



**THE STRUCTURAL RELATIONS BETWEEN  
AGENTIC ENGAGEMENT, BASIC  
PSYCHOLOGICAL NEEDS AND TEACHER'S  
AUTONOMY-SUPPORTIVE ENVIRONMENT IN  
ACADEMIC SUCCESS IN LEARNING ENGLISH**

**2025  
MASTER THESIS  
ENGLISH LANGUAGE AND LITERATURE**

**Farah YACOUB**

**Thesis Advisor  
Assoc. Prof. Dr. Özkan KIRMIZI**

**THE STRUCTURAL RELATIONS BETWEEN AGENTIC ENGAGEMENT,  
BASIC PSYCHOLOGICAL NEEDS AND TEACHER'S AUTONOMY-  
SUPPORTIVE ENVIRONMENT IN ACADEMIC SUCCESS IN LEARNING  
ENGLISH**

**Farah YACOUB**

**Thesis Advisor  
Assoc. Prof. Dr. Özkan KIRMIZI**

**T.C.  
Karabuk University  
Institute of Graduate Programs  
Department of English Language and Literature  
Prepared as  
Master Thesis**

**KARABUK  
January 2025**

## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>1</b>
<b>THESIS APPROVAL PAGE</b> .....	<b>5</b>
<b>DECLARATION</b> .....	<b>6</b>
<b>FOREWORD</b> .....	<b>7</b>
<b>DEDICATION</b> .....	<b>8</b>
<b>ABSTRACT</b> .....	<b>9</b>
<b>ÖZ</b> .....	<b>10</b>
<b>ARCHIVE RECORD INFORMATION</b> .....	<b>11</b>
<b>ARŞİV KAYIT BİLGİLERİ</b> .....	<b>12</b>
<b>ABBREVIATIONS</b> .....	<b>13</b>
<b>SUBJECT OF THE RESEARCH</b> .....	<b>14</b>
<b>PURPOSE AND IMPORTANCE OF THE RESEARCH</b> .....	<b>14</b>
<b>METHOD OF THE RESEARCH</b> .....	<b>14</b>
<b>HYPOTHESIS OF THE RESEARCH</b> .....	<b>15</b>
<b>POPULATION AND SAMPLE</b> .....	<b>16</b>
<b>SCOPE AND LIMITATIONS / DIFFICULTIES</b> .....	<b>16</b>
<b>1. CHAPTER ONE: INTRODUCTION</b> .....	<b>17</b>
<b>1.1. The Background to the Study</b> .....	<b>17</b>
<b>1.2. Research Questions</b> .....	<b>18</b>
<b>1.3. The Purpose of the Study</b> .....	<b>18</b>
<b>1.4. Problem Statement</b> .....	<b>19</b>
<b>1.5. The Significance of the Study</b> .....	<b>20</b>
<b>1.6. The Method of The Study</b> .....	<b>21</b>
<b>1.7. The Limitations of The Study</b> .....	<b>22</b>

<b>2.</b>	<b>CHAPTER TWO: THEORETICAL FRAMEWORK.....</b>	<b>24</b>
2.1.	Self-Determination Theory (SDT).....	24
2.2.	Autonomy-Supportive Teaching and Language Achievement.....	26
2.3.	Basic Psychological Needs and Language Achievement .....	30
2.4.	The Triadic Model of Student Engagement .....	32
2.4.1.	Definition and dimensions.....	32
2.4.2.	Engagement Triadic Model and Academic Achievement Literature Review.....	34
2.4.3.	Agentic engagement and language achievement.....	35
<b>3.</b>	<b>CHAPTER THREE: METHODOLOGY .....</b>	<b>41</b>
3.1.	Introduction.....	41
3.2.	Research Design .....	41
3.3.	Setting & Participants .....	42
3.4.	Data collection tool.....	43
3.4.1.	Scales and Measures:.....	43
3.4.1.1.	The Basic Psychological Needs in Second Language (BPN-L2) Scale.....	43
3.4.1.2.	Four aspects of engagement scale.....	43
3.4.1.3.	English language achievement .....	44
3.4.1.4.	Perceived autonomy-supportive teaching environment scale.....	44
3.5.	Procedure.....	44
<b>4.</b>	<b>CHAPTER FOUR: RESULTS.....</b>	<b>46</b>
4.1.	Structural relations between Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement .....	46
4.1.1.	Testing Pearson Correlations among Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement .....	46
4.1.2.	Results of Multiple Mediation Analyses Among Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement .....	47
4.1.3.	Testing the Pathways of the Multiple Mediation Among Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement .....	48

<b>4.2.</b>	<b>Structural Relations Among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Four Engagement Constructs and Language Academic Achievement.....</b>	<b>51</b>
4.2.1.	Pearson Correlations among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Four Engagement Constructs and Language Academic Achievement .....	51
4.2.2.	Results of Multiple Mediation Analyses Among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Emotional Engagement , Agentic Engagement and Language Academic Achievement	53
4.2.3.	Testing the Pathways of the Multiple Mediation Model among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Emotional Engagement and Language Academic Achievement .....	55
4.2.4.	Results of Multiple Mediation Analyses among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Behavioral Engagement, Agentic Engagement and Language Academic Achievement	57
4.2.5.	Testing the Pathways of the Multiple Mediation Model among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Behavioral Engagement, Agentic Engagement and Language Academic Achievement .....	60
4.2.6.	Results of Multiple Mediation Analyses among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Cognitive Engagement, Agentic Engagement and Language Academic Achievement	61
4.2.7.	Testing the Pathways of the Multiple Mediation Model among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Cognitive Engagement and Language Academic Achievement .....	64
<b>5.</b>	<b>CHAPTER FIVE: DISCUSSION .....</b>	<b>66</b>
5.1.	Introduction.....	66
5.2.	The major findings of the current study.....	67
5.2.1.	The structural relations between study’s variables .....	67
5.2.2.	How does language instructors following a more autonomy-supportive teaching methods (context) affects students basic psychological needs (motivation)? .....	69
5.2.3.	how the satisfaction of student’s basic psychological needs (motivation) affects classroom agentic engagement (action)? .....	70
5.2.4.	How do the other three types of engagement (behavioral, emotional, and cognitive) affect agentic engagement? .....	71

5.2.5. How does students' agentic engagement affect language achievement, and does it work as a distinct construct influencing language achievement? .....	74
5.3. Implications of the study .....	75
CONCLUSION .....	76
REFERENCES.....	78
LIST OF TABLES .....	85
LIST OF APPENDIX .....	86
CURRICULUM VITAE.....	92



## THESIS APPROVAL PAGE

I certify that in my opinion the thesis submitted by Farah YACOUB titled “THE STRUCTURAL RELATIONS BETWEEN AGENTIC ENGAGEMENT, BASIC PSYCHOLOGICAL NEEDS AND TEACHER’S AUTONOMY-SUPPORTIVE ENVIRONMENT IN ACADEMIC SUCCESS IN LEARNING ENGLISH” is fully adequate in scope and in quality as a thesis for the degree of English Language and Literature.

Assoc. Prof. Dr. Özkan KIRMIZI .....

Thesis Advisor, Department of Faculty of Literature

This thesis is accepted by the examining committee with a unanimous vote in the Department of Department of English Language and Literature as a Master of Science thesis. January 2, 2024

### **Examining Committee Members (Institutions)**

### **Signature**

Chairman : Assoc. Prof. Dr. Özkan KIRMIZI (KBU) .....

Member : Assoc. Prof. Dr. İrfan TOSUNCUOĞLU (KBU) .....

Member : Assoc. Prof. Dr. Aydan IRGATOĞLU (HBVU) .....

The degree of Master of English Language and Literature by the thesis submitted is approved by the Administrative Board of the Institute of Graduate Programs, Karabuk University.

Assoc. Prof. Dr. Zeynep ÖZCAN .....

Director of the Institute of Graduate Programs

## **DECLARATION**

I hereby declare that this thesis is the result of my own work and all information included has been obtained and expounded in accordance with the academic rules and ethical policy specified by the institute. Besides, I declare that all the statements, results, materials, not original to this thesis have been cited and referenced literally.

Without being bound by a particular time, I accept all moral and legal consequences of any detection contrary to the aforementioned statement.

**Name Surname: Farah YACOUB**

**Signature :**

## **FOREWORD**

I would like to express my gratitude for my God firstly, then family, professors and loved ones for supporting me through my master's journey. My parents who gave everything for me to be where I am today. My Professor Özkan Kırmızı for being the best role model for my academic endeavors. Professor Mohammed Almatarneh from my bachelor study for being an inspiration of my thesis through his supportive teaching. My best friend Montaha for being always by my side, reminding me of my potential. Serine for always being there through my ups and downs. My therapist, Enas for being my number one emotional supporter, we had been through a lot together. My siblings Shahd and Moawiyah for all our motivational moments.

Thank you all.

## **DEDICATION**

This thesis is dedicated for myself, I had gone through a lot to reach where I am today. This has been a journey of self-discovery not a master's degree only. I poured my whole heart into this work and I hope it to be influential and inspiring.



## **ABSTRACT**

The purpose of the current study is to explore the interplay between student's agentic engagement and their language achievement through examining the structural relations and mediating roles of student's basic psychological needs satisfaction, perceived autonomy-supportive teaching environment and the influence of the other three engagement types which are cognitive, emotional and behavioral. For this conclusion, 313 EFL undergraduate students from the Jordanian context submitted a questionnaire, person-correlation and structural equational modeling were administered to analyze the gathered data. The principal findings demonstrated that agentic engagement significantly enhanced English language achievement among EFL students. Moreover, agentic engagement was identified as a complete mediator in the relationship among autonomy-supportive teaching environment, satisfaction of basic psychological needs, academic achievement, and across the emotional and behavioral engagement constructs both directly and indirectly, whereas cognitive engagement was found to not influence or predict agentic engagement or academic achievement. The findings emphasized on the significance of the environmental setting, namely language classrooms, in facilitating the intrinsic motivational process in language learners through satisfying their basic psychological needs, as posited by self-determination theory.

**Keywords:** agentic engagement; basic psychological needs; English language; autonomy-supportive teaching; Self-determination theory.

## ÖZ

Bu çalışmanın amacı, öğrencinin eylemsel katılımı ile dil başarısı arasındaki etkileşimi; temel psikolojik ihtiyaçların tatmini, algılanan özerklik-destekleyici öğretim ortamı ve bilişsel, duygusal ve davranışsal katılım türlerinin yapısal ilişkileri ve aracı rolleri üzerinden incelemektir. Bu amaçla, Ürdün bağlamından 313 EFL lisans öğrencisinden anket verileri toplanmış ve elde edilen veriler kişi-korelasyon analizi ve yapısal eşitlik modellemesi kullanılarak analiz edilmiştir. Temel bulgular, eylemsel katılımın EFL öğrencilerinin İngilizce dil başarısını anlamlı ölçüde artırdığını göstermektedir. Ayrıca, eylemsel katılımın, özerklik-destekleyici öğretim ortamı, temel psikolojik ihtiyaçların tatmini ve akademik başarı arasındaki ilişkide hem doğrudan hem de dolaylı olarak tam bir aracı rolü üstlendiği belirlenmiştir. Buna karşılık, bilişsel katılımın eylemsel katılımı veya akademik başarıyı etkilemediği ya da yordamadığı saptanmıştır. Bulgular, dil öğrenenlerin temel psikolojik ihtiyaçlarının karşılanması yoluyla içsel motivasyon süreçlerinin kolaylaştırılmasında çevresel faktörlerin, özellikle de dil sınıfı ortamının, Öz-Belirleme Kuramı'nın öne sürdüğü gibi kritik bir rol oynadığını vurgulamaktadır.

**Anahtar Kelimeler:** temsilci bağlılığı; temel psikolojik ihtiyaçlar; İngiliz dili, özerklik-destekleyici öğretim; kendi kaderini tayin kuramı; öğrenci bağlılığı.

### ARCHIVE RECORD INFORMATION

<b>Title of the Thesis</b>	The Structural Relations Between Agentic Engagement, Basic Psychological Needs and Teacher's Autonomy-Supportive Environment in Academic Success in Learning English
<b>Author of the Thesis</b>	Farah YACOUB
<b>Thesis Advisor</b>	Assoc. Prof. Dr. Özkan KIRMIZI
<b>Status of the Thesis</b>	(Master's Degree)
<b>Date of the Thesis</b>	02/01/2025
<b>Field of the Thesis</b>	English Language and Literature Department
<b>Place of the Thesis</b>	UNIKA / IGP
<b>Total Page Number</b>	92
<b>Keywords</b>	Agentic Engagement, Basic Psychological Needs, English Language, Autonomy-Supportive Teaching, Self-Determination Theory

## ARŞİV KAYIT BİLGİLERİ

<b>Tezin Adı</b>	İngilizce Öğreniminde Akademik Başarıda Derse Katılım Bağlılığı, Temel Psikolojik İhtiyaçlar ve Öğretmenin Öğrenen Öerklğini Öestekleyici Ortam Sağlaması Arasındaki Yapısal İlişkiler
<b>Tezin Yazarı</b>	Farah YACOUB
<b>Tezin Danışmanı</b>	Assoc. Prof. Dr. Özkan KIRMIZI
<b>Tezin Derecesi</b>	(Yüksek Lisans)
<b>Tezin Tarihi</b>	02/01/2025
<b>Tezin Alanı</b>	İngiliz Dili ve Edebiyatı Anabilim Dalı
<b>Tezin Yeri</b>	KBU/LEE
<b>Tezin Sayfa Sayısı</b>	92
<b>Anahtar Kelimeler</b>	Temsilci Bağlılığı, Temel Psikolojik İhtiyaçlar, İngiliz Dili, Özerklik-Destekleyici Öğretim, Kendi Kaderini Tayin Kuramı, Öğrenci Bağlılığı

## **ABBREVIATIONS**

**EFL** : English Foreign Language

**ESL** : English Second Language

**LL** : Language Learning

**L2** : Second Language

**STD** : Self-determination Theory



## **SUBJECT OF THE RESEARCH**

An investigation of the significance of agentic engagement as a novel predictor of English language achievement, while considering the structural relationships with basic psychological needs and autonomy-supportive teaching environment as internal and external factors influencing English language learning experience within language classrooms in the Jordanian universities. Further, the study involved an investigation of the influence of the behavioral, emotional and cognitive constructs of engagement on agentic engagement in which they draw an indirect mediating influence between basic psychological needs satisfaction and agentic engagement to achievement.

## **PURPOSE AND IMPORTANCE OF THE RESEARCH**

The main aim of this study was to explore the interplay between student's agentic engagement and their language achievement through examining the structural relations and mediating roles of student's basic psychological needs satisfaction, perceived autonomy-supportive teaching environment and the action of the other three engagement types which are (cognitive, emotional and behavioral). As a newly developed engagement construct, agentic engagement explains the conscious attempts students adopt to customize and refine their learning process and context. The significance agentic engagement adds to the old student's engagement model is that it explains the student-to-teacher pathway where the students take initiative prior to the instructional flow before it starts, motivated by internal striving for better learning experience and taking action towards creating a more need-satisfying, motivationally-supportive, and goal aligned context.

## **METHOD OF THE RESEARCH**

The current investigation is conceptualized as a quantitative, non-experimental study. Data were collected using a questionnaire with a total of 41 questions divided on 7 sections, each section includes a previously designed and validated scale. Sections respectively were: Introduction and language achievement measure (student GPA), autonomy-supportive teaching measure, behavioral engagement measure, emotional engagement measure, agentic engagement measure, cognitive engagement measure and

basic psychological needs satisfaction measure. Basic psychological needs measure included 3 subsections for autonomy, relatedness and competence. University students were asked to participate on a voluntary basis and were randomly assigned to fill the questionnaire. The online questionnaire was administered using Google Forms software. Numerical data were transferred from the questionnaire using Google Sheets software. Model 6 of the PROCESS macro-Hayes (Hayes, 2022) was used to employ Person-Correlation and Structural Equation Modeling to analyze the data, in order to testify the interplay between basic psychological needs satisfaction indicators, agentic Engagement indicators, autonomy-supportive teaching indicators, and academic achievement indicators.

## **HYPOTHESIS OF THE RESEARCH**

The current study had two main goals and five hypotheses. The first goal aimed to elucidate the significance of agentic engagement as a novel predictor of English language achievement. The second goal sought to illustrate the significance of the language learning context, characterized by an autonomy-supportive teaching environment, in fostering intrinsic motivation of the self through the satisfaction of learners' psychological needs of autonomy, competence and relatedness, which are crucial for fostering the action, characterized by agentic engagement in language learners by adopting initiative behavioral taken by inside classroom, and finally how does this structural model of context, motivation, and action ultimately influences the outcome which is English language achievement in university students. For this purpose, the subsequent hypotheses were devised: Hypothesis no.1, teachers practicing an autonomy-supportive environment for English language students contribute in satisfying their basic psychological needs. Hypothesis no.2, that satisfaction of students basic psychological needs leads to increasing their levels of agentic engagement. Hypothesis no.3, students practicing agentic engagement inside English language classrooms leads to improving their academic performance. Hypothesis no.4, agentic engagement works as novel and distinct predictor for English language achievement. Hypothesis no.5, the previous three dimensions of academic engagement (behavioral, emotional and cognitive) work as antecedents for enhancing agentic engagement.

## **POPULATION AND SAMPLE**

Participants of the current study involved 313 EFL students (males and females), during their bachelor level of their studies. The sample was recruited from multiple public and private universities in Jordan.

## **SCOPE AND LIMITATIONS / DIFFICULTIES**

The study was conducted only in the Jordanian context, participants were 313 EFL undergraduate students, and the researcher used 7 Likert-type and 5 Likert-type.



# 1. CHAPTER ONE: INTRODUCTION

## 1.1. The Background to the Study

As a reliable antecedent of academic achievement, students' engagement inside classroom reveals the degree to which they perform academically and determines the means by which they advance in their academic endeavors (Reeve & Lee, 2014). Thus, increased attention must be encouraged towards the possible factors that may affect students' language classroom engagement on both levels externally and internally. Academicians addressed that student engagement as a complex entity involves behavioral (e.g., working hard), emotional (e.g., classroom enjoyment), cognitive (e.g., critically thinking), and agentic (e.g., being proactive) elements (Reeve & Tseng, 2011). As students' engagement can be affected by plenty of different internal and external factors, this thesis, aims at considering two variables associated with students engagement and achievement which are student's basic psychological needs (BPN) satisfaction (internal factor) and perceived autonomy-supportive teaching environment (external factor). One possibility is that basic psychological needs, established in Self-Determination Theory, may serve as possible predictors of language learners' levels of engagement (Deci & Ryan, 1985). BPN seek to explain how surrounding social settings affect humans' autonomous conduct (Deci & Ryan, 2008). According to Ryan and Deci (2000), basic psychological needs include the needs of autonomy, competence, and relatedness. These needs ultimately have an impact on psychological well-being and academic performance. It is conceivable that English language instructors adopting a more autonomous-supportive teaching environment that promotes students' productive language classroom functioning would have an improved impact on fulfilling language learners' basic psychological needs during their learning process. In accordance with this hypothesis, depending on if the educational setting is encouraging or restricting, learners can turn out to be engaged or absent.

Basic psychological need and autonomy-supportive teaching intersect with one another through their highly reliance on (autonomy) as a self-trait that is heavily associated with students overall academic outcomes. Autonomy (the first of basic three psychological needs) refers to a student's ability to organize and control their own

actions as well as make coordinated attempts to meet educational objectives. Student's autonomy is satisfied if they participate in more integrated, engaged, and assigned tasks while being impacted by the surrounding classroom environment (Ryan & Deci, 2000). According to self-determination theory; a learner's sense of autonomy extends beyond only their capacity for making independent learning choices, autonomy is instead associated with internalized or conscious functioning, or the extent to which the learner articulate and behaves in line with personally valued motives, preferences, and requirements (Ryan & Deci, 2000). Matos et al. (2018) states that, this involvement of student's deliberate, proactive, and helpful participation in the direction of the teaching they are receiving, such as offering a proposal or introducing a preference is referred to as Agentic Engagement. Thus, the purpose of this thesis will be to extend prior work and understanding of the role of engaging student's agencies inside language classrooms in English foreign language success by exploring the links between agentic engagement, autonomy-supportive teaching environment, and basic psychological needs within the framework of self-determination theory.

## **1.2. Research Questions**

- How does language instructors following a more autonomy-supportive teaching methods (context) affects students' basic psychological needs (motivation)?
- how the satisfaction of student's basic psychological needs (motivation) affects language learner's agentic engagement (action)?
- How each of the three constructs of engagement (behavioral, emotional, and cognitive) influence agentic engagement?
- how students' agentic engagement (action) affects language achievement (outcome), and does it work as a distinct construct that predicts language achievement?

## **1.3. The Purpose of the Study**

The purpose of the current study is to explore the interplay between student's agentic engagement and their language achievement through examining the structural

relations and mediating roles of student's basic psychological needs satisfaction, perceived autonomy-supportive teaching environment and the action of the other three engagement types which are (cognitive, emotional and behavioral). First, the study aims to examine how the adoption of a more autonomy-supportive teaching methods by language instructors affects the satisfaction of basic psychological needs of language learners following the background of Self-Determination Theory.

Second, the study puts out the hypothesis that basic psychological needs satisfaction and following autonomy-supportive teaching methods by English language teachers work as antecedents for enhancing language learners' agentic engagement in specific. So, this study puts these variables to the test in order to discover the relations between them.

Third, the study explores how other types of student engagement which are (cognitive, behavioral and emotional) affects agentic engagement, and if agentic engagement in specific affects English language achievement in learners as a distinct construct. Last, this study explores the structural relations between all the previous variables and how they interact with each other in order to reveal how they work as a direct\indirect antecedents to English foreign language success.

The findings of the study helps with forming a better understanding for the interplay between four important pillars of English language classrooms, which are; the social context (teachers), motivation (basic psychological needs), the action (engagement) and the outcomes (English language achievement). Further, the findings will support the literature that proposed agentic engagement as a new engagement construct and implementing it during language learning process.

#### **1.4. Problem Statement**

Language researchers have long been interested in investigating variable techniques and factors that can secure a better language learning experience to produce

the desired outcomes. Taking into account the complicated, fluctuating, dynamic, and changing character of learning a foreign/second language, language researchers incorporated psychological and social scientific aspects into language research fields to understand how language learning process occurs during the interactions between learners, instructors and classroom environment (Larsen & Freeman, 2007). Language learning is a collaborative entity between the learner and the teacher. Thus, language teachers adopted a more communicative approach with the aim of engaging language learners in classroom tasks, while student's participation in customizing classroom instruction was still neglected and this task remained restricted to teachers. Consequently, this captured scholars' attention for the need to explore a new type of engagement that reinforce the agentic role of students in customizing some aspects of their learning process alongside with teachers' adoption of more autonomy-supportive teaching methods. Plenty of research was conducted on the relationship between cognitive, emotional and behavioral types of engagement, and language success, but still there is a severe scarcity of the novel concerning the role of agentic engagement construct as it is a recently generated term (Reeve & Tseng, 2011). Further, even though student's psychological factors such as their need satisfaction have been gaining increased attention in the context of its interplay with language achievement, but the studies concerning its direct and indicate effects on language outcomes still in its infancy (Karbakhsh & Safa, 2020). In this vein, the researcher aimed to provide a new literature that explores how the adoption of autonomy-supportive teaching methods would create an environment that reinforce student's agentic role in language classroom, through fulfilling language learner's basic psychological needs.

### **1.5. The Significance of the Study**

The significance of this study is that to the recent knowledge of the researcher, there is no previous conducted research concerned exploring the interplay between student's agentic engagement and their language success through examining the structural relations and mediating roles of student's basic psychological needs satisfaction, perceived autonomy-supportive teaching environment and the role of the three other engagement types. The importance of this research occurs as that it puts into consideration introducing new understanding of the interplay between basic four pillars

of classroom environment, in a new cultural context and specific academic field that would help creating more positive and effective atmosphere to ensure successful English language learning experiences for the student, the teacher and the overall classroom environment.

## **1.6. The Method of The Study**

The current study was conceptualized on a quantitative, voluntary basis and non-experimental method. Data were collected using a questionnaire with a total of 41 questions divided on 7 sections, each section included a previously designed and validated scale. Sections respectively were: Introduction (student information and language achievement measure: GPA), autonomy-supportive teaching measure (6 items), behavioral engagement measure (5 items), emotional engagement measure (5 items), agentic engagement measure (5 items), cognitive engagement measure (4 items), and basic psychological needs satisfaction measure (12 items) divided into 3 subsections of autonomy, relatedness and competence each of includes (4 items).

Participants included 313 students (males and females), specialized in bachelor EFL programs from multiple public and private universities in Jordan. In the Jordanian context, students start studying English as a second language for 2 years during kindergarten levels and for 12 years during elementary, secondary and high school. In addition, all students speak Arabic as their first tongue. The researcher deliberately chose students at the undergraduate levels for two reasons. First, students at the university levels of their studies, play a proactive and constructive role in their course instruction due to the types of tasks they are assigned to engage with, in order to fulfill the degree requirements, this makes them the best option possible for investigating the role of agentic engagement in classroom context. Second, as the study is concerned with English language achievement to be the desired outcome, conducting the study on students whom are specialized in English language programs ensures getting the favorable results. The participants were chosen randomly from multiple universities and informed about the objective of the study. The required time to fill the questionnaire did not exceed 20 minutes. The data was administered online using Google Sheets, then

analyzed using Model 6 of the PROCESS macro (Hayes, 2022) to test the structural equation modeling role between basic psychological needs satisfaction, agentic engagement, autonomy-supportive teaching environment and Academic Achievement.

### **1.7. The Limitations of The Study**

The present investigation included certain limitations, which can be outlined as follows:

- **Sampling:** The study comprised 313 EFL bachelor degree students in the Jordanian context.
- **Research design:** The research employed a non-experimental quantitative design, utilizing 7 Likert-type and 5 Likert-type questionnaires for gathering data.
- **Data collection method:** The assessment of the constructs was exclusively based on self-reporting methodologies.

Future research could investigate the constructive role of agentic engagement on students from different ages, educational levels and cultural backgrounds, as for plenty of previously existing novel in the educational field revealed that students tend to rely unequally on one type of engagement more than other types depending on their age and study level, for example, elementary students mostly engage themselves behaviorally more than the rest aspects of engagement (Alexander, Entwisle, & Dauber, 1993; Birch & Ladd, 1997; Reeve & Tseng, 2011).

On the other hand, high school level students were found to greatly emphasize the cognitive dimensions of engagement (Greene et al., 2004; Reeve & Tseng, 2011). Further, it is still uncertain how agentic engagement takes role depending on changing cultural and ethical contexts. Indeed, a study in the Chinese context by Guo (2021), revealed a dropped levels of agentic engagement due to reason that agentic engagement acts are considered to be disrespectful and impolite to the teacher culturally. Last, future research ought to employ significant qualitative approaches, such as observations or interviews, to provide further understanding into the functional significance of the

variables investigated in this study, rather than relying solely on self-reporting procedures for construct assessment.



## **2. CHAPTER TWO: THEORETICAL FRAMEWORK**

### **2.1. Self-Determination Theory (SDT)**

SDT (Deci & Ryan, 1985), is a prominent macro-theory in motivational psychology that aims to provide an insight over the initiate drives and outcomes of human agentic behavior (Vansteenkiste et al., 2012; Adams et al., 2017). The base ground of SDT is structured on how social-contextual elements facilitate or hinder individuals' capacity to fulfill their basic psychological needs for competence, relatedness, and autonomy (Ryan & Deci, 2000, 2017; Someya & Obermeier, 2023). Deci and Ryan (1985, 2000) remarked how SDT views humans as proactive individuals who actively and unconsciously seek personal progress and optimal development, which is contingent on positive support from surrounding environmental factors. Furthermore, this support, as delineated by SDT encompasses the satisfaction of three basic psychological needs.

STD consists of an array of five micro theories developed over time consecutively, each was found to explain specific phenomenon in the field of motivation, fill the gaps of the preceded micro theory and create an overall vision concerns human experience of growth tendencies and well-being. According to Deci and Rayn (2012), together, these mini-theories coalesces in order to clarify how SDT operates in complicated social contexts.

Cognitive Evaluation Theory (CET) and Basic Psychological Needs Theory (BPNT) are two of these micro theories which considered to be particularly pertinent to the educational field. This research used these two micro theories as a foundational framework for investigating the structural relations between student's context, motivation and actions in their English language success as an outcome.

Basic psychological needs embedded in SDT refers to the “innate psychological nutriments that are essential for ongoing psychological growth, integrity, and wellbeing” (Deci & Ryan's, 2000, p. 229). The theory implies that individuals have three basic

psychological needs of autonomy, competence and relatedness. The need for autonomy pertains to an individual's perception of possessing the capacity to independently make self-approved decisions and choices that are aligned with one's beliefs and having control over regulating one's own behavior (Vansteenkiste et al., 2010). The need for competence suggests that individuals engage successfully with their surroundings to feel adept at achieving desired results and avoiding unwanted ones (Deci et al., 2013; Adams et al., 2017). The need for relatedness pertains to an individual's perception of social belonging and the satisfaction derived from connecting with others in a shared setting (Deci et al., 2013; Adams et al., 2017).

SDT explained that the ultimate human development occurs from the interaction between individuals and their social contexts. Where these contexts either supports or hinders their basic psychological needs. STD proposes that interaction forms the foundation for intrinsic motivation, compelling individuals to participate in activities for their own objectives, marked by curiosity, preference, and pleasure. When individuals get their needs met, they develop feelings of improvement, motivation, well-being and perform at their highest potential. On the other hand, when needs are not fulfilled, this will result in decreased motivation, psychological distress, and diminished well-being (Vansteenkiste & Ryan, 2013). To sum up, the fulfillment of the basic psychological needs as underlined by SDT is crucial for self-determination and necessary for sustaining internal motivation and managing external motives (Deci & Ryan, 2000).

Cognitive Evaluation Theory elucidates the mechanisms by which external factors, influence intrinsic motivation (Deci & Ryan, 2000). The theory posits that all external events create either a supporting or controlling environment, influencing the satisfaction of individuals basic psychological needs, which affects their motivation-to-engagement relationship and eventually personal conduct. CET is an essential micro theory inside the educational SDT framework since it delineates how classroom settings may either bolster or hinder students' intrinsic motivational processes. CET posits that every external event impacting students' autonomy or competence would inevitably influence their intrinsic motivation (Reeve, 2012). In the classroom, students engage

with a social environment that both facilitates and thwarts their needs and objectives depending on teacher's teaching style.

For instance, a teacher employing a predominantly teacher-centered approach to regulate and direct students towards specific behavioral outcomes—such as deadlines, enforced rules, mandated objectives, and directives— may impede students' needs, resulting in heightened apathy, reduced intrinsic motivation, and dissatisfaction (Deci & Ryan, 2000; Ryan, 1995). Conversely, teachers employing autonomy-supportive teaching methods by emphasizing the provision of resources that foster student initiative (such as decision-making, potential for self-orientation, recognition of emotions, positive reinforcement, and provided input) enhance the fulfillment of basic psychological needs, ultimately leading to increased intrinsic motivation, personal development, and well-being, which consequently produce improved engagement and academic performance (Deci et al, 2001).

## **2.2. Autonomy-Supportive Teaching and Language Achievement**

Given that SDT establishes a need-based foundation for human motivation in order to reach the maximum achievement, the question arises as to how these needs might be satisfied. According to SDT, within the context of a classroom, in order to promote improved academic results, the educational setting must meet the basic psychological needs of students, by facilitating the internalization and integration of external motivation. Thus, research on SDT has thoroughly investigated the impact of teacher's autonomy support on both learners' motivation and engagement.

Autonomy-supportive teaching involves adopting an attitude that focuses on the learner, this approach allows for the effective implementation of instructional practices that comply with students' autonomy, such as considering their standpoint and presenting the material in a manner that meets their basic psychological needs (Patall et al., 2018). It represents a student-centered approach which signifies that the educational setting is sincerely invested in the perspectives, decisions, and goals of the students and is prepared to adapt its offers to align with the needs and desires of the student, as

autonomy-supportive teaching method suggests that someone in a position of authority, like a teacher, is expected to understand and acknowledge the thoughts and feelings of another person in a lower authority, such as a learner (Black & Deci, 2000; Reeve, 2012).

Within the realm of language learning, autonomy-supportive teaching environment refers to the establishment of optimal educational settings that enable language learners to wholly or particularly assume authority over their language learning process (Chinpakdee, 2020). As the incorporation of a more autonomy-supportive language teaching experience in second/foreign language education offers multitude of benefits allowing learners to actively engage in their language learning pursuits, language researchers have been exploring its role in plenty of contexts around the world, investigating its direct and indirect role throughout incorporating a variety of different mediating variables. The following section introduces a literature review of the latest research which provide an overview of the studies conducted to analyze the characteristics of implanting autonomy-supportive teaching methods during the process of second/foreign language learning and teaching on both basic psychological needs satisfaction of the learners and academic language outcomes.

Lamkhanter (2022) conducted a quantitative study on the Moroccan context to investigate the influence of implementing autonomy-supportive teaching methods on English language students' autonomy and academic conduct. The population of the study involved 326 undergraduate students at the English language department. Data were collected using a questionnaire and analyzed using measures of central tendencies. The findings revealed that a significant proportion of EFL learners in Morocco exhibited a greater degree of autonomy and developed positive attitudes towards autonomous learning behaviors when engaging in second language learning activities after being exposed to autonomy-supportive teaching methods. Those learners were specifically encouraged to independently choose the most effective learning strategies for their own needs.

Alrabai F. (2021) conducted a mixed-method study concerning the practicality of implementing autonomy-supportive teaching methods on English language education. The study followed a longitudinal two-wave design under the framework of SDT with the aim of exploring how student's basic psychological needs satisfaction and language achievement are influenced by autonomy-supportive classroom environment. The study took a place in Saudi Arabia, the population of the study involved 148 teachers (86 stage-1, 62 stage-2), and 62 EFL students. Observations and questionnaires were used as instruments for data collection phase, and the ANOVA and ANCOVA programs were employed for data analysis. Study's findings emphasized the crucial importance of teacher's providing autonomy-supportive instructions in fostering the independence of EFL learners as a noticeable rise in learners' autonomy was observed. Further, it suggests that in addition to the fulfillment of their basic psychological needs, students should consistently be given greater opportunities to make choices, exercise authority to their learning process, and participate in decision-making processes as it is proven to positively influence language learning outcomes.

Liu (2021) conducted a quantitative study that investigates the impact of teacher following a more autonomy-supportive teaching methods on student's English language engagement inside language classrooms with the mediation of basic psychological needs. The main purpose of the study was to provide an insight of the impact of teacher's autonomy support on basic psychological needs satisfaction, engagement and eventually students' academic conduct. The study involved a total of 400 high school students in China as participants, data were collected using a questionnaire then analyzed with SPSS 26.0 . The findings revealed a clear relationship between teachers' autonomy support and the effectiveness of English learning. Additionally, there was an upward correlation between all three aspects of English language learning engagement (cognitive, behavioral, and emotional) and teachers' autonomy support. According to the study, teachers practicing a more autonomy-supportive teaching methods greatly increased student's engagement in learning English as it indicated high need satisfaction which inevitably reflected on a better language learning outcomes.

Kassem (2018) Conducted a quantitative experimental study with the aim to explore the effect of student-centered and teacher-centered instruction on a total of (86) EFL freshmen language learners at Shaqra University, KSA. The participants were divided into a control group and an experimental group, a questionnaire was distributed to explore the effect of students and teachers centered instruction on both language learning and achievement, while the data were analyzed with the independent-samples t-test. The findings indicated that when exposed to a more student-centered instructional learning approach, learners demonstrated enhanced proficiency in utilizing a wide range of suitable learning strategies, leading to their gradual transition into a more autonomous knowledge seekers. Furthermore, the study indicated a positive effect concerning students' emotional engagement, where less classroom anxiety levels were recorded, while an increased levels of self-efficacy and motivation occurred.

Karimi & Abaszadeh (2017) conducted a quantitative study to investigate the interplay between autonomy-supportive teaching, student's willingness to communicate, self-efficacy and motivation in English language. Participants involved 200 EFL students in the Iranian context. Data were gathered using a questionnaire, then analyzed with structural equational modeling. The results indicated that language student's motivation, willingness to communicate and self-efficacy were directly and positively correlated with teachers' autonomy-supportive methods as it provides the student with the required space, choice and support to interact and communicate with the targeted language.

Dincer et al. (2012), conducted a quantitative study in order to discover the relations between teacher's autonomy-supportive methods and English language success following SDT as a theoretical framework. The study aimed to investigate if following a more autonomy-supportive teaching approach by the teacher would affect students perceived language competence and language achievement. The study took a place in Turkey, participants were 55 EFL undergraduate students. Data were collected using a questionnaire, then analyzed with SPSS. Results indicated that autonomy-supportive teaching methods affected students perceived language competence. Further, the study

indicated that student's engagement and academic gains were positively influenced by autonomy-supportive teaching environment.

Yang (1998) conducted a quantitative study investigating teachers' role in promoting learner's autonomy. The study mainly focused on exploring how autonomy-supportive teaching methods would affect students in self-assessed learning, setting learning related objectives, monitoring and customizing their learning experience during second language acquisition process. The study was conceptualized as a long-term experiment of a second language acquisition course, the program took 4 years to complete, participants were 40 students specialized in English and non-English language majors. Data were collected by interviews and observations. The study emphasized the significance of teachers providing autonomy-supportive methods to foster learner autonomy through imposing the framework, procedures, convictions, and tactics to help guide the learning process. Furthermore the implementation of such a method, improved students' language competency by increasing awareness of learning techniques, enhancing language usage, building a structured self-assessment, guiding objectives selection, and fostering overall autonomy during language learning process.

### **2.3. Basic Psychological Needs and Language Achievement**

Since the establishment of SDT and the acknowledgement of its vital role regarding human motivation, education academicians have been interested in examining the role of basic psychological needs satisfaction on learners in plenty of educational fields including language learning. Yet, unfortunately there is a severe shortage in the literature which investigates the impact of basic psychological needs satisfaction on English language learning and outcomes both directly and indirectly, throughout different mediating variables. The following sections provide insight over the most reliable researches conducted in this field.

Alamer (2022), conducted a quantitative study that employed SDT as a theoretical framework to assist the relationship between BPN and students' English vocabulary knowledge as an academic language outcome, through the mediating roles

of effort and SDT orientations. Participants were 366 ESL students from English language departments in Saudi Arabia, data were collected using a questionnaire and analyzed with structural equational modelling. The findings demonstrated a direct correlation between basic psychological needs and vocabulary knowledge, highlighting the significant role of basic psychological needs in achieving strong vocabulary knowledge. Yet, no additional indirect effects were found through SDT orientations or effort.

Shriven and Alamer (2022) conducted a quantitative study which proposed a model to investigate the role of basic psychological needs as an antecedent to English achievement in second language learning through the mediating role of second language grit (L2 grit), where L2 grit means students perseverance of effort and consistency of interest during language learning process. The population of the study included 213 undergraduate students registered in English language departments at Saudi Arabia public universities. Data were gathered using a questionnaire, then analyzed using structural equational modeling. The findings demonstrated a high correlation between student's basic psychological needs satisfaction and increased levels of student's perseverance of effort during learning language process, where students with high perseverance of effort proved to be more motivated to invest more effort on their language learning goals which affected their language achievement positively. Furthermore, consistency of interest was provided to be weakly linked to students' academic achievement in language learning. Yet, the study highlighted a significant influence of autonomy satisfaction on students' consistency of interest which affects their perseverance of effort towards achieving their language endeavors.

A different conclusion was found in another study conducted by Karbakhsh and Ahmadi (2020) which revealed that there is no direct relationship between basic psychological needs and English achievement. The research followed a quantitative design to investigate the direct and indirect connections between basic psychological needs satisfaction, goal-orientation, willingness to communicate, learning strategy use, self-efficacy, and second language achievement. The population of the study included 506 undergraduate EFL students from the Iranian context. Data were collected using a

questionnaire and analyzed with AMOS statistical package. The findings imply that there was no direct relationship between basic psychological needs satisfaction and L2 achievement. However, basic psychological needs satisfaction was found to have an indirect influence over L2 achievement through goal orientation as a meditative variable. Furthermore, results suggest that instructors ought to first determine the most significant distinctive causes of performance difference of their students in their own setting. Then, they should develop strategies to effectively address the psychological or cognitive aspects that hinder their students' learning speed and approach.

Alamer and Lee (2019) conducted a mixed-method study with the objective of creating a motivational model that demonstrates the connection between basic psychological needs and foreign language achievement. The study utilized commonly explored motivational theories from the field of educational psychology as potential mediators in examining the association between basic psychological needs and foreign language accomplishment. The theories included in the study were SDT, Goal Orientation, and Motivational Emotion. The study population included 441 EFL students enrolled at universities of Saudi Arabia. Data was collected using a questionnaire and analyzed using confirmatory factor analyses and structural equation modeling. Findings indicated that students' motivation is initiated by the satisfaction of BPN, which establishes the basis for students' orientation towards setting goals, subsequently impacting learners' emotional experiences in the process of learning. Additionally, this study reinforced the significance of the theoretical branch of SDT, as it was found to have the strongest correlation with students' language achievement.

## **2.4. The Triadic Model of Student Engagement**

### **2.4.1. Definition and dimensions**

Student engagement, also known as academic engagement, is a significant theoretical perspective in the educational realm that focuses on the diverse styles of motivation, cognition, and behavior among learners with the objective of attaining academic excellence in a determined goal. (Appleton et al., 2008; Fredricks et al., 2004). In his groundbreaking study in the academic domain, Wellborn (1991) defines

engagement as the degree to which a student actively participates in a learning activity. Where the significance of the primary focus on “learning activity” lies in its focused approach on engagement as a discrete activity during student’s involvement in a specific learning task for a few minutes or in a specific educational program for several months or years (Reeve, 2012).

Engagement is widely acknowledged in general consensus as a multifaceted notion including three interrelated constructs: behavioral engagement, emotional engagement, and cognitive engagement. These dimensions together signify students’ positive disposition towards learning, as corroborated by several studies (Appleton et al., 2008; Fredricks et al., 2004). However, Reeve and Tseng (2011) have introduced agentic engagement as a fourth dimension of academic engagement. Yet, further research is required to assess its validity as a newly established engagement concept.

Behavioral engagement, as delineated by Fredricks et al. (2004), incorporates three aspects: positive behavior, active involvement in learning and academic activities, and participation in school events. Positive behavior includes the observance of classroom rules, adherence to guidelines, and avoidance of disruptive activities. Active involvement in learning and academic activities entails participation in classroom dialogic exchanges, focused attention and Participation in school events, where a student chooses to involve in classroom governance, clubs or sports. Cognitive engagement refers to students’ commitment to the learning process, effort put into challenging tasks, suitable learning techniques and tendencies towards academic challenges (Fredricks et al., 2004). Emotional Engagement refers to the range of students’ positive and negative emotional responses during the learning process towards teachers’ instructional methods, colleagues, assignments, and the classroom environment (Kahu, 2013; Liu et al., 2023).

## **2.4.2. Engagement Triadic Model and Academic Achievement Literature Review**

In the recent decades, scholars and educators have shown an increasing fascination with the concept of engagement due to its proven positive influence over students positive functioning, academic performance, progress and its ability to forecast substantial academic results (Ladd & Dinella, 2009; Skinner et al., 1998; Reeve & Tseng, 2011). Extensive empirical research indicates that learners from various backgrounds and in various educational fields often derive advantages from participating in successful educational instruction (Kuh, 2009). Several studies indicate that engagement has significant impacts on academic performance and perseverance (Cruce et al., 2006; Kuh, et al., 2008; Pascarella & Terenzini, 2005; Kuh, 2009). For instance, an investigation conducted by Dogan (2015) revealed that cognitive engagement is a strong predictor of academic achievement in high-school students. Further, Lee's (2014) research on secondary school students has demonstrated that both emotional and behavioral engagement strongly influenced students' reading proficiency. Another study by Dotterer and Lowe (2011) revealed that cognitive, emotional and behavioral engagement, demonstrated a significant prediction of students' positive academic outcome. A study by Perry et al. (2010) revealed a strong correlation between emotional and behavioral engagement and students' academic performance. Moreover, an investigation conducted by Wang and Holcombe (2010) revealed that students' GPA was highly influenced by their behavioral, emotional, and cognitive engagement. Nevertheless, the majority of the current research predominantly emphasizes general education rather than specialized fields (Fredericks et al, 2004). Consequently, researchers have increasingly become focused on exploring students' academic engagement in certain disciplines, including language learning process. For instance, in a study held by Liu et al. (2023) to investigate the degree by which emotional, behavioral and cognitive dimensions of engagement can affect and predict student's language achievement, the findings indicated a noteworthy relationship between student engagement and language outcomes, suggesting that elevated levels of student engagement are predictive of favorable language results, and conversely, the reverse holds true. Moreover, it was observed that emotional engagement exerted the most significant impact on students' positive outcomes, with behavioral engagement following in influence, while the cognitive dimension of engagement ranked the lowest.

Furthermore, the research demonstrated that improving students' academic engagement is a more effective approach to advancing their language proficiency rather than depending on external motivation enhancement. In the same vein Guo et al. (2023) conducted a study to develop and validated a foreign language classroom engagement scale with the aim to explore the interplay between classroom engagement and English language achievement, The findings revealed that individual-based cognitive and behavioral engagement could predict academic achievement. Another example in the same token, a study conducted by Kim & Suárez-Orozco (2015) exploring the interplay between the triadic model of student engagement and language outcomes, the findings emphasized on previously conducted researches in which the 3 constructs of engagement were found to be greatly interrelated with and positively influenced language academic achievement.

### **2.4.3. Agentic engagement and language achievement**

Within SDT framework, each individual posits a range of inner motivational resources which form a source of motivation that provokes them towards personal growth. Motivation and engagement are considered to be inherently influenced by each other, as to motivation is the inner silent mechanism that provokes and energizes the publicly visible behavior known as engagement, providing it with directness and purpose (Reeve, 2012).

Agency in its core constitutes a form of motivation, as it entails one's possessing the intentional desire and objectives to facilitate deliberate and strategic transformations in their own performance and the context in which they are situated (Reeve & Shin, 2020). In the academic context, Reeve & Tseng (2011) proposed agentic engagement as a new student engagement construct and defined it as "students' constructive contribution into the flow of the instruction they receive." (P.258). Students acting out of agency in classroom entails putting forth a proactive contribution into personalizing the constructive process of their own learning, development, teaching style, flow of instruction and educational environment. Students' agentic engagement can be observed through practices such as articulating thoughts, needs, likes and dislikes with teachers, expressing a favorable way to receive instruction, asking for contribution in problem

solving, posing questions, making suggestions for learning-relevant objectives, asking for elaboration and generating options (Reeve & Tseng, 2011).

The commonality between agentic engagement and the preceding three engagement constructs is that it represents a student-driven approach to academic advancement; nevertheless, it possesses significant distinctions. Although behavioral, emotional and cognitive facets of engagement provided an important understanding of student engagement, this triadic model still indicates an incomplete view of student engagement as it relies on a teacher-initiated effort to create and design learning experiences, while student's role remains passive (Reeve, 2012). For instance, if we give the example of language learning class. When a teacher provides a paragraph to be analyzed, students paying attention while the teacher elaborates, enrolling in dialogic exchanges and answering questions indicate their behavioral engagement. Further, students exhibiting joy, interest, boredom or feeling anxious depending on the difficulty of the task indicate their level of emotional engagement. While students' choice of using sophisticated and deep strategies to elaborate the paragraph rather than shallow and superficial ways, or students remain persistence while handling learning difficulties, indicate their cognitive engagement. During the learning process, emphasizing on student's emotional, cognitive and behavioral levels of engagement inadvertently adopts a unidirectional instructional pathway from the teacher-to-student, only indicate student's response to a teacher's previously designed and provided instruction, as these three dimensions accept the teacher's curricular information as presented, converting them into knowledge, comprehension, and skills acquired by the students. Thus, to fill this gap Reeve & Tseng (2011), proposed the concept agentic engagement in order to explain the conscious attempts students adopt to customize and refine their learning process and context. If we take the previously mentioned example, the action taken by agenticallly engaged students would be proposing a preference for how the teacher might elaborate the text before starting the instruction. For example if they need to learn new vocabulary first before starting the reading and comprehension process and so on. The significance agentic engagement adds to the old student's engagement model is that it explains the student-to-teacher pathway where the students take initiative prior to the instructional flow before it starts, motivated by internal striving for better learning

experience and taking action towards creating a more need-satisfying, motivationally-supportive, and goal aligned context (Reeve, 2013).

To further investigate agentic engagement as an educational construct, academicians had been investigating its role in plenty of educational fields and cultural contexts. Yet, due to being a newly developed concept, there is still an extreme shortage in the literature concerning its outcomes especially in specific domains such as second/foreign language learning. Thus, the literature review section included novel that studied agentic engagement in the academic domain in general and in language domain in specific; encountering EFL students, non-English language major students, and school aged students from various cultural backgrounds.

Alqarni (2023) conducted a quantitative cross-sectional study concerning the relations between engagement, learning strategies and student achievement. The main purpose of the study was examining the interplay and the potential correlations between student engagement as a multi-dimensional construct, language learning strategies and students' positive outcomes. Participants involved in the study were a total 168 college students studying EFL in Saudi Arabia. Data were collected using an online questionnaire and analyzed using simple linear regression, descriptive analyses and correlations. Agentic engagement was one of the engagement constructs which were investigated throughout the study, the results revealed that Saudi EFL learners reported lower levels of agentic engagement than other dimensions of engagement, further it was found that it has low correlations with students' achievement. Therefore, the results suggest that the extent to which learners participate in classroom activities may be influenced by their cognitive and behavioral attentiveness levels, which impact their comprehension of tasks rather than their collaboration with an educational setting. Also, engagement as a general construct found to be positively correlated with students' achievement.

Guo (2021) conducted a mixed-method study concerning investigating the interplay between Foreign language enjoyment, student engagement, achievement and

absenteeism. The participants included a total 707 EFL students at a university in China. Quantitative data were collected using questionnaires then analyzed using correlation and regression analyses in SPSS program, while qualitative data were collected by semi-structured interviews with 28 participants. The findings of the study revealed that significant but low correlations were found between student engagement and academic achievement. Furthermore, results reported agentic engagement to mark the lowest value and lowest correlations with achievement among the other three dimensions of engagement. The results explained the reason is due to cultural reasons, as students practicing acts of agency during learning process get to be regarded as disrespectful and impolite. Thus, students preferred to be more behaviorally, emotionally and cognitively than agentically engaged during learning process.

Jiang & Zhang (2021) conducted a quantitative study concerning the relations between students' agentic engagement and teaching style using STD as a theoretical framework. The purpose of the study was to investigate how teaching style influences students' agentic engagement which eventually affects their academic conduct. The sample involved 632 non-English major students from different universities in China. SPSS, Confirmatory factor analyses and structural equation modeling were used to analyze the data. The findings indicated that teacher's teaching style heavily influenced students' agentic engagement, were a more autonomy-supportive and social relatedness methods of teaching predicted higher agentic engagement which eventually affected their academic outcomes, on the other side, the more controlling teaching environments were related to low levels in agentic engagement and achievement.

Dong & Liu (2020) conducted a mixed-method study concerning students' agentic engagement in English learning during an online listening course. The study aimed to investigate students' level of agentic engagement during an online English listening course and if it is correlated with students' scores. The participants involved a total of 89 non-English major university students in China. Data were collected using a questionnaire and interviews. SPSS was used to analyze the quantitative data. The findings of the study indicated that students' agentic engagement levels during the course were moderate, a decline trend in agentic engagement levels was noticed from

freshman students to sophomores. Further, the research indicated no correlations between agentic engagement and students' scores. A lack of teacher-student interaction during the online course was found to have effects on student's levels of agentic engagement.

Dincer et al. (2019) conducted a mixed-method study to examine the roles of classroom engagement and motivation on EFL learners' motivation and achievement using the self-system model of motivation (SSMMD) grounded in STD as a theoretical framework. The study mainly aimed at investigate classroom engagement with its four dimensions in order to identify its mediating role between classroom environment and the student in order to reach positive academic conduct as an outcome. The participants involved a total 412 EFL learners in Turkish universities. Data were collected using questionnaires and semi-structured interviews, then analyzed using Structural Equation Modeling. Part of the study involved investigating the role of agentic engagement on students' achievement as a part of the engagement construct, the findings indicated that agentic students were demonstrated to get higher grades compared to other classroom colleges who did not show acts of agency during learning process.

Reeve (2013) conducted a quantitative 3-wave longitudinal research to investigate the way in which agenticly engaged students contribute in creating learning environments that emphasize and support their motivation and achievement. The study mainly had three goals; first, to expand a previous measure scale of agentic engagement. Second, to validate the newly developed scale. Third, to emphasize agentic engagement role in student positive academic outcomes, as it is a student-initiative rout for increased achievement and enhanced motivational support. The study sample included 302 middle-school students in the Korean context. Data were collected using a questionnaire, filled 3 times throughout the semester. Multilevel structural equation modeling was used to analyze questionnaire's results. After validating the new scale, wave-2 results revealed that agenticly engaged students effectively participate in promoting their academic achievement by practicing proactive behaviors that promotes their efforts, excitement, and strategic thinking which positively affected their specific course achievement. Furthermore, wave-3 study showed that agentic engagement students help

in transforming their classroom space into a more motivational environment by actively participating and engaging in activities, particularly in relationship to their perception of their teachers' level of autonomy support.

Reeve & Tseng (2011) conducted a quantitative study concerning adopting agency as a new aspect of student engagement during learning process. The primary objectives of this study involved three facets; to validate a measuring scale for agentic engagement, to investigate the incorporation of agency as an independent aspect of engagement, and to ascertain the educational significance of agentic engagement by evaluating its role in mediating the relationship between motivation and achievement. The participants included a total of 365 high school students (237 females and 128 males) in Taiwan. Data were collected throughout a questionnaire then analyzed using structural equational modeling. The results of the study revealed that agentic engagement stands as a new and distinct type of engagement as it emphasized on students' proactive contribution in customizing their learning process and favorable ways of learning. Furthermore, the study showed a significant contribution of agentic engagement to students' motivation and overall achievement as it formed strong correlations with the basic three psychological needs measures and students' achievement measure.

### **3. CHAPTER THREE: METHODOLOGY**

#### **3.1. Introduction**

This thesis aims to scrutinize the structural relations between autonomy-supportive teaching environment, basic psychological needs, agentic engagement and language achievement in the Jordanian context, in order to discover how language classroom context affects student's motivation for language learning, and how these two affects students agentic engagement in specific, as engagement is hypothesized to be an antecedent of their English language success. Furthermore, this study plays on various spectrums in order to reveal the constructive relationships of academic engagement by exploring the degree by which each of the other three engagement types interplay with agentic engagement to form an Integrated unit that builds up in order to effectively participate with promoting language achievement. Therefore, to attain the intended objectives, the subsequent inquiries were articulated in this research:

- How does language instructors following a more autonomy-supportive teaching methods (context) affects students' basic psychological needs (motivation)?
- how the satisfaction of student's basic psychological needs (motivation) affects language learner's agentic engagement ( action)?
- How each of the three constructs of engagement (behavioral, emotional, and cognitive) influence agentic engagement?
- how students' agentic engagement (action) affects language achievement (outcome), and does it work as a distinct construct that predicts language achievement?

#### **3.2. Research Design**

This thesis is framed as quantitative research, aiming to investigate the correlations between the intended variables by employing a questionnaire to collect the data and following a supportive theoretical framework from the educational psychology field to guide study's overarching objective.

### **3.3. Setting & Participants**

To serve the purpose of this investigation, the researcher involved a total of 313 students, males and females, specialized in English language programs from different years during their bachelor's studies level. The sample was recruited from multiple public and private universities in Jordan. In the Jordanian context, students start studying English as a second language for fourteen years before university. As they start with ESL learning for two years at the kindergarten stage and twelve years during primary and secondary school levels. In addition, all students speak Arabic as their first tongue.

The researcher deliberately chose students at the undergraduate level who are over the age of seventeen for three reasons. First, students during university education levels, play a proactive and constructive role in their course instruction due to the types of tasks they are assigned to engage with, in order to fulfill the degree requirements, this makes them the best option possible for investigating the role of agentic engagement in classroom. Second, as the study is concerned with English language achievement as the desired outcome, conducting the study on students whom are specialized with English language programs would ensure better results, this is due to the perception that mostly, students who involve in EFL programs during university learning stages, intentionally and passionately choose their major, which makes their internal motivational processes different from school level students who are obligated to involve in schooling language curriculum. Third, from the previous experience of the researcher as a bachelor degree student in one of the public Jordanian universities, the High Ministry of Education in Jordan mandates that university instructors adopt contemporary teaching methodologies that enable students to choose some parts of their academic assessment, which makes the teaching environment consistent with the principles of agentic engagement.

In this study, participants participated in the investigation on a voluntary basis, the questionnaire was distributed through language instructors working in the Jordanian universities to their students after taking their approval in order to declare their degree of concurrence for the questionnaire measures. All students were informed with the objective of the questionnaire in the introduction page.

### **3.4. Data collection tool**

In the present study, 7 Likert-type and 5 Likert-type scales were utilized. An online questionnaire was administered for data collection, all measures were recruited from previously conducted researches in the educational field. The questionnaire included a total of 41 questions divided on 7 sections that aims to measure: language achievement (student GPA), autonomy-supportive teaching, behavioral engagement, emotional engagement, agentic engagement, cognitive engagement, and basic psychological needs satisfaction. Basic psychological needs satisfaction measure included 3 subsections for autonomy, relatedness and competence.

#### **3.4.1. Scales and Measures**

##### **3.4.1.1. The Basic Psychological Needs in Second Language (BPN-L2) Scale**

Basic psychological needs scale, prepared and validated by Alamer (2022), was used. It is a 12 items, 5-point Likert-type response format ranging from 1 (strongly disagree) to 5 (strongly agree). This scale include 12 items that examine satisfaction levels of participants basic three psychological needs which are: autonomy (4-items), competence (4-items), and relatedness (4-items).

To give examples for the items in the scale: Autonomy: “I am able to freely choose the tasks to be done while learning English”. Competence: “I can be a successful language learner”. Relatedness: “my English teacher cares about my progress”.

##### **3.4.1.2. Four aspects of engagement scale**

Four types engagement (behavioral, emotional, cognitive, and agentic) scales, prepared and validated by (Matos et al., 2018) were adapted to measure English language achievement then administered. It is a self-reported 1-7 point Likert-type response format scale ranging from 1 (strongly disagree) to 7 (strongly agree). Behavioral engagement scale is a five-item scale used to measure student’s involvement, attention and efforts during classroom tasks. Emotional engagement scale is a five-item scale, used to reflect student’s positive and negative academic emotions (enjoyment, anxiety, curiosity, interest, ..etc.) during classroom tasks. Agentic engagement scale is a

five-item scale, used to determine the most common methods in which students actively and proactively contributed to the direction of the lesson instruction. Cognitive engagement scale is a four-item deep learning measure, used to evaluate the use of metacognitive self-regulation techniques for example preparation, monitoring, and revision.

To give examples for items in the scale: Behavioral engagement: “when I’m in this class, I participate in class discussions”. Emotional engagement: “when we work on something in this class, I feel interested”. Agentic engagement: ”when I need something in this class, I will ask the teacher for it”. Cognitive engagement: “I try to explain the key concepts in my own words”.

#### **3.4.1.3. English language achievement**

To conduct participants academic language achievement, student’s accumulative grade point average (GPA) records was used to conduct participants academic achievement.

#### **3.4.1.4. Perceived autonomy-supportive teaching environment scale**

Perceived autonomy-supportive teaching scale, prepared and validated by (Matos et al., 2018), was adapted to measure English language achievement then administered. It is a six-item, self-reported 1–7-point Likert-type from 1 (strongly disagree) to 7 (strongly agree) scale, used to examine the degree to which teachers provide their students with supportive environment for autonomous learning.

### **3.5. Procedure**

Participants were notified in the welcoming page with the following concerns regarding filling the survey: “the purpose of this survey is to examine how the interplay between agentic engagement, basic psychological needs and teachers-autonomy supportive environment affects academic success in learning English among Jordanian

students. Your personal information will be kept confidential. Responding to this survey will take only few minutes. Please remember that there are no right or wrong answers."

University students were asked to participate on a voluntary basis and were randomly assigned to fill the questionnaire. The online questionnaire was administered using Google Forms software. The link was shared with instructors of English language departments in multiple Jordanian universities so they can share it with the students enrolled in their subjects' groups on WhatsApp and other social media platforms. Numerical Data were transferred from the questionnaire using Google Sheets software. Model 6 of the PROCESS macro Hayes (Hayes, 2022) was used to employ Person Correlation and Structural Equational Modeling to analyze the data, in order to testify the interplay between basic psychological needs satisfaction indicators, agentic engagement indicators, autonomy-supportive teaching indicators, and academic achievement indicators.

Pearson correlation is an inferential statistic utilized to assess if a substantial association exists between two variables before testifying the hypothesized model. Structural Equational Modeling is a multivariate statistical analytic method employed to examine structural relations through the integration factor analysis with multiple regression analysis to examine the structural associations between observed and latent variables in order to facilitate the estimation of numerous correlations dependencies within a single study.

## 4. CHAPTER FOUR: RESULTS

### 4.1. Structural relations between Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement

#### 4.1.1. Testing Pearson Correlations among Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement

**Table 1:** Pearson correlations among variables of interest (n313).

	1	2	3	4
1. Autonomy-Supportive teaching	1	**0.9900	**0.992	**0.934
2. Basic Psychological Needs		1	0.989**	0.927**
3. Agentic Engagement			1	0.935**
4. Academic Achievement				1

\*\* (0.001)

Table (1) reports the Pearson correlations which indicates the strength and direction between the study variables . As expected, values were aligned with SDT hypothesized model in which; autonomy-supportive teaching was positively correlated with basic psychological needs satisfaction ( $R = 0.990$ ,  $P = 0.001$ ), agentic engagement ( $R = 0.992$ ,  $P = 0.001$ ), and academic achievement ( $R = 0.934$ ,  $P = 0.001$ ).

Basic psychological needs satisfaction was positively correlated with agentic engagement ( $R = 0.989$ ,  $P = 0.001$ ) and academic achievement ( $R = 0.927$ ,  $P = 0.001$ ). While agentic engagement was reported to be positively correlated with academic achievement ( $R = 0.935$ ,  $P = 0.001$ ).

#### 4.1.2. Results of Multiple Mediation Analyses Among Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement

Table (2) details the results of the multiple mediation between the study variables. Model 6 of the PROCESS macro (Hayes, 2022) was used to test the associations between the hypothesized constructs by utilizing the structural equation modeling role of basic psychological needs satisfaction and agentic engagement as mediating the relationship between autonomy-supportive teaching and academic achievement. Indicating that:

**Table 2:** Results of multiple mediation analyses (n313).

Model	95% CI					
	R	$\beta$	T	P	LL	UL
<b>Mode(1)Basic Psychological Needs</b>	0.990					
<b>*Autonomy-Supportive teaching</b>		1.37	217.17	0.0001	1.36	1.39
<b>Mode(2)Agentic Engagement</b>	0.993					
<b>*Autonomy-Supportive teaching</b>		0.559	24.13	0.0001	0.513	0.604
<b>*Basic Psychological Needs</b>		0.191	11.48	0.0001	0.158	0.223
<b>Mode(3)Academic Achievement</b>	0.936					
<b>*Autonomy-Supportive teaching</b>		0.316	4.37	0.0001	0.174	0.459
<b>*Basic Psychological Needs</b>		0.037	0.865	0.387	-0.123	0.047
<b>Agentic Engagement</b>		0.447	5.54	0.0001	0.288	0.605

Model (1) basic psychological needs. (R= 0.990) reported high fit of the hypothesized model of the path analyses: autonomy-supportive teaching to basic psychological needs satisfaction. The results showed that there was statistical significance for the lower and upper limits where ( $\beta = 1.37$ ,  $p = 0.0001$ ) and CI is between 1.36 and 1.39. This emphasize the positive relationship between both construct in which increased levels of autonomy-supportive practices, contributes in increased satisfaction of language learner's basic psychological needs.

Model (2) agentic engagement. ( $R= 0.993$ ) which indicated a well fit of the model, path analyses: Autonomy-Supportive teaching to Basic Psychological Needs satisfaction and path analyses: Autonomy-Supportive teaching, Basic Psychological Needs satisfaction to Agentic Engagement. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which autonomy-supportive teaching significantly influence agentic engagement where ( $\beta = 0.559$ ,  $p = 0.0001$ ) and CI value is between (0.513 to 0.604). Furthermore, basic psychological needs positively affects agentic engagement with ( $\beta = 0.191$ ,  $p = 0.0001$ ) and CI is value between (0.158 to 0.223).

Model (3) Academic Achievement. ( $R= 0.936$ ) Path analyses Autonomy-Supportive teaching, Basic Psychological Needs satisfaction, Agentic Engagement to Academic Achievement showed a well fit, the results of the path analysis showed that there was statistical significance for the lower and upper limits of the model. Agentic Engagement reported to have strong positive correlations on academic achievement in which ( $\beta = 0.447$ ,  $p = 0.0001$ ) and CI between (0.288 to 0.605), the same conclusion was found in the effect of autonomy-supportive teaching on academic achievement where ( $\beta = 0.316$ ,  $p = 0.0001$ ) and CI value is between (0.174 to 0.459). In contrast, there was no statistically significant correlation on the direct effect of basic psychological needs on academic achievement in where ( $\beta = 0.037$ ,  $p = 0.387$ ), this indicates that basic psychological needs do not work as a direct predictor of academic achievement, still has an indirect mediating role through agentic engagement.

#### **4.1.3. Testing the Pathways of the Multiple Mediation Among Autonomy-Supportive Teaching, Basic Psychological Needs, Agentic Engagement and Language Academic Achievement**

Table (3) reports the direct and indirect relations in the hypothesized model of the relationship between autonomy-supportive teaching environment and academic achievement of English language learning mediated by basic psychological needs satisfaction and agentic engagement.

**Table 3:** Testing the pathways of the multiple mediation model (n313).

Effect	95% CI		
	$\beta$	LL	UL
<b>Direct effects</b>			
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Academic Achievement	-0.076	-0.396	0.270
*Autonomy-Supportive teaching $\rightarrow$ Agentic Engagement $\rightarrow$ Academic Achievement	0.369	0.093	0.720
*Autonomy-Supportive $\rightarrow$ Basic Psychological Needs $\rightarrow$ Agentic Engagement $\rightarrow$ Academic Achievement	0.174	0.038	0.327
<b>Indirect effects</b>			
*Autonomy-Supportive $\rightarrow$ Basic Psychological Needs $\rightarrow$ Academic Achievement	-0.051	-0.265	0.183
*Autonomy-Supportive $\rightarrow$ Agentic Engagement $\rightarrow$ Academic Achievement	0.250	0.063	0.486
*Autonomy-Supportive $\rightarrow$ Basic Psychological Needs $\rightarrow$ Agentic Engagement $\rightarrow$ Academic Achievement	0.117	0.026	0.220

The direct effects of the Multiple Mediation:

- Model (1) Autonomy-Supportive Teaching  $\rightarrow$  Basic Psychological Needs  $\rightarrow$  Academic Achievement: The pathway of this direct mediation is not significant where the values of ( $\beta = -0.076$ ) and (CI = -0.396 to 0.270) indicate a negative effect. This amplifies that the satisfaction of language learner's basic psychological needs is not directly associated with language learning achievement.
- Model (2) Autonomy-Supportive Teaching  $\rightarrow$  Agentic Engagement  $\rightarrow$  Academic Achievement: The pathway of this direct mediation indicates a positive effect in which the values of ( $\beta = 0.369$ ) and (CI = 0.093 to 0.720), emphasizing that agentic engagement fully mediates the relationship between autonomy-supportive teaching environment and academic achievement in English learning.

- Model (3) Autonomy-Supportive Teaching → Basic Psychological Needs → Agentic Engagement → Academic Achievement: the pathway of the direct mediation of basic psychological needs and agentic engagement is significant where the values of ( $\beta = 0.174$ ) and (CI = 0.038 to 0.327), which indicates that language learners' academic achievement is influenced by the satisfaction of basic psychological needs indirectly only throughout the mediation of agentic engagement.

The indirect effects of the multiple mediation:

- Model (1) Autonomy-Supportive Teaching → Basic Psychological Needs → Academic Achievement: The pathway of this indirect mediation is not statistically significant, the values of ( $\beta = -0.051$ ) and (CI = -0.265 to 0.183) remark a negative effect which suggests that also the indirect satisfaction of language learner's basic psychological needs cannot be influential on language learner's academic achievement without the Mediation agentic engagement.
- Model (2) Autonomy-Supportive Teaching → Agentic Engagement → Academic Achievement: The pathway of this indirect mediation indicate a positive effect in which the values of ( $\beta = 0.250$ ) and (CI = 0.063 to 0.486), highlighting that agentic engagement is an influential construct in the mediation between autonomy-supportive teaching environment and academic achievement in English learning.
- Model (3) Autonomy-Supportive Teaching → Basic Psychological Needs → Agentic Engagement → Academic Achievement: this pathway of the indirect mediation of both construct together, basic psychological needs and agentic engagement is statistically significant, the values of ( $\beta = 0.117$ ) and (CI = 0.026 to 0.220) highlighting that although the satisfying of language learner's basic psychological needs may not directly result in positive academic outcomes, it is indirectly influential on academic achievement through its indirect mediation of agentic engagement.

Therefore, depending on the information from table (3), basic psychological needs satisfaction and agentic engagement completely mediated the relationship between autonomy-supportive teaching and academic achievement in direct and indirect effect 95%CI (Autonomy-Supportive teaching → Agentic Engagement → Academic Achievement) and (Autonomy-Supportive → Basic Psychological Needs → Agentic Engagement → Academic Achievement).

## 4.2. Structural Relations Among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Four Engagement Constructs and Language Academic Achievement

### 4.2.1. Pearson Correlations among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Four Engagement Constructs and Language Academic Achievement

Table (4) reports the Pearson correlations between the four Engagement constructs, basic psychological needs and academic achievement.

**Table 4:** Pearson Correlations among Variables of Interest (n313).

	1	2	3	4	5	6	7
<b>1. Agentic engagement</b>	1	**0.9880	**0.987	**0.983	**0.992	**0.989	**0.935
<b>2. Emotional engagement</b>		1	0.991**	**0.987	**0.990	**0.991	**0.928
<b>3. Behavioral engagement</b>			1	0.991**	0.989**	0.989**	0.933**
<b>4. Cognitive engagement</b>				1	0.987**	0.989**	0.922**
<b>5. Autonomy-Supportive teaching</b>					1	0.990**	0.934**
<b>6. Basic Psychological Needs</b>						1	0.927**
<b>7. Academic Achievement</b>							1

\*\*(<math>0.001</math>)

The results from the Pearson correlation in table (4) indicate the presence of strong, positive, and statistically significant correlational relationships among all the variables of interest. Below is an interpretation of the relationships between the various variables:

**Agentic Engagement:** The results show strong correlations with all other engagement types, with the correlation coefficient with emotional engagement at (0.988), behavioral engagement at (0.987), cognitive engagement at (0.983), autonomy-supportive teaching at (0.992), basic psychological needs at (0.989), and academic achievement at (0.935). All values are statistically significant at  $p < 0.01$ , indicating the strength of these correlation relationships.

**Emotional Engagement:** there are strong correlations with behavioral engagement (0.991), cognitive engagement (0.987), autonomy-supportive teaching (0.990), basic psychological needs (0.991), and academic achievement (0.928). All values are statistically significant at  $p < 0.01$ , indicating the strength of these correlation relationships.

**Behavioral Engagement:** There are strong positive correlations with cognitive engagement (0.991), autonomy-supportive teaching (0.989), basic psychological needs (0.989), and academic achievement (0.933). All values are statistically significant at  $p < 0.01$ , indicating the strength of these correlation relationships.

**Cognitive Engagement:** There are also strong relationships with autonomy-supporting teaching (0.990) and basic psychological needs (0.927), as being statistically significant at  $p < 0.01$ .

**Autonomy-Supportive teaching:** There is a clear positive relationship with basic psychological needs (0.934) and academic achievement (no direct correlation mentioned but inferred from the context).

**Basic Psychological Needs:** There is a clear positive relationship with Academic Achievement (0.927), as it is statistically significant at  $p < 0.01$ .

There is a positive correlation with all other indicators, indicating that enhancing various types of engagement can lead to better academic performance for students. We can conclude that all types of engagement (agentic, emotional, behavioral, and cognitive) are positively and significantly correlated, suggesting the importance of enhancing these forms of engagement to improve academic achievement.

#### **4.2.2. Results of Multiple Mediation Analyses Among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Emotional Engagement , Agentic Engagement and Language Academic Achievement**

Table (5) details the results of the multiple mediation between the study variables with the mediation of emotional engagement. Model 6 of the PROCESS macro (Hayes, 2022) was used to test the associations between the hypothesized constructs by utilizing the structural equation modeling role of basic psychological needs satisfaction, emotional engagement and agentic engagement as mediating the relationship between autonomy-supportive teaching and academic achievement. Indicating that:

**Table 5:** Results of multiple mediation analyses (n313).

<b>Model</b>	<b>95% CI</b>					
	<b>R</b>	<b>β</b>	<b>T</b>	<b>P</b>	<b>LL</b>	<b>UL</b>
<b>Mode(1)basic Psychological Needs</b>	0.990					
<b>Basic Psychological Needs Autonomy-Supportive teaching</b>		0.006	217.17	0.0001	1.36	1.39
<b>Mode(2) Emotional engagement indicators</b>	0.992					
<b>Autonomy-Supportive teaching</b>		0.023	16.13	0.0001	0.336	0.429
<b>Basic Psychological Needs</b>		0.017	18.92	0.0001	0.289	0.356
<b>Mode(3)Agentic engagement indicators</b>	0.993					
<b>Autonomy-Supportive teaching</b>		0.025	18.99	0.0001	0.439	0.540
<b>Basic Psychological Needs</b>		0.019	6.89	0.0001	0.095	0.170
<b>Emotional engagement</b>		0.031	5.69	0.0001	0.118	0.242

<b>Mode(4) Academic Achievement</b>	0.936				
<b>Autonomy-Supportive teaching</b>	0.075	4.13	0.0001	0.164	0.462
<b>Basic Psychological Needs</b>	0.049	0.833	0.440	-0.137	0.055
<b>Emotional engagement</b>	0.080	0.146	0.883	-0.145	0.169
<b>Agentic engagement</b>	0.082	5.41	0.0001	0.283	-0.606
<b>Mode(5) Academic Achievement</b>	0.934				
<b>Autonomy-Supportive teaching</b>	0.008	79.44	0.0001	0.617	0.648

Model (1) Basic Psychological (R=0.990). path analyses basic psychological needs to autonomy support teaching. The results of the path analysis showed that there was a statistical significance for the lower and upper limits with values of ( $\beta = 0.006$ , ,  $p < 0.0001$ ) and (CI= 1.36 to 1.39), which highlights that autonomy-supportive teaching environment effects the satisfaction of basic psychological needs in the proposed model.

Model (2) Emotional engagement (R=0.992) path analyses is autonomy-supportive teaching to basic psychological needs to emotional engagement, the results of the path analysis showed that there was statistical significance for the lower and upper limits in which values were autonomy-Supportive Teaching ( $\beta = 0.023$ ,  $p < 0.0001$ ) and (CI= 0.336 to 0.429), and basic psychological needs ( $\beta = 0.017$ ,  $p < 0.0001$ ) and (CI=0.289 to 0.35). The results of the multiple mediation analyses in this model suggests a high fit that emphasize on the important influence of autonomy-supportive teaching and basic psychological needs over emotional engagement construct.

Model (3) Agentic engagement (R=0.993) path analyses is autonomy-supportive teaching to basic psychological needs to emotional engagement to agentic engagement. The results of the path analysis showed that there was statistical significance for the lower and upper limits. Values were autonomy-supportive teaching ( $\beta = 0.025$ ,  $p < 0.0001$ , CI: 0.439 to 0.540), basic psychological needs ( $\beta = 0.019$ ,  $p < 0.001$ , CI= 0.095 to 0.170), and emotional engagement ( $\beta = 0.031$ ,  $p < 0.0001$ , CI= 0.118 to 0.242) emphasizing the strong influence of these constructs over supporting language learner's agentic engagement.

Model (4) Academic Achievement ( $R=0.936$ ) path analyses is autonomy-supportive teaching to basic psychological needs to emotional engagement to agentic engagement to academic achievement. The results of the path analysis showed that autonomy-supportive teaching ( $\beta = 0.075$ ,  $p < 0.0001$ , CI: 0.164 to 0.462), basic psychological needs ( $\beta = 0.049$ ,  $p = 0.440$ , CI= -0.137 to 0.055), emotional engagement ( $\beta = 0.080$ ,  $p = 0.883$ , CI= 0.145 to 0.169) and agentic engagement ( $\beta = 0.082$ ,  $p < 0.0001$ , CI= 0.283 to 0.606). The mentioned values conclude that inside the proposed model of the path analysis, both autonomy-supportive teaching and agentic engagement significantly predict and affect academic achievement, while basic psychological needs and emotional engagement do not have a direct effect on achievement in language learning but they predict academic achievement through the mediation of agentic engagement.

Model (5) Academic Achievement ( $R=0.934$ ) path analyses autonomy-supportive teaching to academic achievement. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which ( $\beta = 0.008$ ,  $p < 0.0001$ ) and (CI= 0.617 to 0.648), the proposed model emphasized the crucial role of autonomy-supportive teaching on students language academic achievement.

Table (6) reports the direct and indirect effects of the structural relations between autonomy-supportive teaching environment and academic achievement mediated by basic psychological needs, emotional engagement and agentic engagement.

#### **4.2.3. Testing the Pathways of the Multiple Mediation Model among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Emotional Engagement and Language Academic Achievement**

**Table 6:** Testing the pathways of the multiple mediation model (n313).

Effect	95% CI		
	$\beta$	LL	UL
<b>Direct effects</b>			
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Academic Achievement	-0.083	-0.460	0.272
*Autonomy-Supportive teaching $\rightarrow$ Emotional engagement $\rightarrow$ Academic Achievement	0.006	-0.186	0.189
*Autonomy-Supportive teaching $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.312	0.070	0.636
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Emotional engagement $\rightarrow$ Academic Achievement	0.077	-0.190	0.240
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.120	0.013	0.269
*Autonomy-Supportive teaching $\rightarrow$ Emotional engagement $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.045	0.005	0.124
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Emotional engagement $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.052	0.008	0.132
<b>Indirect effects</b>			
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Academic Achievement	0.056	-0.312	0.185
*Autonomy-Supportive teaching $\rightarrow$ Emotional engagement $\rightarrow$ Academic Achievement	0.004	-0.127	0.128
*Autonomy-Supportive teaching $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.221	0.047	0.429
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Emotional engagement $\rightarrow$ Academic Achievement	0.005	-0.128	0.164
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.081	0.009	0.182
*Autonomy-Supportive teaching $\rightarrow$ Emotional engagement $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.030	0.004	0.084
*Autonomy-Supportive teaching $\rightarrow$ Basic Psychological Needs $\rightarrow$ Emotional engagement $\rightarrow$ Agentic engagement $\rightarrow$ Academic Achievement	0.035	0.005	0.0089

Therefore, the pathway basic Psychological needs, emotional engagement, agentic engagement, mediated the relationship between autonomy-supportive teaching

and academic achievement in direct and indirect effect 95%CI (Autonomy support teaching → Basic Psychological Needs → Emotional engagement → Agentic engagement → Academic Achievement). Further, the table shows that emotional engagement does not influence student’s academic achievement directly without the mediation of agentic engagement, this emphasize its an indirect effect on language outcomes through other mediators rather than as an independent construct. Yet, it is shown that the enhancement of emotional engagement leads into increased levels of student agentic engagement.

#### 4.2.4. Results of Multiple Mediation Analyses among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Behavioral Engagement, Agentic Engagement and Language Academic Achievement

Table (7) details the results of the multiple mediation between the study variables with the mediation of behavioral engagement. Model 6 of the PROCESS macro (Hayes, 2022) was used to test the associations between the hypothesized constructs by utilizing the Structural Equational Modeling role of basic psychological needs satisfaction, behavioral engagement and agentic engagement as mediating the relationship between autonomy-supportive teaching and academic achievement. Indicating that:

**Table 7:** Results of multiple mediation analyses (n313).

Model	95% CI					
	R	$\beta$	T	P	LL	UL
<b>Model (1) Basic Psychological Needs</b>	0.990					
<b>Basic Psychological Needs - Autonomy-Supportive teaching</b>		0.006	217.17	0.0001	1.36	1.39
<b>Model (2) Behavioral engagement</b>	0.991					
<b>Autonomy-Supportive teaching</b>		0.026	15.41	0.0001	0.335	0.458
<b>Basic Psychological Needs</b>		0.019	16.90	0.0001	0.283	0.357
<b>Model (3) Agentic engagement</b>	0.993					

<b>Autonomy-Supportive teaching</b>	0.025	18.29	0.0001	0.443	0.543
<b>Basic Psychological Needs</b>	0.018	7.43	0.0001	0.102	0.176
<b>Behavioral engagement</b>	0.028	5.67	0.0001	0.105	0.217
<b>Model (4) Academic Achievement</b>	0.937				
<b>Autonomy-Supportive teaching</b>	0.074	3.05	0.023	0.081	0.374
<b>Basic Psychological Needs</b>	0.047	2.59	0.0059	-0.216	-0.030
<b>Behavioral engagement</b>	0.071	4.29	0.0001	0.166	0.446
<b>Agentic engagement</b>	0.081	4.70	0.0001	0.223	0.542
<b>Model (5) Academic Achievement</b>	0.934				
<b>Autonomy-Supportive teaching</b>	0.008	79.44	0.0001	0.617	0.648

Model (1) Basic Psychological Needs (R=0.990). Path analyses autonomy-supportive teaching to basic psychological needs. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which values of ( $\beta = 0.006$ ,  $p = 0.0001$ , CI= 1.36 to 1.39) emphasizing that in the proposed model autonomy-supportive teaching positively effects basic psychological needs satisfaction.

Model (2) Behavioral engagement (R=0.991) path analyses Autonomy-Supportive teaching to Basic Psychological Needs to Behavioral engagement. The results of the path analysis showed that there was statistical significance for the lower and upper limits. Values were Autonomy-Supportive Teaching ( $\beta = 0.026$ ,  $p = 0.0001$ , CI = 0.335 to 0.458), Basic Psychological Needs ( $\beta = 0.019$ ,  $p = 0.0001$ , CI = 0.283 to 0.357). The results indicated that within the proposed model both autonomy-supportive teaching and basic psychological needs satisfaction are positively and highly associated with language learner's levels of behavioral engagement.

Model (3) Agentic engagement (R=0.993) path analyses autonomy-supportive teaching to basic psychological needs to behavioral engagement to agentic engagement. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which autonomy-supportive teaching ( $\beta = 0.025$ ,  $p = 0.0001$ ,

CI = 0.443 to 0.543), basic psychological needs ( $\beta = 0.018$ ,  $p = 0.0001$ , CI = 0.102 to 0.176), and behavioral engagement ( $\beta = 0.028$ ,  $p = 0.0001$ , CI = 0.105 to 0.217). The values indicated that all the three constructs are positively associated with agentic engagement, where the existence of autonomy-supportive teaching environment, increased amounts of basic psychological needs satisfaction and high levels of behavioral engagement are predictors of higher agentic engagement levels within language classroom.

Model (4) Academic Achievement ( $R=0.937$ ) path analyses autonomy-supportive teaching to basic psychological needs to behavioral engagement, to agentic engagement to academic achievement. The results of the path analysis showed that there was statistical significance for the lower and upper limits, values for autonomy-supportive teaching ( $\beta = 0.074$ ,  $\beta = 0.047$ ,  $p = 0.0059$ , CI= -0.216 to -0.030), behavioral engagement ( $\beta = 0.071$ ,  $p = 0.0001$ , CI = 0.166 to 0.446), and agentic Engagement ( $\beta = 0.081$ ,  $p = 0.0001$ , CI = 0.223 to 0.542), all three constructs are statistically significant emphasizing that autonomy-supportive teaching environment, behavioral engagement and agentic engagement are positively associated academic achievement. Basic psychological needs indicated a negative coefficient while still predicted a significant relationship, this is due to basic psychological needs not having a direct correlation with academic achievement, in which it occurs as a mediator with other constructs such as engagement bringing an indirect influence over language academic achievement.

Model (5) Academic Achievement ( $R=0.934$ ) path analyses autonomy-Autonomy-Supportive teaching to academic achievement. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which ( $\beta= 0.008$ ,  $p= 0.0001$ , CI= 0.617 to 0.648), this highlighting that autonomy-supportive teaching environment has a strong positive impact on academic achievement.

#### 4.2.5. Testing the Pathways of the Multiple Mediation Model among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Behavioral Engagement, Agentic Engagement and Language Academic Achievement

Table (8) reports the direct and indirect effects of the structural relations between autonomy-supportive teaching environment and academic achievement mediated by basic psychological needs, behavioral engagement and agentic engagement.

**Table 8:** Testing the pathways of the multiple mediation model (n313).

Effect	95% CI		
	$\beta$	LL	UL
<b>Direct effects</b>			
*Autonomy-Supportive teaching → Basic Psychological Needs → Academic Achievement	-0.083	-0.460	0.272
*Autonomy-Supportive teaching → Behavioral engagement → Academic Achievement	0.006	-0.186	0.189
*Autonomy support teaching → Agentic engagement → Academic Achievement	0.312	0.070	0.636
*Autonomy support teaching → Basic Psychological Needs → Behavioral engagement → Academic Achievement	0.077	-0.190	0.240
*Autonomy support teaching → Basic Psychological Needs → Agentic engagement → Academic Achievement	0.120	0.013	0.269
*Autonomy support teaching → Behavioral engagement → Agentic engagement → Academic Achievement	0.045	0.005	0.124
*Autonomy support teaching → Basic Psychological Needs → Behavioral engagement → Agentic engagement → Academic Achievement	0.052	0.008	0.132
<b>Indirect effects</b>			
*Autonomy-Supportive teaching → Basic Psychological Needs → Academic Achievement	-0.170	-0.401	0.065
*Autonomy-Supportive teaching → Behavioral engagement → Academic Achievement	0.124	0.006	0.262
*Autonomy-Supportive teaching → Agentic engagement → Academic Achievement	0.188	0.023	0.403

*Autonomy-Supportive teaching → Basic Psychological Needs → Behavioral engagement → Academic Achievement	0.135	0.005	0.271
*Autonomy-Supportive teaching → Basic Psychological Needs → Agentic engagement → Academic Achievement	0.076	0.004	0.166
*Autonomy-Supportive teaching → Behavioral engagement → Agentic engagement → Academic Achievement	0.025	0.001	0.063
*Autonomy-Supportive teaching → Basic Psychological Needs → Behavioral engagement → Agentic engagement → Academic Achievement	0.027	-0.601	0.065

Therefore, Basic Psychological Needs, Behavioral engagement and Agentic engagement, mediated the relationship between Autonomy-Supportive teaching and Academic Achievement in direct and indirect effect 95%CI (Autonomy-Supportive teaching → Basic Psychological Needs → Behavioral engagement → Agentic engagement → Academic Achievement).

#### 4.2.6. Results of Multiple Mediation Analyses among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Cognitive Engagement, Agentic Engagement and Language Academic Achievement

Table (9) details the results of the multiple mediation between the study variables with the mediation of cognitive engagement. Model 6 of the PROCESS macro (Hayes, 2022) was used to test the associations between the hypothesized constructs by utilizing the Structural Equational Modeling role of basic psychological needs satisfaction, cognitive engagement and agentic engagement as mediating the relationship between autonomy-supportive teaching and academic achievement. Indicating that:

**Table 9:** Results of multiple mediation analyses (n313).

Model	95% CI					
	R	β	T	P	LL	UL
Mode (1) Basic Psychological Needs	0.990					

<b>Basic Psychological Needs</b>	<b>Autonomy-Supportive teaching</b>	0.006	217.17	0.0001	1.36	1.39
<b>Mode (2) Cognitive engagement</b>		0.990				
<b>Autonomy-Supportive teaching</b>		0.022	12.29	0.0001	0.234	0.232
<b>Basic Psychological Needs</b>		0.016	18.19	0.0001	0.264	0.328
<b>Mode (3) Agentic engagement</b>		0.993				
<b>Autonomy-supportive teaching</b>		0.025	22.15	0.0001	0.505	0.603
<b>Basic Psychological Needs</b>		0.018	9.57	0.0001	0.147	0.224
<b>Cognitive engagement</b>		0.033	0.524	0.600	-0.048	0.083
<b>Mode (4) Academic Achievement</b>		0.936				
<b>Autonomy-Supportive teaching</b>		0.075	4.47	0.0001	0.190	0.488
<b>Basic Psychological Needs</b>		0.049	-2.68	0.791	-0.110	0.084
<b>Cognitive engagement</b>		0.082	-1.01	0.311	-0.245	0.078
<b>Agentic engagement</b>		0.080	5.55	0.0001	0.290	0.607
<b>Mode (5) Academic Achievement</b>		0.934				
<b>Autonomy-Supportive teaching</b>		0.008	79.44	0.0001	0.617	0.648

Model (1) Basic Psychological Needs (R= 0.990). Path analyses autonomy-supportive teaching to basic psychological needs. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which values of ( $\beta = 0.006$ ,  $p = 0.0001$ , CI= 1.36 to 1.39) emphasizing that in the proposed model autonomy-supportive teaching positively effects basic psychological needs satisfaction.

Model (2) Cognitive engagement (R=0.990) path analyses Autonomy-Supportive teaching to Basic Psychological Needs to Cognitive engagement. The results of the path analysis showed that there was statistical significance for the lower and upper limits. In which values were autonomy-supportive teaching ( $\beta = 0.022$ ,  $p < 0.001$ , CI= 0.234 to 0.232), and basic psychological needs ( $\beta = 0.016$ ,  $p < 0.001$ , CI= 0.264 to 0.328). The results emphasized that both constructs plays an important role in fostering cognitive engagement.

Model (3) Agentic engagement (R=0.993) path analyses Autonomy-Supportive teaching to Basic Psychological Needs to Cognitive engagement to agentic engagement. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which values were autonomy-supportive teaching ( $\beta = 0.025$ ,  $p < 0.001$ , CI= 0.505 to 0.603), basic psychological needs ( $\beta = 0.018$ ,  $p < 0.001$ , CI= 0.147 to 0.224), Cognitive engagement's ( $\beta = 0.033$ ,  $p > 0.05$ , CI = -0.048 to 0.083) non-significant with CI crossing zero. Results within the proposed model suggests that both autonomy-supportive teaching and the fulfillment of basic psychological needs positively influence agentic engagement. On the other hand cognitive engagement alone may not significantly affect agentic engagement.

Model (4) Academic Achievement (R=0.936) path analyses Autonomy-Supportive teaching to Basic Psychological Needs to Cognitive engagement to Agentic engagement to academic achievement. The results of the path analysis showed that there was statistical significance for the lower and upper limits. In which values were autonomy-supportive teaching ( $\beta = 0.075$ ,  $p < 0.00$ , CI = 0.190 to 0.488), basic psychological needs ( $\beta = 0.049$ ,  $p > 0.05$ , CI = -0.110 to 0.084) statistically non-significant, cognitive engagement ( $\beta = 0.082$ ,  $p > 0.05$ , CI = -0.245 to 0.078) also statistically non-significant, agentic engagement ( $\beta = 0.080$ ,  $p < 0.001$ , CI = 0.290 to 0.607). Results of the values in this proposed model shows that both autonomy-supportive teaching and agentic engagement work as positive predictors of academic achievement, on the other hand, cognitive engagement and basic psychological needs are not associated with academic achievement.

Model (5) Academic Achievement (R=0.934) path analyses autonomy-Autonomy-Supportive teaching. The results of the path analysis showed that there was statistical significance for the lower and upper limits in which ( $\beta= 0.008$ ,  $p= 0.0001$ , CI= 0.617 to 0.648), this highlighting that autonomy-supportive teaching environment has a strong positive impact on academic achievement.

#### 4.2.7. Testing the Pathways of the Multiple Mediation Model among Autonomy-Supportive Teaching Environment, Basic Psychological Needs, Cognitive Engagement and Language Academic Achievement

**Table 10:** Testing the pathways of the multiple mediation model (n313).

Effect	95% CI		
	$\beta$	LL	UL
<b>Direct effects</b>			
*Autonomy-Supportive teaching → Basic Psychological Needs → Academic Achievement	-0.026	-0.395	0.335
*Autonomy-Supportive teaching → Cognitive engagement → Academic Achievement	-0.034	-0.200	0.094
*Autonomy-Supportive teaching → Agentic engagement → Academic Achievement	0.367	0.098	0.737
*Autonomy-Supportive teaching → Basic Psychological Needs → Cognitive engagement → Academic Achievement	-0.050	-0.244	0.165
*Autonomy-Supportive teaching → Basic Psychological Needs → Agentic engagement → Academic Achievement	0.169	0.033	0.346
*Autonomy-Supportive teaching → Cognitive engagement → Agentic engagement → Academic Achievement	0.003	-0.033	0.046
*Autonomy-Supportive teaching → Basic Psychological Needs → Cognitive engagement → Agentic engagement → Academic Achievement	0.004	-0.048	0.061
<b>Indirect effects</b>			
*Autonomy-Supportive teaching → Basic Psychological Needs → Academic Achievement	-0.018	-0.266	0.227
*Autonomy-Supportive teaching → Cognitive engagement → Academic Achievement	-0.023	-0.135	0.063
*Autonomy-Supportive teaching → Agentic engagement → Academic Achievement	0.248	0.067	0.497
*Autonomy-Supportive teaching → Basic Psychological Needs → Cognitive engagement → Academic Achievement	-0.034	-0.166	0.497
*Autonomy-Supportive teaching → Basic Psychological Needs → Agentic engagement → Academic Achievement	0.115	0.022	0.113

<b>*Autonomy-Supportive teaching → Cognitive engagement → Agentic engagement → Academic Achievement</b>	0.022	-0.022	0.232
<b>*Autonomy-Supportive teaching → Basic Psychological Needs → Cognitive engagement → Agentic engagement → Academic Achievement</b>	0.003	-0.033	0.031

Therefore, Basic Psychological Needs, Cognitive engagement did not mediated the relationship between autonomy-supportive teaching and academic achievement in direct and indirect effect in the proposed model (Autonomy-Supportive teaching → Basic Psychological Needs → Cognitive engagement → Agentic engagement → Academic Achievement) as cognitive engagement did not predicted or influenced agentic engagement or academic achievement in EFL students.

## 5. CHAPTER FIVE: DISCUSSION

### 5.1. Introduction

This study sought to elucidate the significance of agentic engagement as a novel predictor of English language achievement, while considering the structural relationships with basic psychological needs and autonomy-supportive teaching environment as internal and external factors influencing English language learning experience within language classrooms in the Jordanian universities. Further, the study involved an investigation of the influence of the behavioral, emotional and cognitive constructs of engagement on agentic engagement in which they draw an indirect mediating influence between basic psychological needs satisfaction and agentic engagement to achievement.

The principal findings of this thesis demonstrated that agentic engagement significantly enhanced English language achievement among students. Moreover, agentic engagement was identified as a complete mediator in the relationship among autonomy-supportive teaching environment, satisfaction of basic psychological needs, academic achievement, and across the emotional and behavioral engagement constructs both directly and indirectly, whereas cognitive engagement was found to not influence or predict agentic engagement or academic achievement. The thesis results underscore findings from prior research indicating that agentic engagement is a novel and significant factor in the academic engagement structure. In addition, the findings emphasized on the significance of the environmental setting, namely language classrooms, in facilitating the intrinsic motivational process in language learners through satisfying their basic psychological needs, as posited by self-determination theory.

While few studies have examined the significance of agentic engagement in specific domains, particularly in EFL/ESL learning, others have sought to elucidate its role either within the broader academic consensus or as a component of the overall academic engagement framework. The present study sought to illustrate the significance of the language learning context, characterized by an autonomy-supportive teaching

environment, in fostering intrinsic motivation of self through the satisfaction of learners' psychological needs of autonomy, competence and relatedness, which are crucial for fostering agentic engagement in language learners by adopting initiative actions taken by inside classroom, and finally how does this structural model of context, motivation, and action ultimately influences the outcome which is English language achievement in university students. For this purpose, the subsequent questions were devised: 1. How does language instructors following a more autonomy-supportive teaching methods (context) affects students basic psychological needs (self)? , 2. how the satisfaction of student's basic psychological needs (motivation) affects classroom agentic engagement ( action)?, 3. How the other 3 types of engagement (behavioral, emotional, and cognitive) affect agentic engagement? 4. how students agentic engagement (action) affects language achievement ( outcome), and does it work as a distinct construct that affects language achievement?.

## **5.2. The major findings of the current study**

### **5.2.1. The structural relations between study's variables**

The present study examined the structural relationships among the components of the student-teacher dialectical framework posited in Self-Determination Theory (SDT), wherein the following elements mutually influence and predict one another respectively: social context (teaching environment), motivation (satisfaction of basic psychological needs), action (engagement), and outcome (academic achievement).

SDT proposed a student-teacher dialectical framework to underscore the significance of comprehending student motivation and engagement within an educational context. The theory posits that students possess intrinsic motivational resources driven by the fulfillment of their fundamental psychological needs, which promote constructive engagement (Reeve, 2012). Further, STD highlighted the manner in which the learning environment can either enhance or hinder these needs, thereby influencing their desire to engage meaningfully with their surroundings and evolve as individuals and learners (Ryan & Deci, 2000).

The student-teacher dialectical paradigm primarily analyzes interactions when individuals of superior rank or expertise, akin to a teacher, strive to motivate or socialize others of a lesser competence like a pupil. Student engagement is influenced by extrinsic factors implemented by the teacher within the classroom, including rewards, goal systems, feedback, evaluations, and relationships with both teachers and classmates (Reeve, 2012). The dynamics of these linkages influence student intrinsic motivation by either fulfilling or obstructing their psychological demands for autonomy, competence, and relatedness. Eventually, it affects their academic functioning and outcomes.

This investigation explored the relationships between autonomy-supportive teaching environment, basic psychological needs satisfaction, agentic engagement, and English language academic achievement. Person correlation revealed that all variables were significantly correlated with one another at ( $p < 0.001$ ). The proposed model of the structural relations pathway between Autonomy-Supportive Teaching → Basic Psychological Needs → Agentic Engagement → Academic Achievement, reported both directly and indirectly significant values which means that both basic psychological need satisfaction and agentic engagement fully mediated the pathway between autonomy-supportive teaching and English language achievement. This conclusion emphasize on SDT hypothesis of the student-teacher dialectical framework where autonomy-supportive teaching first influence student's basic psychological needs satisfaction, which in turn predicted higher levels of agentic engagement and eventually better language outcomes in EFL learners.

The second model aimed to explore the interplay between autonomy-supportive teaching and academic achievement with the mediation of basic psychological needs only, to inspect if students motivation alone can predict language achievement, the model pathway of the structural relations was Autonomy-Supportive Teaching → Basic Psychological Needs → Academic Achievement, the values reported a non-significant effect in both direct and indirect connections, which conclude the fact that the fulfillment of student's basic psychological needs alone cannot predict language achievement directly without the mediation of another factor like engagement.

The third model examined the relationship between autonomy-supportive teaching and academic achievement, mediated solely by agentic engagement, to determine whether students' proactive involvement in personalizing their language learning process might predict language achievement, the model pathway of the structural relations was, Autonomy-Supportive Teaching → Agentic Engagement → Academic Achievement, the results revealed a statistically significant value in the direct and indirect pathways suggesting the importance of student's proactive attempts in customizing their language learning experience within the classroom in influencing their academic outcomes. With the accordance of the study's findings, agentic engagement stands as a distinct and strong factor in English language academic success.

### **5.2.2. How does language instructors following a more autonomy-supportive teaching methods (context) affects students basic psychological needs (motivation)?**

This question was designed to examine the significance of the classroom setting, as represented by teachers employing autonomy-supportive teaching methods, on students' intrinsic motivation represented by the fulfillment of their basic psychological needs.

SDT is based on the concept of individual's possession of internal mechanisms that provoke them to strive for growth and wellness in all aspects of their lives, while the efficacy of these mechanisms contingent upon the fulfillment of their basic psychological needs (Deci & Ryan, 1985). Further, cognitive evaluative theory impeded within SDT explained how external social environmental contexts directs and influences individual's behavioral conduct by creating either supportive or hindering environment impacting the fulfillment of the basic psychological needs (Reeve, 2012). Plenty of novel were previously conducted to highlight the importance of autonomy-supportive teaching on students needs satisfaction, for instance, (Alrabai, 2021) emphasized the need of employing autonomy-supportive teaching to fulfill the basic psychological needs and enhance the accomplishment of English language students in a previous research. His study investigated the influence of autonomy-supportive classroom

environment on the satisfaction of students' basic psychological needs and their language achievement. His findings underscored the critical significance of teachers delivering autonomy-supportive instruction to promote the independence of EFL learners, as a marked increase in learners autonomy was observed. Moreover, it indicated that, alongside satisfying their basic psychological needs, students should consistently be afforded increased opportunities to make choices, exert control over their learning process, and engage in decision-making, as this has been shown to positively impact language learning outcomes.

The current investigation showed similar results to (Alrabai, 2021). In this study, data analysis revealed a strong positive correlation between autonomy-supportive teaching and basic psychological needs satisfaction in EFL student's within the Jordanian context in which the impact of autonomy-supportive teaching on needs satisfaction was ( $r = 0.990$ ,  $p = 0.001$ ). This correlation indicates that increased amounts of autonomy-supportive teaching leads to an increased levels of basic psychological needs satisfaction in students and vice versa. In the mediation model table (2), autonomy-supportive teaching significantly and directly influenced students' basic psychological needs satisfaction with a high ( $\beta$ ) coefficient ( $\beta = 1.37$ ,  $p = 0.0001$ ). These results underline that students Increased exposure to a less authoritarian and indifferent teaching methods, along with a more supportive approaches which foster freedom, autonomy, self-direction, decision-making and peer communication inside language classrooms, enhances the fulfillment of their psychological needs in a way that promotes high-quality internal motivational processes that eventually affected their academic functioning. These results as expected were aligned with SDT hypothesis and previous studies.

### **5.2.3. how the satisfaction of student's basic psychological needs (motivation) affects classroom agentic engagement (action)?**

This question was designed to examine the impact of fulfilling basic psychological needs on students' agentic engagement. To the best of the researcher's knowledge, no prior literature has treated agentic engagement as a separate construct

from the other three dimensions of engagement in relation to its interaction with basic psychological needs in language learning domain. However, a study conducted by Dincer et al. (2019) examined the relationship between basic psychological needs and the four dimensions of academic engagement including agentic engagement on EFL learners, where the findings demonstrated a positive correlation and influence of basic psychological needs on the construct of agentic engagement in which higher amounts of agentic engagement predicted higher grades.

The present investigation highlighted analogous findings. Table (1) demonstrates a Robust link between the satisfaction of basic psychological needs and agentic engagement in EFL learners ( $r = 0.989$ ,  $p = 0.001$ ), suggesting that heightened satisfaction of students' basic psychological needs promotes elevated levels of agentic engagement and vice versa. The mediation model presented in table (2) demonstrated that basic psychological needs strongly predicted agentic engagement among EFL learners ( $\beta = 0.191$ ,  $p = 0.0001$ ). These results emphasize the significance of addressing language learners' autonomy, competence, and relatedness, as these factors enhance students' willingness to take initiative in their language learning endeavors within classroom, hence seeking a superior learning experience (Dincer et al., 2019). According to the SDT framework, students' perception of their ability to make self-approved decisions, regulate their own behavior, achieve desired outcomes, and socialize with peers establishes the basis for intrinsic motivation, encouraging learners to engage confidently and proactively in shaping and personalizing their educational experience (Reeve, 2012).

#### **5.2.4. How do the other three types of engagement (behavioral, emotional, and cognitive) affect agentic engagement?**

This question was formulated to inspect the influence of each component of the prior triadic model of academic engagement on agentic engagement, with the aim of investigating the potential indirect pathways that forecast the link between agentic engagement and English language achievement. Reeve and Tseng (2011) examined the impact of behavioral, emotional, and cognitive aspects of engagement on agentic

engagement among high school students, revealing a strong correlation between agentic engagement and the other three dimensions. The findings of this study revealed analogous outcomes except cognitive engagement. To address the stated question, at first, person correlation was utilized between the specified variables. Tables from (4-10) indicated that behavioral and emotional forms of engagement mediated the relationship between basic psychological needs (motivation) and agentic engagement (action), highlighting their indirect impact on agentic engagement, while cognitive engagement did not influence or mediate agentic engagement.

Students' behavioral engagement signifies their observable and active involvement in language classroom through questioning, participation, and decision-making (Fredricks et al., 2004). This aspect of engagement may enhance students' agentic behaviors, such as directing participation or questioning, thereby enhancing students' agentic behaviors like directing participation or questioning toward shaping language learning experience. Emotional engagement, on the other hand, represents the range of emotions students display during the language learning process (Liu et al., 2023). Experiencing positive emotions such as enjoyment and enthusiasm fosters a secure environment for student initiation, wherein they do not feel threatened or unwelcome when choosing to actively contribute to the personalization of learning objectives and instructions (Reeve, 2013).

As mentioned, the statistical analysis of the current investigation revealed that cognitive engagement did not predict nether agentic engagement, nor academic achievement, This conclusion came out to be contradictory to the findings of (Reeve & Tseng, 2011) in which their study concluded the existence of a positive direct influence of cognitive engagement on both agentic engagement and academic achievement. This contradiction can be Justified by the following hypotheses; Firstly, the range of age, study levels and context of both samples, where Reeve and Tseng (2011) sample involved high school students, while this study focused on undergraduate level students.

Previous research has established that high school students predominantly depend on cognitive engagement compared to other forms of engagement (Greene et al., 2004; Dogan, 2015). This reliance may significantly account for the discrepancies in findings, as their study indicated that cognitive engagement predicted agentic engagement and academic success, whereas this study did not. Secondly, the statistical results indicated an absencerelation rather than a negative or inverse one, suggesting that cognitive engagement may still exert a mediating influence through alternative model configurations not examined in the present work. Cognitive engagement demonstrated a robust correlation with and a significant predictive capacity for emotional engagement, suggesting a potential mediating influence elucidated through the indirect model of (Autonomy-Supportive teaching → Basic Psychological Needs → Cognitive engagement → emotional engagement → Agentic engagement → Academic Achievement), this is as the statistical analysis revealed that both autonomy-supportive teaching environment and basic psychological needs satisfaction are strong predictors of cognitive engagement. Furthermore, cognitive engagement significantly influences emotional engagement, indicating that cognitive engagement might enhance emotional engagement, which may indirectly mediate agentic engagement and academic achievement. This hypothesis is posited based on the agreement with previous investigations indicating that cognitive engagement is frequently associated with emotional engagement in educational contexts (Pietarinen et al., 2014; Hong et al., 2020). Additionally, the interplay between cognitive and emotional engagement in higher education is shaped by factors like course design, which depends on the instructor's pedagogical approaches and the supportive atmosphere they foster for students (Manwaring, 2017; Manwaring et al., 2017). Thirdly, not all of the previous conducted researches approved the validation of cognitive engagement as a predictor of academic achievement, for instance, Lee (2014) and Perry et al. (2010) revealed the effectiveness emotional and behavioral types of engagement only on students' academic performance while cognitive engagement did not.

### **5.2.5. How does students' agentic engagement affect language achievement, and does it work as a distinct construct influencing language achievement?**

This question was designed to examine the influence of agentic engagement on learners' language achievement and to determine whether agentic engagement serves as an independent and separate predictor of English language success. Reeve and Tseng (2011) examined the correlation between agentic engagement and academic success. The findings of their study indicated a robust link between the two constructs. Moreover, agentic engagement was shown as a significant predictor of academic achievement in high school students' success. The findings of the current investigation demonstrated similar results. Person correlation presented in Table (1) indicated a robust relationship between agentic involvement and English language proficiency. The mediation model results indicated a strong substantial link with English language achievement, establishing it as a distinct and independent predictor of language success. Additionally, the table (2) and (3) elucidates both the direct and indirect effects of agentic engagement via several mediating variables such as autonomy-supportive teaching and basic psychological needs satisfaction, highlighting its indirect impact on language achievement.

This study emphasized agentic engagement as an influential construct when it comes to enhancing student's English language outcomes, higher levels of agentic engagement were associated with an increase in students' GPA records. This is due to its direct association with language achievement and as it succeeded in mediating other important factors during the learning process. When students practice acts out of agency, they contribute to creating a learning environment that helps in meeting their needs, interests, and objectives. Agentic engagement is distinctive to success as it encompasses deliberate, proactive, and constructive actions that improve the learning experience and environment (Reeve, 2012). Furthermore, it facilitates a more thorough comprehension of student participation in learning activities, as they actively contribute to the teaching they receive, hence optimizing possible learning opportunities (Reeve, 2013).

### **5.3. Implications of the study**

This study's implications allow English language teachers to recognize the significance of the classroom environment they establish on students' academic conduct and psychological well-being. Moreover, it enlightens them on the advantages of providing students with a secure environment to exercise agency within the language classroom under their supervision. It is essential to emphasize the significance of the discipline of psychological linguistics on language outcomes and the adopted attitudes by language learners, as psychological well-being is the impetus for all developmental activities individuals undertake. Language acquisition necessitates distinct focus compared to other educational domains, as it aims for a communicative purpose and relies significantly on an intrinsic curiosity regarding the culture associated with the language to optimize communication outcomes. Consequently, the curiosity and excitement of students regarding their linguistic objectives should be prioritized by educators, who must offer support, space, and emotional stability to facilitate agentic participation and enrich the educational process.

## CONCLUSION

The present study aimed to introduce an expansion to the literature provided on agentic engagement as a novel predictor of English language academic achievement while considering its mediating role in the structural relations with autonomy-supportive teaching and basic psychological needs and the other three constructs of academic engagement, following the student-teacher dialectical framework from SDT.

Based on the quantitative analysis using the macro Hayes (Hayes, 2022) of the gathered data. The results revealed substantial correlations among all variables, demonstrating that both basic psychological need satisfaction and agentic engagement completely mediated the relationship between autonomy-supportive teaching and English language achievement. The second model investigated the relationship between autonomy-supportive teaching and academic achievement, mediated solely by basic psychological needs. It was concluded that the satisfaction of students' basic psychological needs alone cannot forecast language achievement without the mediation of an additional factor, such as engagement. The third model investigated the correlation between autonomy-supportive teaching and academic achievement, exclusively mediated by agentic engagement. It revealed statistically significant values in both direct and indirect pathways, indicating the critical role of students' proactive initiatives in tailoring their language learning experience within classroom to impact their academic results.

Furthermore, the investigation concerning the influence of the behavioral, emotional and cognitive facets of the academic engagement over agentic engagement indicated that increased levels of behavioral and emotional engagement types are correlated positively with enhanced agentic engagement in English language learning. Behavioral engagement encompasses active classroom participation, including questioning and decision-making, which can augment agentic behaviors such as guiding participant for need articulation. Emotional engagement encompasses positive emotions such as delight and passion, fostering a secure environment for students to ask for personalized learning objectives.

The findings of this thesis correspond with the student-teacher dialectical paradigm posited by SDT, demonstrating that classroom social setting, characterized by teachers' supportive, neglectful, or controlling styles, predicts the satisfaction of basic psychological needs and consequently, intrinsic motivation. Engagement is acknowledged as the expressed behavior of motivation, which serves as the underlying process driving human aspirations for growth and development (Reeve, 2012). Students' agentic engagement significantly complements teachers' autonomy-supportive teaching (Reeve & Tseng, 2011), as the supportive teaching style fosters a conducive environment for language learners. This type of engagement manifests as a result of support, enabling students to proactively tailor aspects of their learning process and seek satisfaction of their needs.

Future Research could investigate the constructive role of agentic engagement in students from different ages, educational levels and cultural backgrounds. As for plenty of previously exciting novel in the educational field revealed that students tend to rely unequally on one type of engagement more than other types depending on their age and study level, for example, elementary students mostly engage themselves behaviorally more than the rest aspects of engagement (Alexander, Entwisle, & Dauber, 1993; Birch & Ladd, 1997; Reeve & Tseng, 2011). On the other hand, high school level students were found to greatly emphasize the cognitive dimensions of engagement (Greene et al., 2004; Reeve & Tseng, 2011). Further, it is still uncertain how agentic engagement takes role depending on changing cultural and ethical contexts. Indeed, a study in the Chinese context by Guo (2021), revealed a dropped levels of agentic engagement due to agentic acts are considered to be disrespectful and impolite to the teacher culturally. Last, future research ought to employ significant qualitative approaches, such as observations or interviews, to provide further understanding into the functional significance of the variables investigated in this study, rather than relying solely on self-reporting procedures for construct assessment.

## REFERENCES

- Adams, N., Little, T. D., & Ryan, R. M. (2017). Self-determination theory. In M. L. Wehmeyer, K. A. Shogren, T. D. Little, & S. J. Lopez (Eds.), *Development of self-determination through the life-course* (pp. 47–54). Springer Science + Business Media. [https://doi.org/10.1007/978-94-024-1042-6\\_4](https://doi.org/10.1007/978-94-024-1042-6_4)
- Alamer, A. (2021). BASIC PSYCHOLOGICAL NEEDS, MOTIVATIONAL ORIENTATIONS, EFFORT, AND VOCABULARY KNOWLEDGE. *Studies in Second Language Acquisition*, 44(1), 164–184. <https://doi.org/10.1017/s027226312100005x>
- Alamer, A., & Lee, J. (2019). A motivational process model explaining L2 Saudi students' achievement of English. *System*, 87, 102133. <https://doi.org/10.1016/j.system.2019.102133>
- Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (1993). First-Grade Classroom Behavior: Its Short- and Long-Term Consequences for School Performance. *Child Development*, 64(3), 801–814. <https://doi.org/10.1111/j.1467-8624.1993.tb02944.x>
- Alqarni, N. (2023). Language learning strategies and learning engagement as predictors of language learning achievement: an investigation of Saudi EFL learners. *Saudi Journal of Language Studies*, 3(3), 129–143. <https://doi.org/10.1108/sjls-12-2022-0084>
- Alrabai, F. (2021). The Influence of Autonomy-Supportive Teaching on EFL Students' Classroom Autonomy: An Experimental Intervention. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.728657>
- Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45(5), 369–386. <https://doi.org/10.1002/pits.20303>
- Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), 61–79. [https://doi.org/10.1016/s0022-4405\(96\)00029-5](https://doi.org/10.1016/s0022-4405(96)00029-5)
- Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science Education*, 84(6), 740–756. [https://doi.org/10.1002/1098-237x\(200011\)84:6](https://doi.org/10.1002/1098-237x(200011)84:6)

- Cheon, S. H., Reeve, J., & Vansteenkiste, M. (2020). When teachers learn how to provide classroom structure in an autonomy-supportive way: Benefits to teachers and their students. *Teaching and Teacher Education*, 90, 103004. <https://doi.org/10.1016/j.tate.2019.103004>
- Chinpakdee, M. (2020). Developing learner autonomy in language learning: A study in the Thai EFL secondary school context. <https://doi.org/10.26686/wgtn.17147885.v1>
- Cruce, T. M., Wolniak, G. C., Seifert, T. A., & Pascarella, E. T. (2006). Impacts of Good Practices on Cognitive Development, Learning Orientations, and Graduate Degree Plans During the First Year of College. *Journal of College Student Development*, 47(4), 365–383. <https://doi.org/10.1353/csd.2006.0042>
- Deci, E. & Ryan, R. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York, NY: Plenum. <https://doi.org/10.1007/978-1-4899-2271-7>
- 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(4), 227–268. [https://doi.org/10.1207/s15327965pli1104\\_01](https://doi.org/10.1207/s15327965pli1104_01)
- Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic Rewards and Intrinsic Motivation in Education: Reconsidered Once Again. *Review of Educational Research*, 71(1), 1–27. <https://doi.org/10.3102/00346543071001001>
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology / Psychologie canadienne*, 49(3), 182–185. <https://doi.org/10.1037/a0012801>
- Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 85–107). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195399820.013.0006>
- Deci, E. L., Ryan, R. M., & Guay, F. (2013). Self-determination theory and actualization of human potentials. In D. M. McInerney, H. W. Marsh, R. G. Craven, F. Guay, & D. M. McInerney (Eds.), *Theory driving research: New wave perspectives on self-processes and human development* (pp. 109-133). Charlotte: Information Age Publishing.
- Dincer, A., Yesilyurt, S., & Takkac, M. (2012). The Effects of Autonomy-Supportive Climates on EFL Learner’s Engagement, Achievement and Competence in English Speaking Classrooms. *Procedia - Social and Behavioral Sciences*, 46, 3890–3894. <https://doi.org/10.1016/j.sbspro.2012.06.167>
- Dincer, A., Yeşilyurt, S., Noels, K. A., & Lascano, D. I. V. (2019). Self-Determination and Classroom Engagement of EFL Learners: A Mixed-Methods Study of the

- Self-System Model of Motivational Development. *SAGE Open*, 9(2). <https://doi.org/10.1177/2158244019853913>
- Dogan, U. (2015). Student Engagement, Academic Self-efficacy, and Academic Motivation as Predictors of Academic Performance. *The Anthropologist*, 20(3), 553–561. <https://doi.org/10.1080/09720073.2015.11891759>
- Dong, Y., & Liu, S. (2020). An Investigation into Students' Agentic Engagement in Online English Listening Learning. *Journal of Language Teaching and Research*, 11(3), 409. <https://doi.org/10.17507/jltr.1103.09>
- Dotterer, A. M., & Lowe, K. (2011). Classroom Context, School Engagement, and Academic Achievement in Early Adolescence. *Journal of Youth and Adolescence*, 40(12), 1649–1660. <https://doi.org/10.1007/s10964-011-9647-5>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Greene, B. A., Miller, R. B., Crowson, H., Duke, B. L., & Akey, K. L. (2004). Predicting high school students' cognitive engagement and achievement: Contributions of classroom perceptions and motivation. *Contemporary Educational Psychology*, 29(4), 462–482. <https://doi.org/10.1016/j.cedpsych.2004.01.006>
- Guo, Y. (2021). Exploring the Dynamic Interplay Between Foreign Language Enjoyment and Learner Engagement With Regard to EFL Achievement and Absenteeism: A Sequential Mixed Methods Study. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.766058>
- Guo, Y., Xu, J., & Chen, C. (2022). Measurement of engagement in the foreign language classroom and its effect on language achievement: the case of Chinese college EFL students. *IRAL - International Review of Applied Linguistics in Language Teaching*, 61(3), 1225–1270. <https://doi.org/10.1515/iral-2021-0118>
- Hayes, A. F. (2022). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford Publications.
- Hong, W., Zhen, R., Liu, R., Wang, M., Ding, Y., & Wang, J. (2020). The longitudinal linkages among Chinese children's behavioural, cognitive, and emotional engagement within a mathematics context. *Educational Psychology*, 40(6), 666–680. <https://doi.org/10.1080/01443410.2020.1719981>
- Jiang, A. L., & Zhang, L. J. (2021). University Teachers' Teaching Style and Their Students' Agentic Engagement in EFL Learning in China: A Self-Determination Theory and Achievement Goal Theory Integrated Perspective. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.704269>

- Kahu, E. R. (2011). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758–773. <https://doi.org/10.1080/03075079.2011.598505>
- Karbakhsh, R., & Safa, M. A. (2020). Basic Psychological Needs Satisfaction, Goal Orientation, Willingness to Communicate, Self-efficacy, and Learning Strategy Use as Predictors of Second Language Achievement: A Structural Equation Modeling Approach. *Journal of Psycholinguistic Research*, 49(5), 803–822. <https://doi.org/10.1007/s10936-020-09714-7>
- Karimi, M. N., & Abaszadeh, A. (2017). Autonomy-Supportive Teaching, Willingness to Communicate in English, Motivation, and English Speaking Self-Efficacy among EFL Learners: A Structural Equation Modelling Study. *Iranian Journal of Applied Linguistics (IJAL)*, 20(2), 113–156. [https://ijal.khu.ac.ir/browse.php?a\\_id=2825&sid=1&slc\\_lang=en](https://ijal.khu.ac.ir/browse.php?a_id=2825&sid=1&slc_lang=en)
- Kassem, H. M. (2018). The Impact of Student-Centered Instruction on EFL Learners' Affect and Achievement. *English Language Teaching*, 12(1), 134. <https://doi.org/10.5539/elt.v12n1p134>
- Kim, H. Y., & Suárez-Orozco, C. (2015). The Language of Learning: The Academic Engagement of Newcomer Immigrant Youth. *Journal of Research on Adolescence*, 25(2), 229–245. <https://doi.org/10.1111/jora.12130>
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683–704. <https://doi.org/10.1353/csd.0.0099>
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the Effects of Student Engagement on First-Year College Grades and Persistence. *The Journal of Higher Education*, 79(5), 540–563. <https://doi.org/10.1080/00221546.2008.11772116>
- Ladd, G. W., & Dinella, L. M. (2009). Continuity and change in early school engagement: Predictive of children's achievement trajectories from first to eighth grade? *Journal of Educational Psychology*, 101(1), 190–206. <https://doi.org/10.1037/a0013153>
- Lamkhanter, F. (2022). Learner Autonomy: Attitudes and Practices of Moroccan University Students in English Departments. *International Journal of Language and Literary Studies*, 4(1), 189–207. <https://doi.org/10.36892/ijlls.v4i1.811>
- Larsen-freeman, D. (2007). Reflecting on the Cognitive–Social Debate in Second Language Acquisition. *Modern Language Journal*, 91(s1), 773–787. <https://doi.org/10.1111/j.1540-4781.2007.00668.x>

- Lee, J. (2013). The Relationship Between Student Engagement and Academic Performance: Is It a Myth or Reality? *The Journal of Educational Research*, 107(3), 177–185. <https://doi.org/10.1080/00220671.2013.807491>
- Liu, P. (2021). Influence of Psychological Need-Based Teachers' Autonomy Support on Effectiveness and Engagement in English Learning. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.663374>
- Liu, M., Noordin, N., Ismail, L., & Abdrahim, N. A. (2023). Relationship between Student Engagement and Academic Achievement in College English Education for Non-English Majors in China. *International Journal of Learning Teaching and Educational Research*, 22(8), 203–232. <https://doi.org/10.26803/ijlter.22.8.12>
- Manwaring, K. (2017). Emotional and Cognitive Engagement in Higher Education Classrooms.
- Manwaring, K. C., Larsen, R., Graham, C. R., Henrie, C. R., & Halverson, L. R. (2017). Investigating student engagement in blended learning settings using experience sampling and structural equation modeling. *The Internet and Higher Education*, 35, 21–33. <https://doi.org/10.1016/j.iheduc.2017.06.002>
- Matos, L., Reeve, J., Herrera, D., & Claux, M. (2018). Students' Agentic Engagement Predicts Longitudinal Increases in Perceived Autonomy-Supportive Teaching: The Squeaky Wheel Gets the Grease. *The Journal of Experimental Education*, 86(4), 579–596. <https://doi.org/10.1080/00220973.2018.1448746>
- Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students: A Third Decade of Research (Vol. 2)*. Jossey-Bass. Wiley.
- Patall, E. A., Steingut, R. R., Vasquez, A. C., Trimble, S. S., Pituch, K. A., & Freeman, J. L. (2018). Daily autonomy supporting or thwarting and students' motivation and engagement in the high school science classroom. *Journal of Educational Psychology*, 110(2), 269–288. <https://doi.org/10.1037/edu0000214>
- Perry, J. C., Liu, X., & Pabian, Y. (2010). School engagement as a mediator of academic performance among urban youth: The role of career preparation, parental career support, and teacher support. *The Counseling Psychologist*, 38(2), 269–295. <https://doi.org/10.1177/0011000009349272>
- Pietarinen, J., Soini, T., & Pyhältö, K. (2014). Students' emotional and cognitive engagement as the determinants of well-being and achievement in school. *International Journal of Educational Research*, 67, 40–51. <https://doi.org/10.1016/j.ijer.2014.05.001>

- Reeve, J., & Tseng, C. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, 36(4), 257–267. <https://doi.org/10.1016/j.cedpsych.2011.05.002>
- Reeve, J. (2012). A Self-determination Theory Perspective on Student Engagement. In Springer eBooks (pp. 149–172). [https://doi.org/10.1007/978-1-4614-2018-7\\_7](https://doi.org/10.1007/978-1-4614-2018-7_7)
- Reeve, J. (2013). How students create motivationally supportive learning environments for themselves: The concept of agentic engagement. *Journal of Educational Psychology*, 105(3), 579–595. <https://doi.org/10.1037/a0032690>
- Reeve, J., & Lee, W. (2014). Students' classroom engagement produces longitudinal changes in classroom motivation. *Journal of Educational Psychology*, 106(2), 527–540. <https://doi.org/10.1037/a0034934>
- Reeve, J., & Shin, S. H. (2019). How teachers can support students' agentic engagement. *Theory Into Practice*, 59(2), 150–161. <https://doi.org/10.1080/00405841.2019.1702451>
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63(3), 397–427. <https://doi.org/10.1111/j.1467-6494.1995.tb00501.x>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press. <https://doi.org/10.1521/978.14625/28806>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Shirvan, M. E., & Alamer, A. (2022). Modeling the interplay of EFL learners' basic psychological needs, grit and L2 achievement. *Journal of Multilingual and Multicultural Development*, 45(7), 2831–2847. <https://doi.org/10.1080/01434632.2022.2075002>
- Skinner, E. A., Zimmer-Gembeck, M. J., & Connell, J. P. (1998). Individual differences and the development of perceived control. *Monographs of the Society for Research in Child Development*, 63(2-3), v–220. <https://doi.org/10.2307/1166220>
- Someya, F., & Obermeier, A. (2023). Autonomy Support, Psychological Needs Satisfaction, Academic Engagement, and Achievement in English Learning Generating a Mediation Model. *LET Kansai Chapter Collected Papers*, 21, 19–38. [https://doi.org/10.50924/letkansai.21.0\\_19](https://doi.org/10.50924/letkansai.21.0_19)

- Vansteenkiste, M., Niemiec, C. P., & Soenens, B. (2010). The development of the five mini-theories of self-determination theory: an historical overview, emerging trends, and future directions. In *Advances in motivation and achievement* (pp. 105–165). [https://doi.org/10.1108/s0749-7423\(2010\)000016a007](https://doi.org/10.1108/s0749-7423(2010)000016a007)
- Vansteenkiste, M., Williams, G. C., & Ken, R. (2012). Toward systematic integration between Self-Determination Theory and Motivational Interviewing as examples of top-down and bottom-up intervention development: Autonomy or volition as a fundamental theoretical principle. *The International Journal of Behavioral Nutrition and Physical Activity*, 9, Article 23. <https://doi.org/10.1186/1479-5868-9-23>
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23(3), 263–280. <https://doi.org/10.1037/a0032359>
- Wang, M.-T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Educational Research Journal*, 47(3), 633–662. <https://doi.org/10.3102/0002831209361209>
- Wellborn, J. G. (1992). Engaged and disaffected action: The conceptualization and measurement of motivation in the academic domain. *Psychology, Education*. <https://psycnet.apa.org/record/1993-72315-001>
- Yang, N. (1998). Exploring a new role for teachers: promoting learner autonomy. *System*, 26(1), 127–135. [https://doi.org/10.1016/s0346-251x\(97\)00069-9](https://doi.org/10.1016/s0346-251x(97)00069-9)

## LIST OF TABLES

<b>Table 1:</b> Pearson correlations among variables of interest (n313).....	46
<b>Table 2:</b> Results of multiple mediation analyses (n313).....	47
<b>Table 3:</b> Testing the pathways of the multiple mediation model (n313). ....	49
<b>Table 4:</b> Pearson Correlations among Variables of Interest (n313).....	51
<b>Table 5:</b> Results of multiple mediation analyses (n313).....	53
<b>Table 6:</b> Testing the pathways of the multiple mediation model (n313). ....	56
<b>Table 7:</b> Results of multiple mediation analyses (n313).....	57
<b>Table 8:</b> Testing the pathways of the multiple mediation model (n313). ....	60
<b>Table 9:</b> Results of multiple mediation analyses (n313).....	61
<b>Table 10:</b> Testing the pathways of the multiple mediation model (n313). ....	64

## **LIST OF APPENDIX**

<b>APPENDIX 1:</b> Autonomy-supportive teaching measure .....	87
<b>APPENDIX 2:</b> Basic psychological needs satisfaction measure.....	88
<b>APPENDIX 3:</b> Four engagement constructs measures .....	90



## APPENDIX 1: Autonomy-supportive teaching measure

- 1) My teacher provides me with choices and options. ( يقدم لي أستاذي الاختيارات ( والاختيارات خلال المحاضرة ) )
- 2) I feel understood by my teacher. ( أشعر بأن أستاذي يفهمني )
- 3) My teacher conveys confidence in my ability to do well this course. ( ينقل ( أستاذي ثقته في قدرتي على الأداء الجيد خلال المحاضرة ) )
- 4) My teacher encourages me to ask questions. ( يشجعني أستاذي على طرح الأسئلة )
- 5) My teacher listens to how I would like to do things. ( أستاذي يستمع إلى رأيي في ( كيفية طرح المادة و ممارسة الأنشطة ) )
- 6) My teacher tries to understand how I see things before suggesting
- 7) A new way to do things. ( يحاول معلمي أن يفهم كيف أرى الأشياء قبل أن يقترح عليّ طريقة ( جديدة لفعلها ) )

### (1-7) Likert-type response scale

- 1) Strongly Disagree; لا أوافق بشدة
- 2) Disagree; لا أوافق
- 3) Somewhat Disagree; لا أوافق علي نحو ما
- 4) Neither Agree Nor Disagree; محايد
- 5) Somewhat Agree; أوافق على نحو ما
- 6) Agree; أوافق
- 7) strongly agree أوافق بشده

## APPENDIX 2: Basic psychological needs satisfaction measure

### Autonomy

- 1) I am able to freely decide my own pace of learning in English. ( أنا قادر على )  
(تحديد وتيرة تعلمي للغة الإنجليزية بحرية)
- 2) I am able to freely choose the tasks to be done while learning English. ( أنا  
(قادر على اختيار المهام التي يجب القيام بها أثناء تعلم اللغة الإنجليزية بحرية)
- 3) My English teacher allows my class to choose how we approach English  
learning. (يسمح مدرس اللغة الإنجليزية لفصلي باختيار الطريقة التي نتعامل بها مع تعلم اللغة)
- 4) My English teacher let me freely practice English in the classroom. ( يسمح لي )  
(أستاذ اللغة الإنجليزية بممارسة اللغة الإنجليزية بحرية في الفصل الدراسي)

### Competence

- 1) I feel I am capable of learning English. (أشعر أنني قادر على تعلم اللغة الإنجليزية)
- 2) I can be a successful language learner. (أستطيع أن أكون متعلم لغة ناجحاً)
- 3) I am competent enough to meet the challenges and tasks posed in English  
learning. (أنا مؤهل بما يكفي لمواجهة التحديات والمهام المطروحة في تعلم اللغة الإنجليزية)
- 4) I feel a sense of accomplishment in my English classes. (أشعر بإحساس بالإنجاز )  
(في دروس اللغة الإنجليزية)

### Relatedness

- 1) My English teacher is friendly and cordial with me. ( مدرس اللغة الإنجليزية )  
(.الخاص بي ودود و لطيف معي)
- 2) English teacher is very understanding (puts him/herself in other people's  
place) about students' problems. ( مدرس اللغة الإنجليزية متفهم جداً (يضع نفسه مكان )  
(الآخرين) بشأن مشكلات الطلاب)
- 3) My classmates are willing to help and cooperate with me while learning the  
language. (زملائي على استعداد لمساعدتي والتعاون معي أثناء تعلم اللغة)
- 4) My English teacher cares about my progress. ( يهتم مدرس اللغة الإنجليزية بتقدمي )  
(في تعلم اللغة)

(1-5) Likert-type response scale

- 1) Strongly Disagree; لا أوافق بشده
- 2) Disagree; لا أوافق
- 3) Neither Agree nor Disagree; محايد
- 4) Agree; أوافق
- 5) Strongly Agree; أوافق بشدة



### APPENDIX 3: Four engagement constructs measures

#### Behavioral engagement measure

- 1) When I'm in class, I listen very carefully. ( عندما أكون في المحاضرة، أستمع بعناية )  
(شديدة)
- 2) I pay attention in this class. (أحرص ان اكون في غاية الإنتباه خلال المحاضرة)
- 3) I try hard to do well in the class. (أحاول جاهداً أن أقوم بعمل جيد في المحاضرات)
- 4) In this major, I work as hard as I can. (في هذا التخصص، أعمل بأقصى ما أستطيع)
- 5) When I'm in class, I participate in class discussions. ( عندما أكون في المحاضرة، )  
(أشارك في المناقشات)

#### Emotional engagement measure

- 1) When we work on something in the class, I feel interested. ( أشعر بالاهتمام تجاه )  
(الأشياء التي نقوم بها خلال المحاضرات)
- 2) This class is fun. (أشعر بالإستمتاع خلال المحاضرة)
- 3) I enjoy learning new things in the class. ( أشعر بالمتعة تجاه تعلم أشياء جديدة في )  
(المحاضرات)
- 4) When I'm in the class, I feel good. (أشعر على نحو جيد خلال تواجدي في المحاضرات)
- 5) When we work on something in the class, I get involved. ( أقوم بالمشاركة عندما )  
(نعمل على شيء ما في المحاضرة)

#### Agentic engagement measure

- 1) I let my teacher know what I need and want. (أخبر معلمي بما أحتاجه وأريده)
- 2) I let my teacher know what I am interested in. (أخبر معلمي بما يجذب أهتمامي)
- 3) During the class. I express my preferences and opinions. ( خلال المحاضرات أعبر )  
(عن تفضيلاتي وآرائي)
- 4) During class, I ask questions to help me learn. ( أثناء المحاضرة اطرح أسئلة )  
(لمساعدتي في التعلم)
- 5) When I need something in the class, I'll ask the teacher for it. ( عندما أحتاج إلى )  
(شيء ما اثناء المحاضرة، سأطلب ذلك من المعلم)

#### Cognitive engagement measure

- 1) I try to explain the key concepts in my own words. (أحاول شرح المفاهيم الأساسية)  
(بكلماتي الخاصة)
- 2) I usually try to summarize it in my own words. (أحاول عادة تلخيص المعلومات)  
(بكلماتي الخاصة)
- 3) I try to connect the ideas I am reading about with what I already know. (أحاول)  
(ربط الأفكار التي أقرأ عنها بالمعلومات التي اعرفها مسبقا)
- 4) I try to generate examples to help me understand them better. (أحاول توليد أمثلة)  
(لمساعدتي في الفهم بشكل أفضل)

(1-7) Likert-type response scale

- 1) Strongly Disagree; لا أوافق بشدة
- 2) Disagree; لا اوافق
- 3) Somewhat Disagree; لا أوافق علي نحو ما
- 4) Neither Agree Nor Disagree; محايد
- 5) Somewhat Agree; أوافق على نحو ما
- 6) Agree; أوافق
- 7) strongly agree أوافق بشده

## **CURRICULUM VITAE**

Farah Yacoub is a Master's student in the Department of English Language and Literature at Karabük University's Faculty of Literature. She holds a Bachelor's degree in English Language and Literature and has gained valuable teaching experience. Farah worked as an English language teacher for one year in a classroom setting and spent an additional year as an online English instructor, honing her skills in virtual education. Currently, she is focusing on her academic pursuits and is not employed professionally.

