in studying in a specific department (contextual level), respectively.
- (d) Autonomous motivation in learning English will be positively related to academic achievement in English classes.
- (e) Controlled motivation in learning English will be either negatively related or unrelated to academic achievement in English classes.
- (f) Vitality will be positively and negatively related to autonomous and controlled motivation, respectively.

CHAPTER 3: METHOD

Introduction

The aim of the present study is to examine to what extent preparatory school students' autonomous and controlled motivations for their English courses are predicted by their autonomous or controlled motivations to study for their disciplinary courses in the following years. Also, the current research examines the relation between the autonomous and controlled motivation and students' academic achievement and vitality in their preparatory English classes. In order to investigate these relations, a correlational research design was applied. This chapter describes the research design applied to answer the research questions, the context of the study, participants, instruments and method of the data collection and analysis procedures.

Research design

Correlational research

Correlational research design may be referred as a descriptive research which is utilized to investigate the possibility of a relationship between two or more variables using a correlation coefficient, which describes the degree to which two or more quantitative variables are related (Fraenkel, Wallen, & Hyun, 2012). In correlational research independent variables are not manipulated to check the effects on the dependent variables and, therefore, causal relations cannot be inferred. The main purpose of this type of quantitative studies is to predict a relationship between the studied variables as well as the magnitude of this relationship which matters in order for a research to be valuable in prediction; the greater the association, the more

accurate prediction the results permit (Cohen, Manion, & Morrison, 2007). In a correlational study, data collection may be either longitudinal or cross-sectional.

Cross-sectional correlational research

A cross-sectional correlational research in educational settings is performed with a representative sample of the existing population at a specific point in time. This one-time sampling procedure enables researchers to collect data either in prospective or retrospective probe (Cohen et al., 2007). In this study, the cross-sectional correlation research design was utilized to explore the relationship between autonomous and controlled motivation and academic achievement and vitality. The same research design was also applied to predict the correlation between the university students' autonomous and controlled motivation for their English classes and their autonomous and controlled motivation for their disciplinary courses. The quantitative data was collected through an online survey and analyzed with SPPS.

Context

This study was carried out in fourteen different universities - eleven public and three private universities- in six different cities of Turkey: Ankara, Adana, Sivas, Trabzon, Niğde, and Antalya. The survey link was sent to different preparatory school students with the help of colleagues and contacts. All the participants completed their preparatory year English education or they were studying at a summer school to be able to complete it. Different socio-economic backgrounds of the schools were not within the scope of the study, so this variety was unassessed.

The study was conducted with 121 undergraduate students in six different cities of Turkey. Among all participants from fourteen universities, most of them were

coming from nine universities from the capital city, Ankara. Three of the nine universities in the capital were private universities, while six of them were public universities.

Participants

A hundred twenty-one students (Mage = 20,04) from fourteen different preparatory schools participated in the present study. All the students participated voluntarily and anonymously in the study. Of the participants, 76 were male (62,8%) and 45 were female (37,2%) (Table 1).

Table 1 Gender of participants (N = 121)

Gender	Number	Percentage
Female	45	37,2
Male	76	62,8

All the participants were briefly informed about the study and joined the study by agreeing on completing an online survey. One case was excluded from the final sample to be utilized for the analysis since the participant misunderstood some questions and specified their names mistakenly.

The participants were majoring in different undergraduate programs such as

Department of Law, Business Administration Department, Public Administration

Department, Management Information Systems Department, Department of Political

Sciences and Economics, Banking and Finance Department, International Relations

and Logistics Departments, Department of History, Mechanical Engineering,

Electrical-Electronics Engineering, Nano-technological Engineering, Industrial

Engineering, Civil Engineering, Aerospace Engineering, Material Engineering,

Computer Engineering, Metallurgical Engineering, Environmental Engineering

Departments, Department of Medicine, Department and Psychology, and Department of Security Sciences.

The participants from different departments but in the same faculties were classified together below (Table 2).

Table 2 Departments of participants (N = 121)

Departments	N
1. Departments of Engineering	36
2. Faculty of Law	5
3. Department of Psychology	3
4. Department of Security Sciences	44
5. Department of History	4
6. International Relations & Trade Department	5
7. Department of Medicine	1
8. Management & Information Systems	23

Instrumentation

A list of instruments including Students' Demographic Information Questionnaire, Comprehensive Relative Autonomy Index (C-RAI) (Sheldon, Osin, Gordeeve, Suchkov, & Sychev, 2017), and Subjective Vitality Scale (Ryan & Frederick, 1997) and students' achievement scores of the students were utilized in the study. Below the detailed information of the scales were explained in brief. Participants were also asked to specify which year they are studying for their English Language Education as well as their last two exam scores and the departments in which they were going to continue their studies.

All the instruments used were translated from English into Turkish by two different researchers to verify reliability. The translated versions were double-checked, proofread and back translated by three different informants. All the questionnaires were administered online and in Turkish to the students. The questions in the survey were mixed in the online version on purpose.

Students' demographic information questionnaire

A demographic information questionnaire for students was set up by the researcher in order to gather data about the participants. Along with the information about their age, gender, schools and departments that they would study for their specific disciplines in the following years, the participants were also asked about the last English level (e.g. B1, B1+, C1 according to CEFR) they completed. The students were also asked about which year they were studying in English preparatory school to identify the target population more accurately (See Appendix A, 60). The name of the participants was not asked specifically in order to keep their identities anonymous.

Autonomous and controlled motivation

In order to assess students autonomous and controlled motivation at the specific level of English classes as well as at the contextual level of studying in a specific department, the Comprehensive Relative Autonomy Index (C-RAI; Sheldon et al., 2017) was used. C-RAI is consisted of 20 items, derived and validated by Sheldon et al (2017) from Relative Autonomy Continuum (RAI). The C-RAI scale was used to identify the extent to which the participants have the quality of motivation according to the Self-determination Theory (Ryan & Deci, 2000). All the items in the survey were answered on a 5-point Likert-type scale (1 point for *strongly disagree*, 2 points

for disagree, 3 points for neither agree nor disagree, 4 points for agree and 5 points for strongly agree).

Comprehensive Relative Autonomy Index (C-RAI) included five different subscales and four items each; (1) *external regulation* (e.g., "because I do not have any choice but to do") (Cronbach's alpha α = .78 for specific and Cronbach's alpha α = .82 for contextual) (2) *negative introjected regulation* (e.g., "because I would feel guilty if I did not do it") (Cronbach's alpha α = .83 for specific and Cronbach's alpha α = .81 for contextual) (3) *positive introjected regulation* (e.g., "because I want to prove myself that I am capable") (Cronbach's alpha α = .83 for specific and Cronbach's alpha α = .77 for contextual) (4) *identified regulation* (e.g., "because it is personally important to me") (Cronbach's alpha α = .78 for specific and Cronbach's alpha α = .85 for contextual) and (5) *intrinsic regulation* (e.g., "because it is a pleasure to do it") (Cronbach's alpha α = .89 for specific and Cronbach's alpha α = .90 for contextual). Regarding the reliability of the scale, Cronbach alpha (α) was calculated for each item.

The same scale was utilized twice to assess students' motivation towards both their English classes (stem item "Why do I try to do well in my English class?) and their disciplinary courses (stem item "Why did you choose to study in your department?). The items of the five subscales were mixed (see Appendix C, 65).

Subjective vitality scale

A subjective vitality scale was also administered to the participants to correlate their vitality and academic achievement in the English classes. The subjective vitality scale was developed by Frederick and Ryan (1997). The scale consists of seven items

but only four were used in the present study in order to reduce the time of survey completion; (1) "I feel alive and vital", (2) "I don't feel very energetic" (reverse scored), (3) "I have energy and spirit", and (4) "I nearly always feel awake and alert". All the items were administered in a 5-point Likert-type scale (1 point for strongly disagree, 2 points for disagree, 3 points for neither agree nor disagree, 4 points for agree and 5 points for strongly agree). The internal consistency of the scale was checked through Cronbach's alpha which revealed satisfactory ($\alpha = .89$).

Achievement

Students' achievement was assessed by asking students to indicate their score in the first and second test of their current semester. The average score of these two tests was used as indicator of students' current achievement.

Data collection

For the current study, the necessary permissions were obtained from Bilkent Ethics
Committee. Following the process of approval, a combined version of two different
questionnaires and 44 items were prepared and administered to the participants via
Google forms. The researcher contacted with different preparatory school instructors
from several universities in and out of Ankara to reach more preparatory students.

Both the instructors and students were briefly informed about the scope and content
of the study. Then the online version of the survey was prepared via Google Forms
and shared with the instructors and the students. The online survey was totally
voluntary and the students were reminded that they had the option to opt out
whenever they would like to. Once they are consent to take part in the study, the
students' age, gender, departments, and midterm grades were asked rather than their

names in order to keep them anonymous. The survey questions were purposefully mixed before they are distributed to the students.

Data analysis

SPSS (Statistical Package for the Social Sciences v.25) was utilized to analyze and interpret the quantitative data. The preliminary analyses included descriptive statistics for each variable and bivariate correlations while the internal consistency of each subscale was also explored by applying Cronbach Alpha.

In the main analysis, four different hierarchical regression analyses were run to observe the relationship between dependent variables and independent variables.

CHAPTER 4: RESULTS

Introduction

The aim of the present study was to investigate Turkish university students' autonomous and controlled motivations from different aspects. Specifically, this study examined to what extent preparatory school students' autonomous and controlled motivations for their English courses can be predicted by their motivations for studying for their disciplinary courses in the following years. Also, the current research examined the relation between the autonomous and controlled motivation of learning English and students' academic achievement and vitality in their preparatory year English classes. In order to analyze the relationship between the variables, a correlational research design has been applied. This chapter describes the analysis and results of the study.

The analysis of the data included two segments. The *preliminary analysis* reported descriptive statistics of the variables and bivariate correlations examined relationships among the measured variables.

The *main analysis* examined (a) whether students' autonomous and controlled motivation towards their English classes can be predicted by their autonomous and controlled motivation towards their disciplinary courses in the following years, and (b) the relation between the autonomous and controlled motivation for learning English and students' academic achievement and vitality. Students background variables such as level of English and year of study in preparatory school were also

used as predictors of the quality of motivation in English classes as well as achievement and vitality.

Preliminary analysis

The preliminary analysis of the study consisted of two sections: descriptive statistics and bivariate correlations. Descriptive statistics —means, and standard deviations of the studied variables—are presented in Table 3.

Table 3
Descriptive statistics of the measured variables

121	3.97	0.96
121	3.58	0.87
121	3.25	1.05
121	3.17	0.94
121	2.86	1.21
121	65.9	15.3
	121 121 121 121	121 3.58 121 3.25 121 3.17 121 2.86

N = Number of participants for each variable, M = Mean, SD = Standard Deviation.

Descriptive statistics

To identify the type of motivation each participant has motivational survey,

Comprehensive Relative Autonomy Index (C-RAI), was administered to the 122

university preparatory school students (age 18 to 27) enrolled at a Turkish university.

Of the 122 returned questionnaires, 121 were analyzed since one of the questionnaires was incomplete and excluded from the analysis. The mean score for each measured variable (contextual autonomous motivation, contextual controlled motivation, specific autonomous motivation, specific controlled motivation, and

vitality) was ranged from 2.86 (SD = 1.21) to 3.97 (SD = .96) on a Likert type scale between 1 and 5. Achievement score was measured by taking the mean of first and second midterm grades during the last English course the participants had attended, which was out of 100 points. The achievement score mean was 65.9 with a 15.3 standard deviation.

Correlational analysis

The bivariate correlations among the measured variables are presented in Table 4.

The results showed that there is a statistically significant and negative correlation between gender and achievement scores of the students (r = -.36, p < .01). According to the results of the analysis, male participants get higher achievement scores when compared to female students.

According to the bivariate correlational analyses results, year of study of the participants positively and significantly correlated with their level of English (r = .55, p < .01) and with the specific controlled motivation (r = .19, p < .05), while there was a statistically significant negative correlation between year of study and achievement (r = -.43, p < .01). This indicates that the students in their second year of preparatory school reported higher level of English, but their achievement scores were lower than students in their first year of preparatory school. Furthermore, students in their second year are more specific controlled motivated when compared to the students in their first year of English.

Level of English of the participants is statistically significantly and positively correlated with contextual autonomous motivation (r = .19, p < .05). This shows that high achieving students are more autonomously motivates to study for their disciplinary courses (contextual level).

The results also indicated a statistically significant and positive correlation between contextual autonomous motivation and contextual controlled motivation (r = .55, p < .01), specific autonomous motivation (r = .38, p < .01), specific controlled motivation (r = .32, p < .01) and vitality (r = .26, p < .01). According to the results, the participants that had chosen their departments with intrinsic or identified regulations (autonomous motivation at a contextual level) before they started to their English language education are also both highly autonomously motivated (quality of motivation) and controlled motivated (quantity of motivation) to study for their English classes as well as being interested and feeling energetic in their English classes. Apart from that, the students who are autonomously motivated (quality of motivation) towards their disciplinary courses have high amount of controlled motivation (quantity of motivation) for their disciplinary courses as well.

Contextual controlled motivation was also strongly and positively correlated with specific controlled motivation (r = .73, p < .01). This means that the students with high amount of external and/or introjected regulations towards their disciplinary courses (controlled motivation at a contextual level) are also externally and/or introjectedly motivated for their English classes as well (controlled motivation at a specific level).

Moreover, there is a statistically significant correlation between specific autonomous motivation and specific controlled motivation (r = .23, p < .05), vitality (r = .46, p < .01) and achievement (r = .26, p < .01), which means that the students who are autonomously motivated for their English classes (at a specific level) have also high amount of controlled motivation for the same classes. Apart from that, the students who are autonomously motivated for their English classes are more interested and energetic in their English classes and they achieve higher.

Specific controlled motivation is negatively correlated with achievement (r = -.29, p < .01). This result showed that if a student is externally or introjectedly regulated (controlled motivation) for studying English, their achievement level is inclined to be lower.

According to the results of the bivariate correlations, vitality of the participants in English classes is significantly correlated with their achievement (r = .33, p < .01) although the correlation is not very strong. This results indicates that the students who feel more interest and energy towards their English classes achieve higher in the English exams than other participants.

According to the hypothesis (a), controlled motivation in learning English (specific level) will be strongly related to controlled motivation in studying in a specific department (contextual level), while hypothesis (b) puts forth that autonomous motivation in learning English (specific level) will not be strongly associated to autonomous motivation in studying in a specific department (contextual level). As indicated from the reported results above, both these hypotheses have been

confirmed. The statistically significant correlation between contextual autonomous motivation and specific autonomous motivation was weaker (r = .32, p < .01) than the statistically significant correlation between contextual controlled motivation and specific controlled motivation (r = .73, p < .01) which is considered strong.

 $\frac{3}{2}$

Table 4
Bivariate correlations among the measured variables

Variables	1	2	3	4	5	6	7	8	9
1. Gender	-								
2. Year of Study	.49**	-							
3. Level of English	.46**	.55**	-						
4. Contextual Autonomous Motivation	01	.09	.19*	-					
5. Contextual Controlled Motivation	.03	.02	.03	.55**	-				
6. Specific Autonomous Motivation	.05	10	.07	.38**	.14	-			
7. Specific Controlled Motivation	.15	.19*	10	.32**	.73**	.23*	-		
8. Vitality	03	17	.09	.26**	.06	.46**	04	-	
9. Achievement	36**	43**	06	09	18	.26**	29**	.33**	-

Note. * p < .05. ** p < .01. Gender was dummy-coded (0 = male, 1 = female)

Main analysis

The first aim was to explore whether students' autonomous and controlled motivation towards for studying a discipline (contextual level) can predict their autonomous and controlled motivation towards learning English in preparatory programs (specific level). In order to attain this aim, two two-step hierarchical regression analyses were conducted. In the first hierarchical regression analysis, the dependent variable was autonomous motivation for studying English and independent variables were, in step 1, background variables such as gender, year of study (i.e. first or second), and level of English (i.e. B, B+, C, C+) and, in step 2, autonomous motivation for disciplinary courses and controlled motivation for disciplinary courses. In the second hierarchical regression analysis, the dependent variable was controlled motivation for studying English, while the independent variables were the same as in the first regression analysis.

The third and fourth hierarchical analyses were run to answer the second research question. In the third hierarchical regression analysis, the dependent variable was vitality and the independent variables were, in step 1, background variables such as gender, year of study (i.e. first or second), and level of English (i.e. B, B+, C, C+) and, in step 2, autonomous motivation for studying English and controlled motivation for studying English.

In the fourth and last hierarchical analysis, the dependent variable was academic achievement of preparatory school students (students' average exam scores in their last English classes) and the independent variables were, again, the same as in the third regression model.

Testing hypothesis (c)

According to the hypothesis (c), autonomous and controlled motivation in learning English (specific level) will be predicted by autonomous and controlled motivation in studying in a specific department (contextual level), respectively. To test this hypothesis hierarchical regression analysis was performed. Specifically, having checked the bivariate correlations (shown in Table 4) and the assumptions of normality, linearity and multi-collinearity, two two-step hierarchical regression models were tested, one for specific autonomous motivation and one for specific controlled motivation as a dependent variable. In both models, the dependent variable was regressed on gender, level of English, year of study, contextual autonomous motivation and contextual controlled motivation.

The model for specific autonomous motivation was statistically significant only in Step 2, $(F [5, 120] = 4.85, p < .01, adjusted <math>R^2 = .14)$. The results are shown in Table 5.

Table 5
The hierarchical regression for specific autonomous motivation

Predictors	ictors Specific autonomous motivation							
		Step 1		Step 2				
	В	SE	β	B SE β				
1. Gender	-0.11	(0.23)	05	0.01 (0.22) .01				
2. Year of study	-0.38	(0.25)	18	-0.39 (0.23)18				
3. Level of English	0.23	(0.14)	.19	0.10 (0.13) .08				
4. Contextual autonomous	-	7 -/	-	0.47 (0.11) .43**				
5. Contextual controlled	-		-	-0.11 (0.12)09				
F change (2, 115)				9.91**				

Note. ** p < .01, * p < .05. Gender was dummy-coded (0 = females; 1 = males), year of study was also dummy-coded (1 = first year; 2 = second year), Level of English coded 1-4 (1 = B; 2 = B+; 3 = C; 4 = C+).

In the second step of the two steps hierarchical regression analysis, contextual and autonomous controlled motivations were added to the analysis as independent variables (predictors). The results showed that contextual autonomous motivation significantly predicted the specific autonomous motivation of the participants.

As it can be noticed and according to hypothesis (c), only contextual autonomous motivation was a positive predictor of specific autonomous motivation. These findings suggest that when students choose to study for a discipline instigated by autonomous motivation, they are more likely to study for their English language classes instigated also by autonomous motivation. As presented in Table 5, none of

the independent variables (gender, year of study, level of English and contextual controlled motivation) could predict specific autonomous motivation.

The model for specific controlled motivation was also statistically significant in both Step 1 (F [3, 120] = 5.01, p < .01, adjusted R^2 = .09) and step 2 (F [5, 120] = 41.53, p < .01, adjusted R^2 = .63). The results are shown in Table 6.

Table 6
The hierarchical regression for specific controlled motivation

F change (2, 115)

Predictors		Sp	ecific co	ontrolled motivation
		Step 1		Step 2
	В	SE	β	B SE β
1. Gender	0.32	(0.20)	.16	0.26 (0.13) .14*
2. Year of study	0.58	(0.22)	.30	0.58 (0.14) .30**
3. Level of English	-0.38	(0.12)	34	-0.37 (0.08)34**
4. Contextual autonomous	-	-	-	-0.05 (0.07)05
5. Contextual controlled	-	-	-	0.81 (0.07) .76**

Note. *p < .05. ** p < .01. Gender was dummy-coded (0 = females; 1 = males). Year of study was also dummy-coded (1 = first year; 2 = second year), Level of English coded 1-4 (1 = B; 2 = B+; 3 = C; 4 = C+).

85.46**

As it can be noticed above (in Table 6), the year of study and level of English predict controlled motivation in English class in both steps. The results of the two different two steps analyses confirmed the hypothesis (c). This means that when students were in the second year of their studies they had higher controlled motivation compared to those students being in the first year of their studies. As for the level of English,

lower level of English predicted higher controlled motivation. Moreover, in line with the hypothesis (c), contextual controlled motivation and gender were positive predictors of specific controlled motivation in step 2. This result suggests that if students have external or introjected regulations (controlled) rather than identified or intrinsic regulations (autonomous) to study for a discipline (at a contextual level), they are possibly more inclined to have, in the same way, external or introjected regulations (controlled) to study for their English classes (at a specific level) as well.

The result of Step 2 also suggests that female participants were more externally or introjectedly (either negative or positive) motivated than their male peers.

Testing hypotheses (d) and (e)

According to hypotheses (d) and (e), autonomous motivation in learning English will be positively related to academic achievement in English classes, and controlled motivation in learning English will be either negatively related or unrelated to academic achievement in English classes. To test both hypotheses, a two-step hierarchical regression analysis was performed. Specifically, having checked the bivariate correlations (shown in Table 4) and the assumptions of normality, linearity and multi-collinearity, a hierarchical regression model was tested by taking achievement as a dependent variable. The independent variables were, in step 1, the background variables of gender, year of study (i.e. first or second), and level of English (i.e. B, B+, C, C+) and, in step 2, the autonomous and controlled motivation for studying English. The model for achievement was statistically significant in both Step 1 (F [3, 108] = 14.72, p < .01, adjusted R^2 = .28) and Step 2 (F [5, 108] = 12.36, p < .01, adjusted R^2 = .35). The results are shown in Table 7.

Table 7
The hierarchical regression for Achievement

Predictors	Achievement							
		Step 1				Step 2		
	В	SE	β		В	SE	β	
1. Gender	-9.25	(3.14)	29		-7.24	(3.05)	22*	
2. Year of study	-16.15	(3.42)	50		-13.26	(3.38)	41**	
3. Level of English	6.57	(1.89)	.36		4.41	(1.91)	.25*	
4. Specific autonomous	-	-	-		3.81	(1.20)	.26**	
5. Specific controlled	-	-			-3.62	(1.41)	22*	
F change (2, 103)						6.49**		

Note. *p < .05. ** p < .01. Gender was dummy-coded (0 = females; 1 = males). Year of study was also dummy-coded (1 = first year; 2 = second year), Level of English coded 1-4 (1 = B; 2 = B+; 3 = C; 4 = C+).

As Table 7 suggests, gender, year of study and level of English predicted significantly students' achievement in English class in both steps indicating that female students in the second year of their studies and in low level in English tended to have lower achievement.

Moreover, in Step 2, specific autonomous motivation and specific controlled motivation were predictors of achievement. However, while specific autonomous motivation was a positive predictor, specific controlled motivation was a negative predictor of achievement confirming hypotheses (d) and (e). The participants who chose to study at a department with intrinsic or identified regulations (contextual level) were more likely to be successful in their English departments (specific level).

On the other hand, the participants who study for their English classes with external and introjected regulations (controlled) tended to get lower scores in these classes.

Testing hypothesis (f)

According to the last hypothesis (f), vitality will be positively and negatively related to autonomous and controlled motivation, respectively. To test this hypothesis hierarchical regression analysis was performed. Specifically, having checked the bivariate correlations (shown in Table 4) and the assumptions of normality, linearity and multi-collinearity, a hierarchical two-step regression model was tested, for vitality as a dependent variable. The independent variables were, in step 1, the background variables of gender, year of study (i.e. first or second), and level of English (i.e. B, B+, C, C+) and, in step 2, the autonomous and controlled motivation for studying English.

The model of vitality was statistically significant in both Step 1 (F [3, 120] = 3.30, p < .05, adjusted R^2 =.05) and Step 2 (F [5, 120] = 7.97, p < .01, adjusted R^2 =.23). The results are shown in Table 8.

Table 8
The 2 steps hierarchical regression for Vitality

Predictors				Vitality			
		Step 1				Step 2	
	В	SE	β		В	SE	β
1. Gender	0.03	(0.26)	.01		0.12	(0.24)	.05
2. Year of study	-0.81	(0.28)	32		-0.54	(0.27)	22*
3. Level of English	0.37	(0.16)	.26		0.21	(0.15)	.14
4. Specific autonomous	-	-	-		0.52	(0.10)	.45**
5. Specific controlled	7 . ,	-			-0.12	(0.12)	09

F change (2, 115) 13.90**

Note. *p < .05. ** p < .01. Gender was dummy-coded (0 = females; 1 = males). Year of study was also dummy-coded (1 = first year; 2 = second year), Level of English coded 1-4 (1 = B; 2 = B+; 3 = C; 4 = C+).

The two steps regression analysis showed that vitality of preparatory school students in English classes was negatively and positively related to the year of study and level of English in step 1 indicating that students in the second year and with low English level were feeling less energetic in English classes. When, in step 2, quality of motivation was entered as predictor, specific autonomous related to vitality as well as the year of study. The results partially support hypothesis (f) as specific controlled motivation was not a predictor of vitality.

The results indicate that the participants who study English regulating their behavior through identified and intrinsic regulations (autonomous motivation) were

significantly more energetic and interested in their classes than the participants who chose their departments with external or introjected regulations (controlled motivation).

CHAPTER 5: DISCUSSION

Introduction

The aim of the present study was to investigate Turkish university students' autonomous and controlled motivations from different aspects. Specifically, this study examined to what extent preparatory school students' autonomous and controlled motivations for their English courses during their first year can be predicted by their motivations for studying for their disciplinary courses in the following years. Also, the current research examined the relation between the autonomous and controlled motivation of learning English and students' academic achievement and vitality in their preparatory year English classes. In order to analyze the relationship between the variables, a correlational research design has been applied. This chapter presents an overview of the study as well as a discussion of the findings and implications for education and further research. At the end of the chapter, the limitations of the study are also discussed.

Overview of the study

The purpose of the present study was to investigate whether the autonomous and controlled motivations of preparatory school students towards their English classes can be predicted by their autonomous and controlled motivations towards their disciplinary courses. As well as prediction of their motivation towards their English courses, this study aimed also to examine the relation between quality of motivation in learning English and vitality and academic achievement in the courses of the preparatory school. All the participant, who took part in the study, completed an online questionnaire including items related to their demographic information,

motivation, vitality and achievement. The collected data was analyzed by applying quantitative methods.

To achieve the specific aims of the study the following research questions were posed:

- 1. To what extent students' autonomous or controlled motivation in an English class is predicted by their autonomous or controlled motivation to study a specific subject?
- 2. To what extent students' academic achievement and vitality in English is predicted by their autonomous or controlled motivation in an English class?

In line with the reviewed literature, it was hypothesized that;

- (a) Controlled motivation in learning English (specific level) will be strongly related to controlled motivation in studying in a specific department (contextual level).
- (b) Autonomous motivation in learning English (specific level) will not be strongly associated to autonomous motivation in studying in a specific department (contextual level).
- (c) Autonomous and controlled motivation in learning English (specific level) will be predicted by autonomous and controlled motivation in studying in a specific department (contextual level), respectively.
- (d) Autonomous motivation in learning English will be positively related to academic achievement in English classes.
- (e) Controlled motivation in learning English will be either negatively related or unrelated to academic achievement in English classes.

(f) Vitality will be positively and negatively related to autonomous and controlled motivation, respectively.

In the study, the correlational method and a cross-sectional design were utilized to investigate the correlation between motivation towards English and disciplinary classes. Also, the study investigated the correlation between motivation towards English courses and vitality and academic achievement. The data collected from fifteen private and public universities in Turkey. In total, 121 participants consented to take part in the study voluntarily by completing an online motivational survey.

In the data analysis procedure, preliminary and main analyses were applied respectively. In the preliminary analyses of the results, descriptive statistics and bivariate correlations were utilized to find mean and standard deviation as well as correlations of the collected data. For the main analysis, four different two-step hierarchical regression analyses have been applied to test the hypotheses.

Major findings and conclusions

Building on the results of the analyses and hypotheses grounded on the literature review, major findings to each research question will be explained and discussed below.

Research question #1: To what extent students' autonomous or controlled motivation in an English class is predicted by their autonomous or controlled motivation to study a specific subject?

To answer the first research question, three hypotheses (a), (b) and (c) were tested.

The first hypothesis (a) assumed that controlled motivation at a specific level (learning English) is strongly correlated with controlled motivation at a contextual level (studying at a specific department). The results of the study confirmed the hypothesis (a) replicating previous research findings. Lavigne and Vallerand (2010) found that contextual motivation towards science predicted students' situational motivations towards science. Moreover, Chanal and Guay (2015) argued that the strength of this relation can vary as a function of the quality of motivation. Specifically, Chanal and Guay (2015) found that controlled motivation at the contextual level (i.e. at school in general) was stronger correlated to controlled motivation at the specific level (i.e. at a specific subject) than autonomous motivation. As the results of the present study indicate it as well, controlled motivation seems to be pervasive from subject to subject and level to level. The second hypothesis (b) assumed that autonomous motivation at a specific level (learning English) will not be strongly associated to autonomous motivation at a contextual level (studying in a specific department) and the results confirmed the hypothesis (b). This finding is in accord to Chanal and Guay's (2015) findings, which indicated that autonomous motivation had a higher level of specificity from subject to subject as well as from level to level.

Our third hypothesis (c) assumed that both autonomous and controlled motivations at specific level (learning English) will be predicted by autonomous and controlled motivations at a contextual level (studying at a specific department). This hypothesis was also supported by the result of the study. The findings show consistency with the previous studies in the literature. In a similar study, Denault and Guay (2017) argued that the students who get autonomy-support are more autonomously motivated both

in one specific domain and across-school subjects. This shows that if a student's motivation is boosted with internal and/or identified regulations, the autonomous motivation in any domain (specific, contextual or global) may relate to other domains as well. Likewise, De Meester, Aelterman, Cardon, Bourdeaudhuij and Haerens (2014) focused on the motivational effects of extra-curricular activities in a Flemish context, and they found that there is a significantly positive relation between extra-curricular school-based sports activities and community supports participation. The results of the present study showed also that specific controlled motivation was positively predicted by gender. In this case, it is noticed that female students are more controlled motivated in learning English than male students. The year of study and the level of English were also significantly related to specific controlled motivation. This means that when students fail to complete the preparatory program in one year as it is usually expected and study for a second year in their English classes as well as when they attend classes of low level in English, they tend to be more controlled motivated. On the other hand, although these students study for their second year, their achievement scores and vitality were lower than the students who were at their first year. This finding may be caused by students' frustration towards the courses after their failure and/or the loss of time and effort.

In the light of the findings and reviewed related literature, it may be argued that quality of motivation for studying a specific discipline has as positive relation to the quality of in English classes while low level of English and prolonged studies in preparatory school are deleterious for students' motivation, achievement and wellbeing expressed by vitality.

Research question #2: To what extent students' academic achievement and vitality in English is predicted by their autonomous or controlled motivation in an English class?

To answer the second research question three hypotheses (d), (e) and (f) were tested. The first hypothesis (d) assumed that autonomous motivation at a specific level (learning English) will be positively related to academic achievement at the same specific level (English classes).

The other hypothesis (e) assumed that controlled motivation at a specific level (learning English) will be either negatively related or unrelated to academic achievement at a specific level (English classes). The findings supported both of the hypotheses indicating the important role of the quality of motivation for students' success at preparatory schools. As Taylor et al. (2014) also suggested in their meta-analysis, being instigated by intrinsic regulations such as pleasure and interest or identified regulations such as personal goals toward studying is a positive motivation for high achievement at school. On the other hand, feeling pressure either by external (e.g. teachers and parents) or internal (e.g. guilty feelings) factors in studying leads to low academic achievement.

The last hypothesis (f) assumed that vitality will be positively and negatively related to autonomous and controlled motivation, respectively. The hypothesis is partially supported as only autonomous motivation predicted vitality, an indicator of wellbeing.

This finding is partially in accordance with Cuevas, Ntoumanis, Fernandez-Bustos, and Bartholomew's (2018) study, where it was found that vitality was predicted by both autonomous motivation (positively) controlled (negatively) motivation.

Implications for practice

This study sought to examine the correlation between autonomous and controlled motivations of preparatory year students towards their English classes and their disciplinary classes as well as their achievement and vitality toward English classes during the preparatory school year.

The results of the study showed that the students who have a higher level of autonomous motivation for their disciplinary classes also have a higher level of autonomous motivation, achievement and vitality for their English classes. Similarly, the students with a higher level of controlled motivation for disciplinary courses have a higher level of controlled motivation and a low level of achievement and vitality for their English classes as well. The results of this study can provide pedagogical implications for curriculum and instruction.

The results revealed that the quality of motivation at a contextual level can strongly predict the type of motivation the students will have at a specific level. In other words, if students have autonomous motivation to study at a department, they are likely to be more autonomously motivated to study for their English classes as well. Therefore, the students who are autonomously motivated for their disciplinary courses achieve higher in their English classes they take before their disciplinary courses, and they are also more interested in their English classes during their preparatory year.

The findings also showed that the students who start their university education with a low degree in English language are more controlled motivated in learning English and they tend to fail to a higher extent in preparatory schools. Some implications arise from this finding are that Ministry of National Education (MoNE) in Turkey should give sufficient education in English language to students at primary and secondary levels before attending to university. Since it is observed that students with a higher level of English proficiency tend to fail less and are more autonomously motivated, the English instruction given before university should be completed at an intermediate level so that the students become more autonomously motivated and achieve higher at tertiary level. The MoNE schools' curriculum should be revised accordingly from the basic levels of English instruction.

Taking the findings into account, it has been realized that quality of motivation to choose a department is crucially important for students even at high school level. The decision to choose the department that the students study and complete should be selected with intrinsic and identified regulations by taking the interests, tendencies and skills of the students into consideration. Parents should not keep their children under pressure to choose a department for external reasons. The pressure children feel from parents or teachers can only keep them motivated by controlled reasons such as external and/or positive or negative introjected regulations. Moreover, this type of motivation may lead to a lower level of achievement and vitality both for their departmental courses and English classes.

Another implication could be related to raising the awareness of high school level students towards the issue. Most students at a high school level in Turkey are

inclined to choose a department with the guidance of external people such as parents or peers rather than themselves. This may be due to reasons such as lack of knowledge, cultural background and the norms families own, or the excessive amount of pressure the students get from their peers at puberty. Looking into these reasons, curricular courses or extra-curricular activities such as seminars, workshops or visits for different occupations and fields to study should be integrated into the high school curriculum by Ministry of National Education (MoNE) so as high school students to make choices according to their interest and skills.

Another implication could be having an interdisciplinary curriculum at the university level in Turkey. Given the fact that individuals are obliged and allowed to take only the courses in the discipline they have chosen at the beginning of their tertiary level education, a noticeable gap between humanities/social sciences and sciences departments occurs and makes it almost impossible to change their field at the university level. However, each university student should be able to take a variety of courses from different disciplines and thus, make the decision of choosing a career after they complete their bachelor's degree. By doing this, most people will be able to choose their career path at the end of their education with a more accurate knowledge about fields and experience and they will be more autonomously motivated to study both for their disciplinary courses and English classes during their preparatory year.

Implications for further research

The study was conducted in six different cities. However, to get a more detailed frame of the Turkish educational system, similar studies can be conducted with a more variety of data and higher number of participants.

The findings revealed that there is a correlation between autonomous and controlled motivations of the participants towards their disciplinary courses and English classes. The findings also revealed that there is a correlation between the type of motivation between the participants have and their achievement scores and vitality in their classes. However, no further investigations have been carried out about the cause-effect relationship of the results. Research including cause-effect relationships may be carried out for future studies.

According to the findings, there is a statistically significant difference between controlled motivation at a specific level and the proficiency level of students. This explains that students with a lower level of proficiency level of English are more controlled motivated. However, since it is a cross-sectional correlational study, this study lacks investigating the possible reasons of being controlled motivated at university level. A causal-comparative research design could be applied to examine the possible reason behind this finding.

Limitations

The first limitation of the study was applying a cross-sectional correlational research design to investigate the existing correlation between contextual and specific motivations among preparatory students by examining their motivations towards English classes and disciplinary courses as well as the relationship between their vitality in these English classes and academic achievements. A correlational study, which is a type of associational research, lacks investigating any cause-effect relationship in nature.

Also, since the existing study utilized an online survey and the data collected via the internet, the participants did not fill out the instrument at the same time and in the classroom environment, which may lead to different results that may stem from a variety of mood shifts of the participants.

Another limitation is the method of the study. The current study is a quantitative study lacking a qualitative part and triangulation. In any case, a study supported with qualitative data collection methods would provide more valid and generalizable results for the study.

The sample of the data was selected both public and private schools in different regions and cities of Turkey. However, the number of the participants (N = 121) and the ratio of the participation is not sufficient enough to generalize the results to be valid throughout the country.

Owing to the reasons such as cultural differences among countries and differing educational standards and environments for investigating contextual and specific motivational regulations, the results may not be adaptable to other countries.

Finally, to measure both autonomous and controlled regulations and well-being of the participants, only four items were included in the questionnaire for each subscale including the vitality measure. In order to get a deeper understanding of motivational regulations and well-being, extended versions of the questionnaires can be asked to all informants.

REFERENCES

- Arnold, J. (2000). *Affect in language learning*. Cambridge: Cambridge University Press.
- Chanal, J., & Guay, F. (2015). Are autonomous and controlled motivations school-subjects-specific? *PLoS ONE*, *10*. doi:10.1371/journal.pone.0134660.g001
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). New York, NY: Routledge.
- Cuevas, R., Ntoumanis, N., Fernandez-Bustos, J. G., & Bartholomew, K. (2018).

 Does teacher evaluation based on student performance predict motivation, well-being, and ill-being? *Journal of School of Psychology*, 68, 154-162.
- Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268. doi:10.1207/S15327965PLI1104_01
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 324-346.
- De Meester, A., Aelterman N., Cardon, G., Bourdeaudhuij, I. D., & Haerens, L.

 (2014). Extracurricular school-based sports as a motivating vehicle for sports participation in youth: A cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity*, 11, 1-15.
- Denault, A. S., & Guay, F. (2017). Motivation towards extra-curricular activities and motivation at school: A test of the generalization effect hypothesis. *Journal of Adolescence*, *54*, 94-103.

- Dincer, A., Yesilyurt, S., & Takkac, M. (2012). The effects of autonomy-supportive climates on EFL learners' engagement, achievement and competence in English speaking classrooms. *Procedia Social and Behavioral Sciences*, 46, 3890-3894.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate* research in education (8th ed.). New York, NY: McGraw-Hill.
- Green, J., Martin, A. J., & Marsh, H. W. (2007). Motivation and engagement in English, mathematics and science high school subjects: Towards an understanding of multidimensional domain specificity. *Learning and Individual Differences*, 17, 269–279. doi:10.1016/j.lindif.2006.12.003
- Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, 52, 890-898.
- Guay, F., & Bureau, J. S. (2018). Motivation at school: Differentiation between and within school subject matters in the prediction of academic achievement.

 Contemporary Educational Psychology, 54, 42-54.
- Guay, F., Mageau, G. A., & Vallerand, R. J. (2003). On the hierarchical structure of self-determined motivation: A test of top-down, bottom-up, reciprocal, and horizontal effects. *Personality and Social Psychology Bulletin*, 29, 992–1004. doi:10.1177/0146167203253297
- Lavigne, G. L., & Vallerand, R. J. (2010). The dynamic processes of influence between contextual and situational motivation: A test of the hierarchical model in a science education setting. *Journal of Applied Social Psychology*, 40, 2343-2359.

- Magnusson, D. (1998). The logic and implications of a person-centered approach. In R. B. Cairns, L. R. Bergmann, & J. Kagan (Eds.), *Methods and models for studying the individual* (pp. 33-64). Thousand Oaks, CA: Sage.
- Nix, G., Ryan, R. M., Manly, J. B., & Deci, E. L. (1999). Revitalization through self-regulation: The effects of autonomous and controlled motivation on happiness and vitality. *Journal of Experimental Social Psychology*, 35, 266-284.
- Rozanski, A., Blumenthal, J. A., Davidson, K. W., Saab, P. G., & Kubzansky, L. (2005). The epidemiology, pathophysiology, and management of psychosocial risk factors in cardiac practice. *Journal of the American College of Cardiology*, 45, 637–651.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749-761.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.
- Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.),

 Handbook of self-determination research (pp. 3–33). Rochester, NY:

 University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2008). From ego depletion to vitality: Theory and findings concerning the facilitation of energy available to the self. *Social and Personality Psychology Compass*, 2, 702-717.

- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. New York, NY: Guilford Publications.
- Ryan, R. M., & Frederick, C. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65, 529-565.
- Ryan, R. M., Kuhl, J., & Deci, E. L. (1997). Nature and autonomy: Organizational view of social and neurobiological aspects of self-regulation in behavior and development. *Development and Psychopathology*, *9*, 701-728.
- Senecal, C., Julien, E., & Guay, F. (2003). Role conflict and academic procrastination: A self-determination perspective. *European Journal of Social Psychology*, 68, 531-543.
- Sheldon, K. M., Osin, E. N., Gordeeve, T. O., Suchkov, D. D. & Sychev, O. A. (2017). Evaluating the dimensionality of self-determination theory's relative autonomy continuum. *Personality and Social Psychology Bulletin*, *43*, 1215-1238. doi:10.1177%2F0146167217711915
- Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: The unique role of intrinsic motivation.
 Contemporary Educational Psychology, 39, 342-358.
- Uysal, R., Satıcı, S. A., Satıcı, B., & Akın, A. (2014). Subjective vitality as mediator and moderator of the relationship between life satisfaction and subjective happiness. *Educational Sciences: Theory & Practice*, 14, 489-497.
- Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. *Advances in Experimental Social Psychology*, 29, 271-360.

- Vansteenkiste, M., Soenens, B., Sierens, E., Luyckx K., & Lens, W. (2009).

 Motivational profiles from a self-determination perspective: The quality of motivation matters. *Journal of Educational Psychology*, 101, 671-688.
- Velki, T. (2011). The correlation considering the degree of autonomous motivation, academic achievement and mental health. *Croatian Journal of Education*, *13*, 56-87.
- White, R. W. (1959). Motivation Reconsidered. Psychological Review, 66, 297-333.

APPENDICES

APPENDIX A: Students' Demographic Information Questionnaire

The information you provided for this section will be kept private and only will be used with research purposes. The accuracy of the information you give is highly important for the purpose of the study.

1. Specify your school:
2. Gender: Male Female
3. Age:
4. Which year are you studying in the preparatory school?
year
5. What is your department?
-
6. What was the last level you completed in your preparatory school?
B1 Level
B+ Level
C Level
C+ Level
7. Your 1 st Midterm Score in the last level you completed:
8. Your 2 nd Midterm Score in the last level you completed:

APPENDIX B: Comprehensive Relative Autonomy Index (C-RAI) Motivation towards English Classes & Disciplinary Courses

(Sheldon, Osin, Gordeeve, Suchkov, & Sychev, 2017)

Why did you choice to study in your department?					
External regulation					
1. Because important people (i.e., parents, professors) will like me better if I do so.	1	2	3	4	5
2. Because if I don't do so, others will get mad	1	2	3	4	5
3. I'll get in trouble if I don't do so.	1	2	3	4	5
4. Because I don't have any choice but to do it.	1	2	3	4	5
Negative introjected regulation					
5. Because I would feel guilty if I didn't do it.	1	2	3	4	5
6. Because I would feel ashamed if I didn't do it.	1	2	3	4	5
7. Because I would feel like a failure if I didn't do it.	1	2	3	4	5
8. Because I don't want to feel bad about myself.	1	2	3	4	5
Positive introjected regulation					
9. Because I want to feel proud of myself	1	2	3	4	5
10. Because I want to prove to myself that I am capable.	1	2	3	4	5
11. Because it boosts my self-esteem.	1	2	3	4	5
12. Because I want to feel good about myself.	1	2	3	4	5
Identified regulation					
13. Because I strongly value it.	1	2	3	4	5

14. Because it is personally important to me.	1	2	3	4	5
15. Because it is my personal choice to do it.	1	2	3	4	5
16. Because it is meaningful to me.	1	2	3	4	5
Intrinsic regulation					
17. Because I enjoy it.	1	2	3	4	5
18. Because it is fun.	1	2	3	4	5
19. Because it is a pleasure to do it.	1	2	3	4	5
20. Because it is interesting.	1	2	3	4	5

Motivation for participating in English class

(Sheldon, Osin, Gordeeve, Suchkov, & Sychev, 2017)

Why do I try to do well in my English class?					
External regulation					
21. Because important people (i.e., parents, professors) will like me better if I do so.	1	2	3	4	5
22. Because if I don't do so, others will get mad	1	2	3	4	5
23. I'll get in trouble if I don't do so.	1	2	3	4	5
24. Because I don't have any choice but to do it.	1	2	3	4	5
Negative introjected regulation					
25. Because I would feel guilty if I didn't do it.	1	2	3	4	5
26. Because I would feel ashamed if I didn't do it.	1	2	3	4	5
27. Because I would feel like a failure if I didn't do it.	1	2	3	4	5

28. Because I don't want to feel bad about myself.	1	2	3	4	5
Positive introjected regulation					
29. Because I want to feel proud of myself	1	2	3	4	5
30. Because I want to prove to myself that I am capable.	1	2	3	4	5
31. Because it boosts my self-esteem.	1	2	3	4	5
32. Because I want to feel good about myself.	1	2	3	4	5
Identified regulation					
33. Because I strongly value it.	1	2	3	4	5
34. Because it is personally important to me.	1	2	3	4	5
35. Because it is my personal choice to do it.	1	2	3	4	5
36. Because it is meaningful to me.	1	2	3	4	5
Intrinsic regulation					
37. Because I enjoy it.	1	2	3	4	5
38. Because it is fun.	1	2	3	4	5
39. Because it is a pleasure to do it.	1	2	3	4	5
40. Because it is interesting.	1	2	3	4	5

Vitality

(Ryan & Frederick, 1997)

In my English class					
1. I fell alive and vital	1	2	3	4	5
2. I feel alert and awake	1	2	3	4	5
3. I feel energy and spirit	1	2	3	4	5
4. I don't feel very energetic (Reverse)	1	2	3	4	5

APPENDIX C. Turkish Version of the Motivational Scale

(Sheldon, Osin, Gordeeve, Suchkov, & Sychev, 2017)

	yılki ingilizce derslerine neden ışıyorum?	Kesinlikle katılmıyor um	Katılmı yorum	Karar sızım	Katılı yorum	Kesinli kle katılıyo rum
1.	Çünkü benim için önemli kişiler (ebeveynlerim, öğretmenlerim veya arkadaşlarım) eğer ben çalışırsambeni daha çok sevecekler.	1	2	3	4	5
2.	Çünkü kendimle gurur duymak istiyorum .	1	2	3	4	5
3.	Çünkü İngilizce çalışmak benim için değerlidir.	1	2	3	4	5
4.	Eğer İngilizce çalışmazsam, utanırım.	1	2	3	4	5
5.	Çünkü İngilizce çalışmak, benim için kişisel olarak önemlidir.	1	2	3	4	5
6.	Çünkü İnglizce çalışmaktan keyif alıyorum.	1	2	3	4	5
7.	Çünkü eğer İngilizce çalışmazsam kendimi başarısız hissederim	1	2	3	4	5
8.	Çünkü İngilizce çalışmak özgüvenimi arttırıyor.	1	2	3	4	5
9.	Eğer İngilizce çalışmazsam başım derde girer.	1	2	3	4	5
10.	Çünkü kendime yeterli olduğumu kanıtlamak isterim.	1	2	3	4	5
11.	Çünkü İngilizce çalışmak bir keyiftir	1	2	3	4	5
12.	Çünkü kendim hakkında iyi hissetmek istiyorum.	1	2	3	4	5
13.	Çünkü eğer İngilizce çalışmazsam, diğerleri sinirlenecek .	1	2	3	4	5
14.	Eğer İngilizce çalışmazsam suçlu hissederim.	1	2	3	4	5
15.	Çünkü onu yapmak İngilizce çalışmak benim kişisel tercihimdir.	1	2	3	4	5
16.	Çünkü İngilizce çalışmak eğlencelidir.	1	2	3	4	5

17. Çünkü kendim hakkında kötü hissetmek istemem.	1	2	3	4	5
18. Çünkü İngilizce çalışmak benim için anlamlıdır.	1	2	3	4	5
 Çünkü İngilizce çalışmaktan başka seçeneğim yok. 	1	2	3	4	5
20. Çünkü İngilizce çalışmak ilginçtir.	1	2	3	4	5

Motivational Scale for Disciplinary Courses

(Sheldon, Osin, Gordeeve, Suchkov, & Sychev, 2017)

Böl	üm derslerine neden çalışmak isterim?	Kesinlikle katılmıyor um	Katılmı yorum	Karar sızım	Katılıy orum	Kesinli kle katılıyo rum
1.	Çünkü benim için önemli kişiler (ebeveynlerim, öğretmenlerim veya arkadaşlarım) eğer ben çalışırsambeni daha çok sevecekler.	1	2	3	4	5
2.	Çünkü kendimle gurur duymak istiyorum .	1	2	3	4	5
3.	Çünkü İngilizce çalışmak benim için değerlidir .	1	2	3	4	5
4.	Eğer İngilizce çalışmazsam, utanırım.	1	2	3	4	5
5.	Çünkü İngilizce çalışmak , benim için kişisel olarak önemlidir.	1	2	3	4	5
6.	Çünkü İnglizce çalışmaktan keyif alıyorum.	1	2	3	4	5
7.	Çünkü eğer İngilizce çalışmazsam kendimi başarısız hissederim	1	2	3	4	5
8.	Çünkü İngilizce çalışmak özgüvenimi arttırıyor.	1	2	3	4	5
9.	Eğer İngilizce çalışmazsam başım derde girer.	1	2	3	4	5
10.	Çünkü kendime yeterli olduğumu kanıtlamak isterim.	1	2	3	4	5

11. Çünkü İngilizce çalışmak bir keyiftir	1	2	3	4	5
12. Çünkü kendim hakkında iyi hissetmek istiyorum.	1	2	3	4	5
13. Çünkü eğer İngilizce çalışmazsam, diğerleri sinirlenecek .	1	2	3	4	5
 14. Eğer İngilizce çalışmazsam suçlu hissederim. 	1	2	3	4	5
 Çünkü onu yapmak İngilizce çalışmak benim kişisel tercihimdir. 	1	2	3	4	5
16. Çünkü İngilizce çalışmak eğlencelidir.	1	2	3	4	5
17. Çünkü kendim hakkında kötü hissetmek istemem.	1	2	3	4	5
18. Çünkü İngilizce çalışmak benim için anlamlıdır.	1	2	3	4	5
19. Çünkü İngilizce çalışmaktan başka seçeneğim yok.	1	2	3	4	5
20. Çünkü İngilizce çalışmak ilginçtir.	1	2	3	4	5

Vitality

(Ryan & Frederick, 1997)

İngilizce derslerinde					
1. Kendimi enerjik hissediyorum.	1	2	3	4	5
2. Neredeyse her zamam zihnim açık ve dikkatliyim.	1	2	3	4	5
3. Kendimi canlı hissediyorum.	1	2	3	4	5
4. Kendimi enerjik hissetmiyorum.*	1	2	3	4	5