

**STUDENT ENGAGEMENT AND TEACHER MOTIVATING  
STYLE: A FOCUS ON AGENTIC ENGAGEMENT AND  
TEACHER AUTONOMY SUPPORT FROM A  
LONGITUDINAL AND MULTILEVEL PERSPECTIVE**

**Ph.D Dissertation**

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**PH.D. DISSERTATION**

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Program in English Language Teaching  
Supervisor: Prof. Dr. İlknur KEÇİK**

**Eskişehir  
Anadolu University  
Graduate School of Educational Sciences  
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## ABSTRACT

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This study aims to investigate the relationship between teacher autonomy support and student engagement and to reveal the extent to which student engagement explains the variance in teacher autonomy support at the beginning, in the middle, and at the end of a semester which is sixteen weeks long school term. It also aims at revealing the extent to which student engagement explains the variance in longitudinal increase of teacher autonomy support. Lastly, this study attempts to uncover the factors that might affect teacher autonomy support and student engagement. For this purpose, a mixed methods design research is conducted. A total of 212 participants from the School of Foreign Languages at Akdeniz University participated in the quantitative part of the study. 12 students and their instructor volunteered for the qualitative part. To collect data, Four Aspects of Student Engagement Questionnaire, Learning Climate Questionnaire, observation sheet, hit-steer observation system, semi-structured interviews, and stimulated recall protocols were utilized. The analysis of the data revealed that teacher autonomy support and student engagement had a significant relationship. It was also revealed that agentic engagement explained the variance in teacher autonomy support to some extent. However, student engagement did not explain the increase in perceived teacher autonomy support. It was found that teacher autonomy support and student engagement were affected by a number of factors such as student and teacher characteristics, course and institution related factors, and environmental factors.

**Key words:** Student engagement, Agentic engagement, Teacher motivating style,  
Teacher autonomy support

## ÖZET

### ÖĞRENCİ KATILIMI VE ÖĞRETMEN MOTİVASYON STİLİ: EYLEMLİ KATILIM VE ÖĞRETMENİN ÖZERKLİK DESTEKLEYİCİ MOTİVASYON STİLİ ARASINDAKİ İLİŞKİYE BOYLAMSAL VE ÇOK DÜZEYLİ BİR BAKIŞ

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Bu çalışma, öğretmenin özerklik destekleyici stili ile öğrenci katılımı arasındaki ilişkiyi incelemeyi ve öğrenci katılımının on altı haftalık eğitim döneminin başında, ortasında ve sonunda öğretmen özerklik destekleme stilindeki değişimi ne ölçüde açıkladığını ortaya çıkarmayı hedeflemektedir. Ayrıca bu çalışma öğrenci katılımının öğretmen özerklik destekleyici stilinin gelişimindeki varyansı ne ölçüde açıkladığını da ortaya çıkarmayı amaçlamaktadır. Son olarak, çalışmada öğretmen özerklik destekleme stilini ve öğrenci katılımını etkileyebilecek faktörlerin belirlenmesini de amaçlamaktadır. Bu amaçlar doğrultusunda, karma yöntemler deseni kullanılmıştır. Akdeniz Üniversitesi Yabancı Diller Eğitimi Yüksek Okulu'ndan 212 öğrenci çalışmanın nicel kısmına katılmıştır. Ayrıca 12 öğrenci ve bu grubun dersine giren öğretim görevlisi çalışmanın nitel kısmına katılmaya gönüllü olmuştur. Veri toplama aracı olarak Dört Boyutlu Ders Katılım Ölçeği, Öğrenme İklimi Ölçeği, gözlem formu, vur-yönlendir gözlem sistemi, yarı yapılandırılmış görüşmeler ve uyarılmış hatırlama protokollerinden faydalanılmıştır. Verilerin analizi sonucunda, öğretmen özerklik destekleme stili ile öğrenci katılımı arasında istatistiksel olarak anlamlı bir ilişki bulunmuştur. Ayrıca, eylemli katılımın öğretmen özerklik destekleyici stilindeki değişimi belli bir ölçüde açıkladığı sonucuna ulaşılmıştır. Ancak, öğrencilerin eylemli katılımı öğretmenlerin özerklik destekleyici motivasyon stillerindeki artışı açıklayamamıştır. Ek olarak, öğretmen özerklik destekleyici stili ile öğrenci katılımının çevresel, kurumsal, öğretmen ve öğrenci karakteri gibi birçok faktörden etkilendiği ortaya çıkarılmıştır.

**Anahtar kelimeler:** Öğrenci katılımı, Eylemli katılım, Öğretmen motivasyon stili, Öğretmen özerklik destekleyici motivasyon stili

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Gizem BERBER  
Antalya, 2023

## **ETİK İLKE VE KURALLARA UYGUNLUK BEYANNAMESİ**

Bu tezin bana ait, özgün bir çalışma olduğunu, çalışmamın hazırlık, veri toplama, analiz ve bilgilerin sunumu olmak üzere tüm aşamalarında bilimsel etik ilke ve kurallara uygun davrandığımı; bu çalışma kapsamında elde edilen tüm veri ve bilgiler için kaynak gösterdiğimi ve bu kaynaklara kaynakçada yer verdiğimi; bu çalışmamın Anadolu Üniversitesi tarafından kullanılan ‘bilimsel intihal tespit programı’yla tarandığımı ve hiçbir şekilde “intihal içermediğini” beyan ederim. Herhangi bir zamanda, çalışmamla ilgili yaptığım bu beyana aykırı bir durumun saptanması durumunda, ortaya çıkacak tüm ahlaki ve hukuki sonuçları kabul ettiğimi bildiririm.

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## **STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES**

I hereby truthfully declare that this thesis is an original work prepared by me; that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with “scientific plagiarism detection program” used by Anadolu University, and that “it does not have any plagiarism” whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved.

Gizem BERBER

## CONTENTS

	<u>Page</u>
PH.D. DISSERTATION.....	i
FINAL APPROVAL FOR THESIS.....	i
ÖZET .....	iv
ACKNOWLEDGEMENTS .....	v
ETİK İLKE VE KURALLARA UYGUNLUK BEYANNAMESİ.....	vii
STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES.....	viii
CONTENTS .....	ix
LIST OF TABLES .....	xii
LIST OF FIGURES .....	xiii
CHAPTER 1.....	1
1. INTRODUCTION .....	1
1.2. Background to the Study.....	2
1.3. Statement of the Problem, Aim, and Research Questions .....	5
1.4. Importance of the Study.....	9
CHAPTER 2.....	12
2. LITERATURE REVIEW .....	12
2.1. Student Engagement.....	12
2.1.1. Behavioral engagement .....	14
2.1.2. Emotional engagement .....	15
2.1.3. Cognitive engagement.....	16
2.1.4. Agentic engagement .....	16
2.2. Theoretical Background.....	17
2.2.1. Self determination theory.....	18

2.3.2. Teacher motivating style .....	22
2.4. Related Studies on the Relationship between Teacher Motivating Style and Student Engagement.....	28
<b>CHAPTER 3.....</b>	<b>44</b>
<b>3. METHODOLOGY .....</b>	<b>44</b>
3.1. Design of the Study .....	44
3.2. Context of the Study and the Participants .....	45
3.3. Data Collection Tools .....	46
3.3.1. Four aspects of student engagement questionnaire (FASEQ).....	46
3.3.2. Learning climate questionnaire (LCQ) .....	47
3.3.3. Observation .....	47
3.3.4. Video Recordings.....	49
3.3.5. Stimulated Recall Protocols.....	51
3.3.6. Semi-Structured Interviews.....	52
3.4. Pilot Study .....	53
3.5. Data Collection Procedure .....	54
3.6. Data Analysis.....	55
<b>CHAPTER 4.....</b>	<b>59</b>
<b>4. RESULTS .....</b>	<b>59</b>
4.1. Levels of Perceived Teacher Autonomy Support and Student Engagement at the Beginning, in the Middle, and at the End of the Semester.....	60
4.2. The Relationship Between Perceived Teacher Autonomy Support and Student Engagement .....	63
4.3. The Extent Student Engagement explain the change in Perceived Teacher Autonomy Support throughout the Semester .....	65
4.4. Longitudinal Increase in Perceived Teacher Autonomy in Relation to Student Engagement .....	68

<b>4.5. Student Engagement and Factors Affecting Student Engagement: Students’ Perspectives .....</b>	<b>70</b>
<b>4.5.1. Dimensions of student engagement.....</b>	<b>70</b>
<b>4.5.2. Factors Affecting Student Engagement.....</b>	<b>73</b>
<b>4.6. Factors Affecting Teacher Autonomy Support: Teacher’s Perspective.....</b>	<b>84</b>
<b>4.6.1. Teacher autonomy support.....</b>	<b>84</b>
<b>4.6.2. Factors affecting teacher autonomy support .....</b>	<b>87</b>
<b>REFERENCES .....</b>	<b>109</b>
<b>APPENDICES</b>	
<b>CURRICULUM VITAE</b>	

## LIST OF TABLES

	<u>Page</u>
<b>Table 3.1.</b> Summary of Research Questions, Data Collection Tools, and Data Analyses .....	58
<b>Table 4.1.</b> Descriptive Observation Sheet Statistics of Perceived Teacher Autonomy Support and Students' Collective Engagement at the Beginning, in the Middle, at the End of the Semester.....	61
<b>Table 4.2.</b> Descriptive Statistics of Perceived Teacher Autonomy Support (LCQ) and Student Engagement (FASEQ) at T1, T2, and T3.....	62
<b>Table 4.3.</b> Correlation Matrix of Perceived Teacher Autonomy Support and Student Engagement at the Beginning, in the Middle, and at the End of the Semester .....	64
<b>Table 4.4.</b> Hierarchical Multiple Regression Analysis at the Beginning of the Semester (Dependent Variable: Perceived Teacher Autonomy Support).....	66
<b>Table 4.5.</b> Hierarchical Multiple Regression Analysis in the Middle of the Semester (Dependent Variable: Perceived Teacher Autonomy Support).....	68
<b>Table 4.6.</b> Hierarchical Multiple Regression Analysis at the End of the Semester (Dependent Variable: Perceived Teacher Autonomy Support).....	69
<b>Table 4.7.</b> Multilevel Regressions with the Four Student Engagement Components at the Beginning (Time 1), in the Middle (Time 2), and at the End (Time 3) of the Semester Predicting Perceived Teacher Autonomy Support.....	70

## LIST OF FIGURES

	<u>Page</u>
<b>Figure 2.1.</b> Four interrelated aspects of students' engagement.....	14
<b>Figure 2.2.</b> Four interrelated dimensions of student engagement explaining positive learning outcomes with unique contribution of agentic engagement.....	27
<b>Figure 3.1.</b> Confirmatory Factor Analysis (CFA) of FASEQ.....	55
<b>Figure 3.2.</b> Confirmatory Factor Analysis (CFA) of LCQ .....	56
<b>Figure 4.1.</b> Dimensions of Student Engagement .....	72
<b>Figure 4.2.</b> Factors Affecting Student Engagement from Student Perspective .....	75
<b>Figure 4.3.</b> Students' Suggestions to Enhance Student Engagement.....	81
<b>Figure 4.4.</b> Teacher Autonomy Support: the Teacher's Perspective .....	85
<b>Figure 4.5.</b> Factors Affecting Teacher Autonomy Support: the Teacher's Perspective.	88
<b>Figure 4.6.</b> Suggestions to Enhance Student Engagement.....	91

## CHAPTER 1

### 1. INTRODUCTION

Classrooms are complex environments consisting of a diverse range of students who are involved in various activities during a lesson. Some of these students listen to their teacher carefully, pay attention to the instruction, raise their hands to answer their teacher's questions, and even ask questions and require explanations about the content of the lesson. Contrarily, some other students do not concentrate on the lesson and are interested in irrelevant activities; some of them are absorbed by an off-the-subject material such as a novel or even a textbook of another course, and some of them try to distract their peers' attention by talking to them, some of them gaze outside the window and daydream. As it is seen, students demonstrate varying levels of involvement that is they are engaged at varying levels during lessons. The varying levels of involvement is considered to be due to the satisfaction of students' psychological needs namely, autonomy, competence, and relatedness according to Self-Determination Theory (SDT). Basically, the need for autonomy refers to students' demand to be free from control and be in charge of their own learning on the extent to which they receive their teachers as autonomy supportive (Jang, Kim, & Reeve, 2016; Patall, Steingut, Vasquez, Trimble, Pituch, & Freeman, 2017; Reeve, Cheon, & Jang, 2019; Lee & Reeve, 2012). Autonomy supportive teaching satisfies students' need for relatedness and sense of belonging as well as their need for autonomy (Cheon, Reeve, & Song, 2016; Standage, Duda, & Ntoumanis, 2006). Recently, it has also been proposed that this relationship between student engagement and teacher autonomy support is reciprocal. That is, teachers adapt their teaching in accordance with their students' engagement levels (Matos, Reeve, Herrera, & Claux, 2018; Patall, Pituch, Steingut, Vasquez, Yates, & Kennedy, 2019; Reeve, Jang, Shin, Ahn, Matos, & Gargurevich, 2022; Reeve et al., 2019; Wakefield, 2016). Therefore, student engagement and teachers' autonomy supportive behaviors will be scrutinized in the current study.

Considering this aim in this chapter following the background to the study the statement of the problem and the aim of the study will be presented. Research questions will also be provided afterwards.

## **1.2. Background to the Study**

Engagement is a broader concept used to refer to the varying forms of involvement levels of the students in a lesson. In basic terms, student engagement is defined as the students' active involvement in a learning task (Christenson, Reschly and Wylie, 2012). Student engagement consists of four major dimensions: behavior, emotion, cognition, and agency (Fredricks, Blumenfeld, & Paris, 2004; Reeve and Tseng, 2011; Wang, Bergin, & Bergin, 2014). Behavioral engagement means learners' ability to demonstrate required behaviors in the classroom such as participating, working on the task, listening to the teacher, and following the directions (Cooper, 2014; Reeve and Tseng, 2011; Fredricks et al., 2004). Cognitive engagement is the amount of the mental power spent on learning such as contemplating the content, tackling the material, and challenging herself mentally (Fredricks et al., 2004). It is the degree to which students are actively thinking about and processing the material they are learning. Emotional engagement is students' feelings regarding the class such as enjoyment, comfort, interest, and eagerness (Fredricks et al., 2004; Oga-Baldwin & Nakata, 2017). In other words, emotional engagement refers to the extent to which students are emotionally invested in their learning and care about the material they are studying. Moreover, considering that the students receive instruction through the reciprocal relationship between the student and the teacher, Reeve & Tseng (2011) proposed that student contribution to the instruction should also be included as another dimension. This fourth dimension is named agentic engagement and it is related to the constructive input of learners such as asserting their choice, making a suggestion or a contribution, asking questions, expressing needs and opinions, specifying interests, and asking for assistance (Reeve & Tseng, 2011).

Although engagement can develop separately in four dimensions of behavior, cognition, emotion; agency; the synergetic combination of these dimensions can create a holistic experience of student engagement in the classroom (Bowden et al., 2021; Fredricks et al., 2004; Reeve & Tseng, 2011). The collaborative combination of these dimensions of student engagement such as attending school and participating in and being attentive to instructional tasks is considered as crucial element to utilize for the achievement of favorable learning outcomes (Appleton, Christenson, Kim, & Reschly, 2006; Fredricks et al., 2004; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Lei, Cui, & Zhou, 2018; Oga-Baldwin, 2019; Reeve, Cheon, & Jang, 2020; Shernoff, 2013; Zhang, 2020). In other words, students with high levels of engagement have higher levels of

academic achievement (Casuso-Holgado, Cuesta-Vargas, Moreno-Morales, Labajos-Manzanares, Barón-López, & Vega-Custa, 2013; Karabıyık, 2019; Paloş, Maricuțoiu, & Coestea, 2019; Reeve & Lee, 2014; Gunuc, 2014), greater levels of motivation (Oga-Baldwin & Nakata, 2017; Reeve & Lee, 2014), and increased self-efficacy rates (Lin, 2021).

Besides the variety of studies that are mentioned above, asserting that student engagement as a whole is correlated with high-quality learning outcomes, there has been another bulk of research investigating the sub-components of student engagement in relation to the level of attaining favorable learning outcomes. However, this relationship between the dimensions of student engagement and learner success in reaching the favorable outcomes is a more complex issue. Namely, each dimension of student engagement i.e., behavioral engagement, cognitive engagement, emotional engagement, and agentic engagement, tend to correlate with achieving targeted outcomes with a varying degree of effectiveness. For example, in Brallier's (2020) study, behavioral engagement was found to have a significant relationship with college students' overall achievement while emotional and cognitive achievement did not predict student achievement uniquely. On the other hand, Jelas, Azman, Zulnaidi, & Ahmad (2016) demonstrated that cognitive engagement was the best predictor of adolescent learners' achievement however, behavioral engagement did not correlate with students' achievement and emotional achievement did not contribute to the achievement uniquely at all. Whereas Schmidt, Rosenberg, & Beymer (2018) showed that high school students' behavioral engagement in tackling a science task is dependent on their cognitive and emotional engagement levels. Altogether, these studies have demonstrated that the relationship within the sub-dimensions of student engagement and between each dimension and the educational attainment levels of the students is apt to show variety.

In addition to being varied, this relationship between sub-dimensions of student engagement and desired learning outcomes tends to be at either low or moderate level. In other words, although the studies demonstrate a change in achievement due to high student engagement, this prediction is generally mediocre (Lei et al., 2018; Reeve, Cheon, & Jang, 2020a). These studies have investigated student engagement as a three-dimensional construct excluding agentic engagement while including only behavioral, cognitive, and emotional engagement.

Considering the idea of a modest relationship between student engagement and achievement might stem from misconfiguration of student engagement that is, the absence of the newly introduced fourth dimension, agentic engagement might affect the results in the previous studies, two studies were carried out by Reeve et al. (2020a). The findings of these two studies indicate that agentic engagement besides other factors should be considered in the research of the relationship between achievement and teacher autonomy support and engagement levels. Agentic engagement helps learners create an optimal state of learning through its proactive and initiative aspects (Reeve, 2013; Reeve et al., 2022).

In light of the studies mentioned, the inclusion of agentic engagement as the fourth sub-component of student engagement could augment the explanatory qualification of student engagement in attaining aimed objectives. Therefore, in this study, all four sub-components are included.

For more than seventy years, student engagement has been a flourishing research area for scholars (Kuh, 2009). To explain the relationship between student engagement and learning, researchers have been utilizing various theories and examined the issue in relation to these theories, including Self-Determination Theory (Deci and Ryan, 1985) and autonomy-supportive teaching (Reeve, 2016). According to Self-Determination Theory (STD), students have three basic psychological needs namely, autonomy, competence, and relatedness. Basically, the need for autonomy refers to students' demand to be free from control and be in charge of their behaviors and choices, the need for competence indicates the urge of feeling capable of accomplishing intended learning outcomes and being effective in the interaction with the surrounding, and the need for relatedness points to the sense of belonging and the need to feel connected to other people in a warm and caring relationship (Cheon et al., 2016; Deci & Ryan, 2000). Among the aspects of this controlling or supportive social context, teachers' autonomy-supportive motivating style is especially important because students' engagement level depends on the extent to which they receive their teachers as autonomy-supportive (Jang et al., 2016; Patall et al., 2017; Reeve et al., 2019; Reeve, 2012).

In this respect, a number of research has displayed that teachers' autonomy support increases students' motivation and engagement levels (Cheon, Reeve, & Moon, 2012, Cheon et al., 2016; Cheon & Reeve, 2015; De Meyer, Soenens, Vansteenkiste, Aelterman, Van Petegem, & Haerens, 2016; Parker, Parris, Lau, Dobbins, Shatz, Porush,

& Wilkins, 2021; Patall, Hooper, Vasquez, Pituch, & Steingut, 2018; Patall et al., 2017; Wei, Zhang, & Bobis, 2020). That is, an increase in perceived autonomy support levels of teachers increased students' engagement levels in all four sub-dimensions namely, behavioral, cognitive, emotional, and agentic engagement (Núñez & León, 2019). These studies indicate that teacher autonomy support is related to student engagement to a quite high degree.

Considering the relationship between student engagement and teacher autonomy support is mutual, another body of literature explained how student engagement might affect teacher autonomy support behaviors. The researchers have revealed that teachers altered their way of teaching in relation to autonomy support according to their students' engagement levels (Matos et al., 2018; Patall et al., 2018; Reeve, Cheon, & Yu, (2020b). Although these studies have demonstrated that teacher autonomy support is affected by student engagement, the extent (variance) to which teachers' autonomy supportive behaviors are explained by student engagement still needs further investigation.

Besides, the problem of what kind of engagement behaviors of students lead teachers to be more autonomy supportive or what kind of autonomy-supportive teacher behaviors result in more engaged students is still in question. Therefore, in addition to student engagement and its role in autonomy-supportive teacher behaviors, the focus of this study will be students' engagement behaviors that might lead teachers to be more autonomy supportive and teachers' autonomy supportive behaviors that might cause students to be more engaged.

### **1.3. Statement of the Problem, Aim, and Research Questions**

Some studies in the available literature (Matos et al., 2018; Patall et al., 2019; Reeve et al., 2020a) put forward, student engagement in classroom is a challenging issue for teachers. Although students might be involved in the lesson by doing the task (behavioral engagement), feeling positive emotions towards the lesson and the classroom (emotional engagement), and utilizing some strategies while internalizing the information (cognitive engagement), this might not be enough to create the optimal environment for learning. Students need to be agenticly engaged in the lesson by taking more efficient actions to enhance their learning. To realize this, teachers need to demonstrate autonomy-supportive behaviors to satisfy their students' inner autonomy needs.

Some of the studies have shown that when students are agentively involved in a lesson, they receive more autonomy support from their teachers (Patall et al., 2019; Matos et al., 2018). On the other hand, it has also been demonstrated by the studies that when teachers provide autonomy support to the students, students become more agentively engaged in the lesson (Reeve et al., 2020a; 2020b; Reeve & Shin, 2020). As a result of these studies, considering this relation to be reciprocal, scholars also carried out longitudinal studies to observe how this reciprocal relationship between agentic engagement and teacher autonomy support develops over time and have found that when teachers care for the students' autonomy, students become more responsible for their learning and assertive in the class and within time, this agentic engagement leads teachers to become more autonomy supportive (Patall et al., 2019; Reeve et al., 2020b; Reeve et al., 2022).

However, the review of related literature revealed that these studies exclusively relied on student reports regarding their agentic engagement and perceived teacher autonomy support. Although there has been research including teachers' perspectives, depending on only one single group of participants' viewpoints i.e., either students or teachers, might result in response bias. To avoid this bias, an observation carried out by an external observer could be included. (Patall et al., 2019). Gathering data from three perspectives might result in gaining a clearer view of the actual behaviors of students' agentic engagement and teachers' autonomy-supportive motivating style.

Although students' agentic engagement has been found to affect teachers' motivating autonomy support levels to a great degree, this might not always be the case. That the students communicating their needs and asking for explanations might not always result in adaptations in the teachers' instruction. Some teachers might react negatively to their students' assertiveness and their desire to involve actively in the decision process and might try to establish authority (Matos et al., 2018; Reeve et al., 2022).

When we consider English language classrooms, teacher autonomy support is especially important because these classrooms are generally the only places in which students are given the opportunities to practice in EFL context. In English language classrooms where English is taught as a foreign language, the teacher is one of the main sources of input and therefore their behaviors toward students are of utmost importance (Bagci & Aydin, 2021; Civabas, 2019). However, English language learners are silent

and unwilling to participate in classroom activities due to being raised according to collectivist cultural norms (Griffiths, Oxford, Kawai, Park, Ma, & Yang, 2014; Xie, 2010). These norms put great emphasis on the importance of conveying knowledge and those possessing it (Parris-Kidd and Barnett, 2011). Since the students regard their teachers as the authority in class and the holder of the knowledge, they do not want to disrespect their teachers by challenging or interfering with questions (Xie, 2010).

As a society shaped by collectivist norms (Tatar, 2005), similar problems are also observed in EFL classrooms with Turkish students. In a similar vein with far Eastern cultures, Turkish society raises children as people who do not speak too much because it is widely acknowledged that a well-mannered child should be quiet (Cagiltay and Bichelmeyer, 2000). Turkish students learning English as a foreign language are also expected to listen attentively, respond only when called upon, not ask any questions, and not demonstrate any behavior that can be interpreted as disrespectful and as a threat to the teacher's authority (Tatar, 2005). However, although a few in number, currently studies in second language research have demonstrated that students' active engagement in the classroom may direct them into paying more attention to the language structures and their meanings, contemplating their target language usage, and completing the activities and assignments, which all augment their second language performance eventually (Zhang, Dai, & Ardasheva, 2020).

Although studies have demonstrated that student engagement is affected by teacher autonomy support, there has been no research investigating how student engagement affects teachers' autonomy supportiveness in the Turkish context. That is, the review of available literature has revealed that there has been no research examining the relationship between all four dimensions of engagement especially agentic engagement and teacher autonomy support in Turkish context. Since agentic engagement is only a "potential catalyst" (p. 590) to generate further teacher autonomy support, what kind of student input might lead teachers to become more autonomy supportive needs to be investigated (Matos et al., 2018).

Since there has been no attempt to explore the longitudinal increase in teacher autonomy support concerning student engagement during a period of time in Turkish context in the present study another aim is to search the developmental aspect of teacher autonomy support and student engagement relationship. For this purpose, a longitudinal research covering 16 weeks, that is one semester of a school year, is conducted.

As mentioned earlier, in the available studies most of the data were gathered from a single perspective, either students or teachers. To triangulate the data could be possible by adding an external observer (Patall et al., 2019). Gathering data from multiple perspectives might result in gaining a clearer view of the actual behaviors of students' agentic engagement and teachers' autonomy-supportive motivating style. Moreover, no research has investigated what kind of student engagement behaviors of students lead teachers to be more autonomy-supportive and what kind of autonomy-supportive behaviors of teachers result in more student engagement both in the national and international context to the best of the researchers' knowledge. So, a qualitative dimension is also added to the present study.

A more fine-grained qualitative approach utilizing qualitative methods analyzing both students' and teachers' perceptions regarding student engagement, teacher autonomy support, and the relationship between these concepts are required for a deeper understanding (Patall et al., 2019). Consequently, the current study's first goal is to investigate to what extent student engagement explains the changes in teacher autonomy-supportive motivating style. Secondly, it is aimed to explore what factors, including the engagement behaviors of students guide teachers in providing more autonomy support to their students. Considering the reciprocal relationship between student engagement and teachers' autonomy-supportive motivating style, it is also intended to what factors lead students to become more engaged. Accordingly, the research questions of the current study are:

1. What are the levels of student engagement and perceived teacher autonomy support at the beginning, in the middle, and at the end of the semester?
2. What is the relationship between student engagement (behavioral, emotional, cognitive, and agentic engagement) and perceived teacher autonomy support at the beginning, in the middle, and at the end of the semester?
3. To what extent does student engagement (behavioral, emotional, cognitive, and agentic engagement) explain the changes in perceived teacher autonomy support at the beginning, in the middle, and at the end of the semester?
4. To what extent does student engagement (behavioral, emotional, cognitive, and agentic engagement) explain the changes in longitudinal increases in perceived teacher autonomy support?

5. What are the factors affecting teacher autonomy support?
6. What are the factors affecting student engagement?

#### **1.4. Importance of the Study**

The current study is important for three main reasons. Firstly, this study is important for its attempt to investigate student engagement's predictive role in explaining the change in teacher autonomy support. As some of the previous research (Benlahcene, Awang-Hashim, Kaur, & Wang-Din, 2021; Jiang & Zhang, 2021; Reeve et al., 2020a, 2019; Reeve & Shin, 2020) has suggested that when teachers demonstrate more autonomy-supportive behaviors, their students become more agentively involved in the lesson. Moreover, some studies have found that teachers occasionally utilize their students' engagement behaviors to adjust their instruction to be more autonomy supportive (Matos et al., 2018; Patall et al., 2019; Reeve et al., 2022). In this respect, this study might be considered as one of the first attempts to demonstrate the extent to which students' engagement explains variations in teacher' autonomy supportiveness in Turkish context.

Additionally, the longitudinal increase in teacher autonomy support in relation to student engagement is examined, which might provide insights in improving teacher autonomy support for greater student engagement in the classroom. In order to observe the longitudinal increase in perceived teacher autonomy support in relation to student engagement, this study is designed as a longitudinal research, in which the data is collected at the beginning (Time 1 – T1), middle (Time 2 – T2), and end of 16 week semester (Time 3 – T3).

Besides, this is a multilevel study because it allows us to analyze potential discrepancies in several interconnected variables and the interactions between these variables (Flunger, Trautwein, Nagengast, Lüdke, Niggli, & Schnyder, 2021). In this study, the effect of student-level factors, i.e., student engagement, on perceived teacher autonomy support are being investigated. Therefore, this study's Level 2 is labeled as student level (student engagement and its sub dimentions). The effect of student engagement on perceived teacher autonomy support is investigated at three different time points. Repeated measures in a longitudinal study are also considered as a nested data structure (Bauer & Curran, 2016; Peugh, 2010), and it helps grouping successive data within the individual subjects (Buxton, 2008). Thus Level 1 (different time points) of this

study is labeled as time waves (repeated measures). In this study, student engagement has a 2-level cross-classified hierarchical structure with repeated measures (Level 1, 3 waves) nested within students (Level 2, N= 212), which enables us to take a multilevel perspective.

Secondly, the current study is valuable for its endeavor to reveal the factors that might affect student engagement as well as the factors that might have an impact on perceived teacher autonomy support by including both student and teacher perspectives. This study aims at explaining the factors including student engagement that help students create a more supportive learning environment, acquire greater motivational gains, and function more effectively such as developing skills and performing better at the tasks, and enhancing behavioral, emotional, cognitive, and agentic engagement levels in the lessons (Reeve et al., 2022). However, to achieve their goals, students need a teacher who supports these assertive and initiative acts. That is to say, if students' attempts to provide input are not interpreted as meant to be and disappear without being noticed by an authoritarian teacher, the efforts of the students cannot be effective (Reeve et al., 2022). As one of the aims of the current study is to expose what kind of factors including student engagement lead teachers to be more autonomy supportive, the findings of the study might be utilized in fostering student engagement. That is to say, specifying what kind of student engagement behaviors result in more teacher autonomy-supportive or controlling behaviors might be beneficial in developing teacher insight. Specifically, teachers can be trained on students' engagement behaviors and their awareness can be raised not to take these actions negatively.

In addition to determining factors including student engagement that might affect teacher's autonomy supportiveness, this study also aims to uncover teachers' autonomy-supportive behaviors that might foster student engagement. Namely, if teachers act in a more autonomy-supportive way by taking students' point of view, giving satisfactory explanations about the instruction, exercises, tasks, and rules, acquiring an invitational language, recognizing students' negative feelings, and being patient at the beginning of this relationship (Reeve, Cheon, & Yu, 2020), their students become more assertive and articulative about their needs and opinions. In this way, the students ask more questions, require more explanations and they demand to be involved in the decision-making process through their agency in the continuation of their relationship. Eventually, this kind of engagement affects the teachers in turn, and they adjust their instruction according to their

students' needs and expectations. Thus, the necessary learning climate is created reciprocally by both the teacher and the students. As this study aims to unveil effective teacher autonomy-supportive behaviors in terms of student engagement, the findings of the study might provide insights regarding the ways to construct optimal learning environments for students. Determining what kind of teachers' autonomy support behaviors have a facilitating or debilitating impact on student engagement might be crucial for teacher development. In the light of the results of the current study, training programs on how to be autonomy-supportive teachers for both pre-service and in-service teachers can be designed.

Thirdly, this study is important for its methodological considerations. Although the reciprocal relationship between student engagement and teacher autonomy support has been a research topic for many scholars, the issue has been handled quantitatively. In other words, although many studies have proven that teacher autonomy support enhances student engagement and student engagement leads teachers to be more autonomy supportive, what factors might affect teacher autonomy support and student engagement have not been analyzed from a qualitative perspective. As this study uses interviews, stimulated recall protocols, and observations in addition to quantitative data collection instruments such as scales, more profound and extensive data are gathered on teacher autonomy-supportive behaviors, student engagement, and the effectiveness of these two concepts on each other. By this way, internal validity is ensured through data triangulation (Creswell & Creswell, 2018).

## CHAPTER 2

### 2. LITERATURE REVIEW

In this chapter, the concept of student engagement and its four sub-dimensions i.e., behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement will be introduced first. Secondly, theoretical background including Self Determination Theory and teacher motivating style will be presented. In Self Determination Theory part, the underlying premises of the theory and the constituting mini theories i.e., basic psychological needs theory, cognitive evaluation theory, organismic integration theory, goal contents theory, and causality orientations theory will be given. In teacher motivating style part, teacher autonomy support, teacher provision of structure, and teacher involvement will be mentioned. Lastly, related studies on the relationship between teacher motivating style and student engagement will be presented.

#### 2.1. Student Engagement

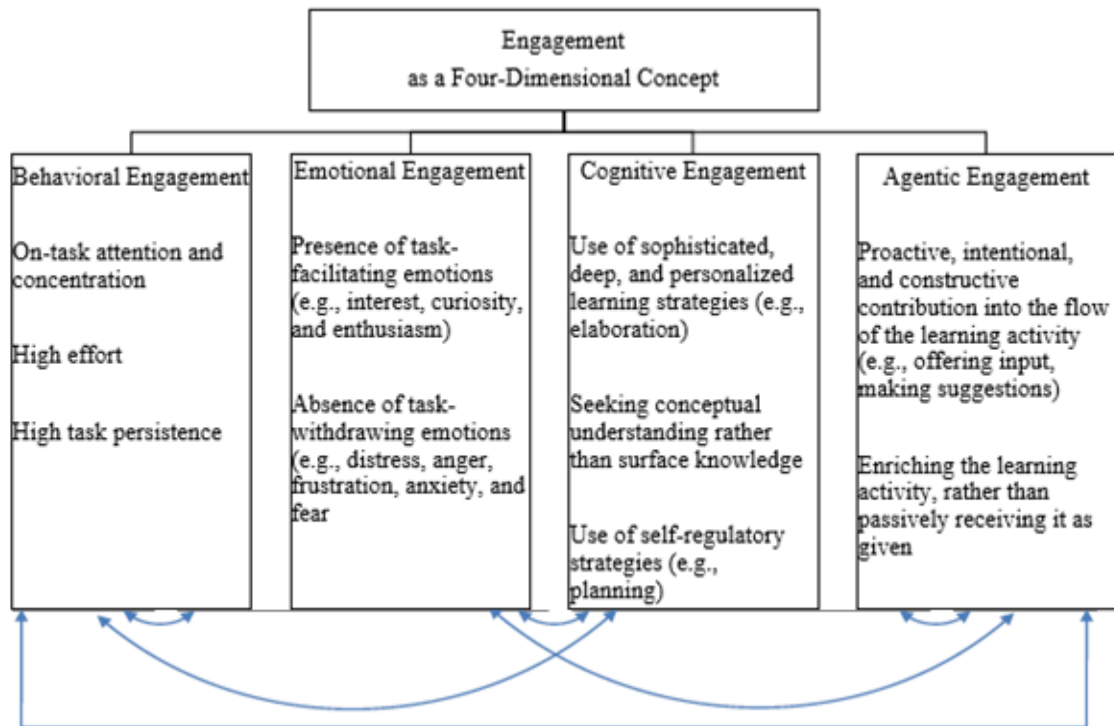
In the educational context, engagement is students' active involvement in the lesson and one of the highly valued requirements of learning (Skinner, Pitzer, Steele, 2016). Although it has been a fruitful research area for scholars, there has been no consensus on the definition of student engagement. From the educational perspective, engagement is referred to as student engagement and is defined as the learners' behaviors regulated around the execution of a specific learning activity or a body of learning activities (Wellborn, 1992, p. 35). In this definition, the focus is on the "learning activity" because according to this definition, engagement is treated as a "domain-specific event" which implies that the students are involved in a specific activity for a particular period of time or a specific course for a longer period of time such as a couple of weeks (Reeve, 2012, p. 150). Another educational definition refers to engagement as learners' eagerness to involve in everyday school activities such as being present in class, handing in due assignments, and acting by teachers' directions (Chapman, 2002). This definition focuses more on students' behaviors of obedience to school requirements. From a motivational perspective, engagement is defined as the observable demonstration of motivation (Skinner, Kindermann, Connell & Wellborn, 2009). In this definition, engagement is linked to the concept of motivation as motivation is concerned with the underlying

sources of energy, purpose, and durability while engagement is pertinent to the way these characteristics are exhibited (Skinner & Pitzer, 2012). These definitions of student engagement have underlined different perspectives by directing the attention to self, classroom, and institution. Though they approach the concept of student engagement from different perspectives, they have one common point, which is the fact that student engagement is learners' conscious deployment of their resources.

The concept of student engagement appeared in the Participation-Identification Model postulated by Finn (1989) as a remedy to decrease dropout levels in high schools and increase school completion levels of students in the USA. According to the Participation-Identification Model, the concepts of dropout and completion are recognized as continuing processes during which student participation leads to success resulting in identification or students' poor performance at school leads to emotional withdrawal (Reschly & Christenson, 2012). In this model, participation refers to behavior and identification indicates affect, which makes up engagement together (Reschly & Christenson, 2012). In other words, student engagement as a two-dimensional concept includes student involvement behaviors such as showing effort, participating in classroom activities, and extracurricular activities, and exhibiting positive behavior (Finn, 1989). In this classification, the emotional constituent involves feelings such as interest, having a sense of belonging, and showing positive attitude toward learning (Wilms, 2003).

More recently, other researchers have included cognitive engagement as the third dimension (Appleton, Christenson, Kim, and Reschly, 2006; Fredricks et al., 2004). Cognitive engagement is related to relatively unobservable internal traces such as self-regulation, relating schoolwork to personal goals, and being aware of the value of the learning process (Appleton et al., 2006). Additionally, recognizing that student engagement and teacher motivational style and instructional behaviors are in a reciprocal relationship that is, the teacher autonomy support in the classroom has an impact on students' behavioral, emotional, and cognitive engagement and the students' engagement behaviors such as showing boredom, less effort, and distraction lead the teacher to be more supportive or controlling. Most recent studies has introduced agentic engagement as the fourth dimension of the student engagement (Reeve & Tseng, 2011). Student engagement as a four-dimensional concept consists of behavioral engagement referring to acting, emotional engagement related to feelings, cognitive engagement pertinent to thinking, and agentic engagement connected to communicating (Reeve, 2013; Wang &

Eccles, 2013). Figure 1 below summarizes the concept of student engagement and its four dimensions.



**Figure 2.1.** Four interrelated aspects of students' engagement (Reeve, 2012)

As Figure 1 demonstrates, student engagement is comprised of four distinct yet intercorrelated and reciprocally supporting dimensions paving the way to success (Christenson et al., 2012; Reeve & Tseng, 2011; Fredricks et al., 2004; Skinner et al., 2009; Reeve, 2011). Student engagement is a meta-construct combining behavioral, emotional, cognitive, and agentic engagement in a meaningful way providing a richer examination of learners' traits (Reeve & Tseng, 2011; Fredricks et al., 2004). Although engagement is a multidimensional construct consisting of behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement, these dimensions can also be conceptualized and be put into work as individual aspects (Christenson et al., 2012; Reeve, 2013; Sinatra, Heddy, & Lombardi, 2015).

### 2.1.1. Behavioral engagement

Behavioral engagement is portrayed as showing positive conduct such as obeying the classroom and school rules, avoiding undesirable behaviors (Finn, 1989), being involved in the learning process and academic tasks by showing effort and consistency,

paying attention during instruction, and concentrating on the task (Finn, Panno, & Voelkl, 1995; Skinner & Belmont, 1993), and attending extracurricular activities such as being part of a team or taking part in the school governance (Finn et al., 1995). It is more related to students' participation in social, academic, or school-related activities (Fredricks et al., 2004). Particularly in classrooms, behavioral engagement can be described as concentrating on the task, showing high levels of effort, and displaying a high degree of persistence (Reeve, 2020). Students' behavioral engagement can be monitored through various indicators. These indicators can be divided into three categories; attendance, behavior incidents, and participation in classroom activities and school events (Reschly et al., 2020). Specific indicators related to attendance are absence and truancy records in the classrooms (Reschly et al., 2020). Behavior incidents are suspensions, office referrals, and detention. (Reschly et al., 2020). Indicators related to participation are preparation before class, involvement in class activities, and attendance to extracurricular events (Reschly et al., 2020). Among the indicators of students' behavioral engagement, the category of participation has been found to be the most related one to academic achievement (Fredricks et al. 2004).

### **2.1.2. Emotional engagement**

Emotional engagement refers to the presence of feelings such as interest, inquisitiveness and eagerness that support the process of engagement in a task, and the absence of feelings such as stress, anger, and anxiety that adversely affect the process of engagement in a task (Reeve, 2012). These positive or negative feelings are related to teachers, peers, and the institution, which are thought to influence the willingness to participate in a task (Fredricks et al., 2004). These feelings which include emotional engagement such as interest are consistent with the constructs elaborated in motivational studies (Fredricks et al., 2004). However, emotional concepts in motivation research distinguish between domain-specific interest directed toward a particular activity or situation and personal interest which is more stable such as the desire to accomplish a difficult task (Krapp, Hidi & Renninger, 1992 as cited in Fredricks et al., 2004). Motivation is considered as a more subjective phenomenon experienced in a relatively private manner and is considered to be an antecedent to student engagement which is an observable construct (Reeve, 2012).

Recently, considering that student engagement refers to actions and behaviors of the students and emotional engagement represents students' affection levels and experiences, emotional engagement has begun to be seen as a variable predicting changes in student engagement—rather than as a dimension of it (Reeve et al., 2020a). Namely, emotional engagement is considered more like motivation, which is accepted as a deeply ingrained antecedent of engagement (Eccles & Wang, 2012). Therefore some researchers suggested it to be considered as a factor affecting student engagement rather than a sub-dimension of student engagement (Reeve, 2012).

### **2.1.3. Cognitive engagement**

Cognitive engagement is defined as students' ability to employ complex and customized learning strategies, using self-regulatory skills, and looking for abstract comprehension rather than surface-level information (Reeve, 2012). Cognitive engagement as a sub-dimension of student engagement emerges from the studies on school engagement, and learning and on strategic and self-regulated learning (Fredricks et al., 2004). From a psychological perspective, cognitive engagement is different from behavioral engagement as it relates to high-quality psychological skills such as being flexible in problem-solving and accepting challenging tasks (Connell & Wellborn, 1991). From the learning and instruction perspective, cognitive engagement pertains to utilizing learning strategies and regulating learning (Fredricks et al., 2004). Cognitively engaged learners employ metacognitive strategies such as planning, evaluating, and monitoring (Zimmerman, 1990), trying to understand the material and focusing on the work by keeping the distractions away (Corno, 1993).

### **2.1.4. Agentic engagement**

Agentic engagement is defined as “students' constructive contribution to the flow of the instruction they receive” (Reeve and Tseng, 2011, p. 258). Among the four dimensions of student engagement, agentic engagement is relatively a newer component and distinctive from other sub-components of student engagement in two unique ways: it is proactive and reciprocal (Reeve & Shin, 2020). In terms of proactivity, agentively engaged students act both before and during a learning experience (Reeve & Shin, 2020). Regarding reciprocity, agentively engaged students provide input and cooperate with the

teacher intentionally to expand and reconstruct the learning opportunities as valuable experiences (Patall et al., 2019). Agentically engaged students cultivate the learning activities instead of receiving them as passive learners (Reeve, 2020).

Students show engagement through behavioral, emotional, and cognitive involvement in the instruction they receive, and the magnitude of this exertion, the feeling of fulfillment, and strategic thinking predict the changes in the accomplishment of educational outcomes such as academic achievement (Reeve, 2013). In terms of behavioral, emotional, and cognitive engagement, the teacher gives instruction such as reading a book or doing a task, and students might respond with or without exertion, interest, and critical reasoning while tackling the task (Reeve & Shin, 2020). However, students are capable of doing more than just being behaviorally, cognitively, and emotionally engaged; they also proactively contribute to the flow of the lesson by asserting their agency (Patall et al., 2019). These students who engage agentively provide input through suggestions and asking questions, communicate their needs, preferences, and interests, and ask the teacher for explanations and clarifications regarding the aim and importance of the tasks (Patall et al., 2019; Reeve et al., 2020). In this way, agentively engaged students make learning more enjoyable, more appealing, and more personal for themselves through these constructive and proactive attempts (Reeve, 2013; Reeve & Tseng, 2011). Moreover, agentic engagement is said to be uniquely predicting academic achievement as well as explaining and having a statistically significant relationship with the other sub-dimensions of engagement namely, behavioral, cognitive, and emotional engagement (Patall et al., 2019; Reeve, 2013; Reeve & Tseng, 2011).

## **2.2. Theoretical Background**

Student engagement is an essential requirement for the successful achievement of educational goals (Wang & Fredricks, 2016). When students are engaged in learning they, concentrate on learning tasks with more attention and participate in the learning process more vigorously, which brings about positive results such as an advanced level of learning, improvement of skills, and attaining academic success (Cooper, 2014; Reeve, 2012; Reeve & Tseng, 2011). Considering the importance of student engagement in achieving desired outcomes in educational settings, various theories in the literature have been utilized to explain student engagement. Among these theories, Self Determination

Theory (Deci and Ryan, 1985) is one of the most prominent ones (Cheon et al., 2012) and the one the present study takes as basis, which is composed of 5 mini theories: basic psychological needs theory, cognitive evaluation theory, organismic integration theory, goal contents theory, and causality orientations theory. These theories are explained below successively, together with the other related topics; teacher motivating style which involve teacher autonomy support, teacher provision of structure, and teacher involvement.

### **2.2.1. Self determination theory**

Within the Self Determination Theory (SDT) framework, engagement is a motivated behavior initiated by students as a pathway to desired educational goals (Skinner, Kinderman, Connell, & Wellborn, 2009; Skinner, Kindermann, & Furrer, 2009). Student engagement is viewed as an outcome of motivational sources (Ryan & Deci, 2017; Reeve, 2013; Reeve, 2012). SDT postulates that particular teaching behaviors are in relation to student engagement indirectly and this indirect relationship is mediated by students' motivation (Ryan & Deci, 2016; Reeve, 2012). Specific teaching styles which are considered as autonomy-supportive boost learners' intrinsic motivation (Haerens, Aelterman, Vansteenkiste, Soenens, & Petegem, 2015), and eventually these unobservable underlying resources turn into observable manifestations as student engagement (Reeve, 2012; Jang, Reeve, Ryan, & Kim, 2009).

SDT framework mainly focuses on the social circumstances which may reinforce or debilitate human growth (Ryan and Deci, 2017). This framework focuses on different aspects of human motivation by asking the questions of who, what, where, when, why, and how (McEowin & Oga-Baldwin, 2019). To answer these questions, SDT provides five mini theories. These mini theories are basic psychological needs theory, cognitive evaluation theory, organismic integration theory, goal contents theory, and causality orientations theory. Each of these five mini theories works as a gear in a machine and cooperates harmoniously within the SDT framework. In general terms, according to SDT, learners' motivational orientation can be advanced from amotivation to intrinsic motivation by fulfilling their need for autonomy, competence, and relatedness in a social environment (Chiu, 2021).

### ***2.3.1.1. Basic psychological needs theory***

Basic psychological needs theory is interested in how the fulfillment of psychological needs as inner motivational resources leads to higher motivation levels and increased engagement (Reeve, 2012). According to basic psychological needs theory, the psychological needs are autonomy, competence, and relatedness (Deci & Ryan, 2011). As the theory puts forward, fulfillment of autonomy, competence, and relatedness needs lead students to look for novelty, chase optimal challenge, practice, and enhance their abilities (Reeve, 2012).

In general terms, autonomy refers to the inner approval of one's actions (Deci & Ryan, 1985). Autonomous people behave enthusiastically without experiencing disagreement that is felt when doing something unwillingly (Ryan & Deci, 2017). In the classroom, when students are given the opportunities to experience the feeling of psychological freedom, internal locus of causality, and freedom of choice regarding their actions their autonomy need is satisfied (Deci & Ryan, 2000; Reeve, Nix & Ham, 2003). When teachers pay attention to the words they use and choose more inviting vocabulary while talking to their students, they will be more successful in initiating autonomy, enhancing engagement, and ensuring the wellbeing of their students (Reeve, 2016).

The need for competence indicates the urge of feeling capable of accomplishing intended learning outcomes and being effective in interacting with the surrounding (Reeve, 2012). Competence is one of the most prominent factors initiating a number of behaviors like enjoying free time by engaging in fun activities and contemplating on scientific matters (Ryan & Deci, 2017). However, competence is inclined to be affected negatively in that too complicated tasks, negative feedback, or comments undermining one's capabilities might impede the development of competence (Ryan & Deci, 2017). Therefore, teachers are expected to provide constructive feedback and clear instructions in the classroom to meet students' need for autonomy (Reeve, 2016).

The need for relatedness points to the sense of belonging and the need to feel connected to other people in a warm and caring relationship (Cheon, Reeve, & Song; 2016; Deci & Ryan, 2000). People experience the sense of relatedness when they feel being catered by others as well as they become a part of a group of people by contributing to that community (Ryan & Deci, 2017). Learners' need for relatedness is ensured by teachers showing affection, demonstrating concern and paying attention when students

have failure or hardship during the activities in the class right from the beginning (Reeve, 2016).

### ***2.3.1.2. Cognitive evaluation theory***

Cognitive evaluation theory explains how environmental factors affect intrinsic motivation as well as superior performance and contentment (Ryan and Deci, 2017). The theory examines how external circumstances such as appreciation and prize influence intrinsic motivation (Reeve, 2012). It also asserts that external events that affect students' feelings of autonomy and competence will influence their intrinsic motivation inevitably (Reeve, 2012). In terms of learning environments, external events have two basic functional facets: controlling and informational (Deci & Ryan, 1985). The controlling aspect of an external event forces students to act in a certain kind of way, which decreases the level of internal motivation (Reeve, 2012). On the other hand, the informational aspect of an external event conveys competence feedback which is perceived as a reward by the students, increasing students' internal motivation (Reeve, 2012). In this sense, cognitive evaluation theory is of utmost importance as it indicates what kind of classroom conditions lead students to be motivated or hindered intrinsically (Reeve, 2012). The interpersonal platform through which the teacher transmits the instruction in an autonomy-supportive or controlling way predicts crucial variance in intrinsic motivation (Reeve, 2012).

### ***2.3.1.3. Organismic integration theory***

Organismic integration theory deals with extrinsic motivation by tackling the question of why students demonstrate socially crucial but not intrinsically motivated actions (Reeve, 2012). Organismic integration theory argues that learners tend to internalize sides of their social environments and they integrate these sides as motivational processes into their motivation system (Reeve, 2012). In this theory, different types of extrinsic motivation indicate different levels of autonomous motivation. Students' integration and ownership level of a behavior or a way of thinking determine how much autonomy they will experience (Reeve, 2012).

Organismic integration theory provides a continuum from amotivation to controlled motivations, and autonomous motivation (McEown & Oga-Baldwin, 2019). Amotivation

is the personal orientation manipulating learners into believing that they are poor students, and the time and effort put into learning and achievement would be in vain (McEown & Oga-Baldwin, 2019). Controlled motivations, also referred as extrinsic motivation are represented in a continuum including external regulation, introjected regulation, identified regulation, integrated regulation (Dörnyei & Ushioda, 2011). External regulation is the least autonomous type of controlled motivation in which the learners feel that they have no choice but obey (Reeve, 2012). Introjected regulation is a little more autonomous than external regulation and related to students' compliance with external demands to protect their self-worth and not to lose face in front of others (Reeve, 2012). Identified regulation refers to students' awareness of the importance of an external regulation. In identified regulation, learners convert the external regulation into self-approved regulation willingly by internalizing it with a sense of free will and commitment (Reeve, 2012). Integrated regulation is the estimation of intrinsic motivation according to the value of the activity and it demands extensive self-consciousness and reflection (Reeve, 2012). Intrinsic regulation is the complete depiction of intrinsic motivation in which learners experience enjoyment, interest, and a sense of meaning and aim during the learning process (McEown & Oga-Baldwin, 2019).

#### ***2.3.1.4. Goal contents theory***

Goal contents theory focuses on the difference between intrinsic goals and extrinsic goals, postulating intrinsic goals results in enhanced well-being by fulfilling psychological needs while extrinsic goals disregard these psychological needs and bring about ill-being (Reeve, 2012). Intrinsic goals originate from individuals themselves (Ryan & Deci, 2017). Intrinsic goals lead students to fulfill their basic psychological needs, guide them toward well-being, help students create deeper connections with other people, and access to reach freedom and the opportunity for assertiveness (McEown & Oga-Baldwin, 2019).

To be more precise, attaining intrinsic goals such as reaching personal achievements and forming deeper relationships satisfies basic needs. However, pursuing extrinsic goals leads to dissatisfaction even if the extrinsic goals are achieved (Reeve, 2012; Deci & Ryan, 2011). As intrinsic goals activate learners' inner motivational sources, seeking intrinsic goals promotes high-level learning, improved performance,

constant perseverance, and further psychological well-being (Vansteenkiste, Lens and Deci, 2006).

#### ***2.3.1.5. Causality orientations theory***

Causality orientations theory is concerned with the individual differences that have the potential of resulting in diverse developmental outcomes (Ryan and Deci, 2017). In learning environments, some learners activate more autonomous or self-determined directories such as their interests, personal goals, and beliefs to start and manage a classroom activity while other learners depend on more controlling directories such as environmental impetus, social instructions, and pressuring inner voice (Deci & Ryan, 1985).

When students depend more on intrinsically motivated sources in organizing their course of action, they adopt autonomy causality orientation (Reeve, 2012). Autonomy causality orientation refers to actions prompted and governed by one's ambitions and needs (Koestner & Levine, 2023). People with autonomy causality orientation are more likely to experience the events and processes in an autonomously motivated way that they are more inclined to carry on the task and experience ensuing outcomes such as positive emotions and well-being (Hagger & Hamilton, 2021).

When students count more on controlled motivation sources to adapt their attempts, they take up control causality orientation (Reeve, 2012). Control causality orientation is related to behaviors prompted and governed by external elements such as rewards or internal control mechanism such as one's inner voice commanding that a particular task must be done (Koestner & Levine, 2023). People with controlled causality orientation regard events and tasks controlled by external factors such as due dates and tend to refrain from the task and experience consequent outcomes such as negative feelings, ill being, and become more defensive (Hagger & Hamilton, 2021).

#### **2.3.2. Teacher motivating style**

In the SDT framework, students are thought to possess inner motivational resources which lead them to be engaged in the lesson effectively. These motivational resources are autonomy, relatedness, and competence. SDT postulates that fulfillment of these three basic psychological needs by environmental conditions and interpersonal relationships

will eventually lead to motivation and engagement (Cheon et al., 2014; De Loof et al., 2021; Jang et al., 2016). For this reason, SDT is distinguished from other motivational theories and instructional approaches in that SDT hypothesizes that it is the teacher style, way of instruction that stimulates students' inner psychological needs to a degree of fulfillment of psychological needs which leads students to be actively involved in classroom activities (Cheon et al., 2012).

According to SDT, students attain more positive educational results when they are motivated in an autonomy-supportive way by their teachers through building classroom environments that reinforce the students' basic psychological needs i.e., autonomy, relatedness, and competence (Deci & Ryan, 2016). Teaching practices that support autonomy, relatedness, and competence needs of the students might nourish the students' interests and lead them to engage in the learning process voluntarily (Hornstra, Stroet, Eijden, Goudsblom & Roskamp, 2018). Student engagement is promoted when the students' need for autonomy, sincere relationship with peers and the teacher (relatedness), and provision of structure (competence) is fulfilled (Jang, Reeve & Halusic, 2016; Niemiec & Ryan, 2009). This reciprocal and flexible teacher-student interaction in which the teacher respects the students' viewpoints and initiatives with a tone of understanding and supports students' three basic psychological needs is called "motivating style" (Tessier, Sarrazin & Ntoumanis, 2010; Reeve, 2009, 2016). In line with the SDT framework, teacher motivating styles consists of three types. These are teacher autonomy support, teacher involvement, and provision of structure.

### ***2.3.2.1. Teacher autonomy support***

Autonomy is defined as having the freedom to initiate one's actions and to determine when to engage in an activity (Deci & Ryan, 2000). In this sense, teacher autonomy support refers to the identification, nourishment, and development of students' inner motivational sources (Reeve, 2009). Relatedly, autonomy-supportive teaching is instructing in an interpersonal manner with a tone of support and perceptiveness, which is regarded as the provision of students' need for autonomy (Reeve, 2016). Autonomy-supportive teaching includes the effort to comprehend, accept, and be receptive to students' point of view (Ryan & Deci, 2020).

Autonomy-supportive teachers give students the freedom of choice, let students reach their aims in their own way and speed, form their lessons according to their students' needs and interests, give informative justification regarding the tasks and activities during the lesson, communicate in a facilitative and a peaceful manner, and be patient towards their students (Pataall et al., 2019; Reeve, Cheon, & Yu, 2020; Reeve et al., 2019). When autonomy-supportive teachers ask their students to carry out something in class, they provide a logical explanation (Ryan & Deci, 2020). In this way, teachers displaying autonomy-supportive behaviors not only tap into their students' autonomy needs but also support their other needs, that is competence and relatedness (Reeve, 2009). Students' need for relatedness is supported by caring students and by establishing connections with the students which is typically associated with more provision of autonomy (Reeve, 2016). Moreover, students' competence need is provided through constructive feedback and clear instruction which is only effective when it is delivered in an autonomy supportive way (Cheon, Reeve, Vansteenkiste, 2020). On the other hand, more controlling teachers try to repress their students' thoughts, feelings, or behaviors in certain manners without showing any response to students' views (Ryan & Deci, 2020).

Teachers' autonomy-supportive motivating behaviors are considered to be the indicator of students' proactive ability to deal with challenges and turn them into meaningful experiences, which is agentic engagement (Jang et al., 2012; Reeve, 2013). This provision of the need for autonomy by the teacher is the most fundamental driving force that motivates students to engage agentively (Reeve & Shin, 2020). When students are proactively and reciprocally involved in a task, autonomy support provided by the teacher promotes the students' dynamic capacity to a place where they show more agentic engagement (Reeve, Cheon, & Yu, 2020). More specifically, when students express their opinions and preferences, autonomy-supportive teachers adapt the lesson in accordance with the students' needs (Reeve & Shin, 2020). Ultimately, students start to perceive the lesson as more enjoyable and relatable at personal level (Reeve & Shin, 2020) and see their autonomy supportive teacher as a source that feeds their attempts to agentively engage in the lesson (Reeve, et al, 2020).

In the classroom context, SDT tries to explain the way classroom circumstances affect students' engagement. According to SDT students can either be inquisitive or uninterested, active or passive, and engaged or disengaged depending on the social context's supportive or controlling conditions (Matos et al., 2018). Among the aspects of

this controlling or supportive social context, teachers' autonomy-supportive motivating style is the most crucial one (Reeve, 2009; Reeve & Reeve, 2012). Autonomy-supportive behaviors are especially important because students' engagement level depends on the extent to which they receive their teachers as autonomy-supportive (Jang et al., 2016; Patall et al., 2017; Reeve et al., 2019; Reeve & Reeve, 2012). Moreover, autonomy-supportive teaching satisfies students' need for relatedness and a sense of belonging as well as their need for autonomy (Cheon et al., 2016; Standage et al., 2006).

### ***2.3.2.2. Teacher provision of structure***

Competence is defined as the feeling of contentment people experience after exerting and showing their potential (Ryan & Deci, 2000). In an educational context, teachers can support their students' need for competence by providing structure (De Loof, Struyf, Boewe-de Pauw, Van Petegem, 2021). Teachers' provision of structure has been defined as supplying the needed information and giving instruction in a supportive manner for students to achieve desired outcomes successfully (Skinner & Belmont, 1993). The provision of structure entails guidance and clarification (Aelterman, Vansteenkiste, Haerens, Soenens, Fontaine & Reeve, 2019). Guiding includes the teaching of strategies, providing feedback, and offering help and assistance in accordance with the students' level and ability to help students feel to achieve intended learning goals (Aelterman et al., 2019). Clarifying refers to transferring expectations to the students in a clear and straightforward manner (Aelterman et al., 2019).

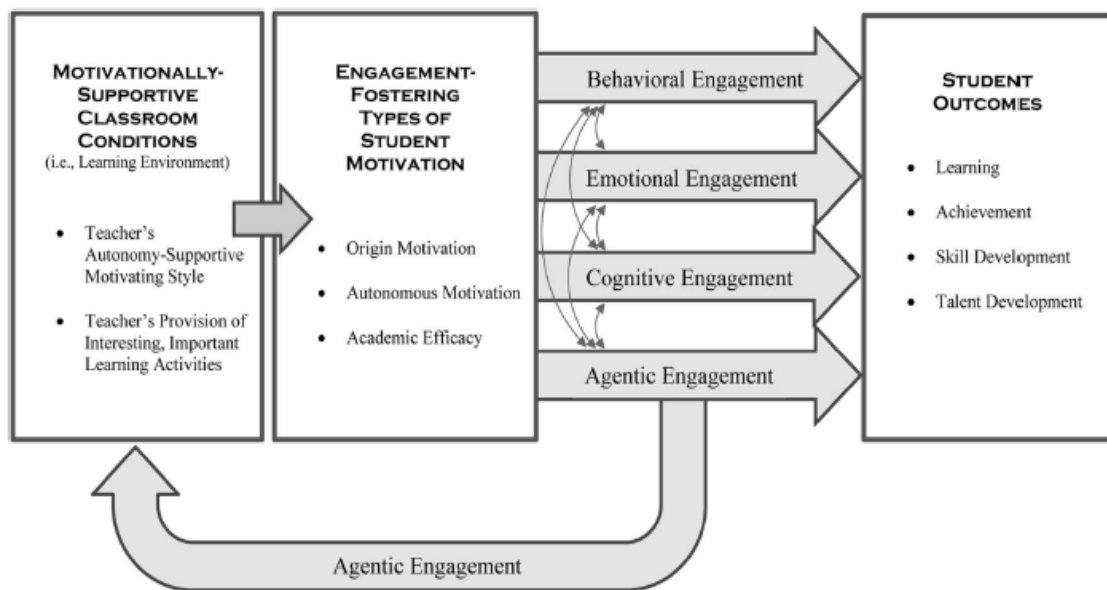
The structure can be provided in three phases; during interaction, during lesson, and during post-performance commentary period. The first phase is during interaction and/or direction (Haerens, Aelterman, Van de Berghe, De Meyer, Soenens & Vansteenkiste, 2013, Reeve et al., 2004). In this phase, the structure can be provided by giving clear and understandable instruction and information about the procedures, framing the objectives of the lesson explicitly, and communicating the expectations in a precise way (Jang, Reeve & Deci, 2010; Reeve et al., 2004). The second phase is during lesson. During lesson in which students are occupied with the activities, the teacher can act as a leader to guide learners, challenge their students by asking for their full potential, and supply rich scaffolding by giving hints and cues, and answering students' questions well to provide structure (Reeve, et al., 2004). The third phase is the time after the performance.

During this post-performance commentary period, the teacher can provide structure by giving constructive, upgrading, and instructive feedback (Aelterman et al., 2019; Jang et al., 2010; Reeve et al., 2004).

### **2.3.2.3. *Teacher involvement***

Relatedness means the sense of belonging with other human beings or a community (Deci & Ryan, 2002). In the classroom context, teachers can satisfy their students' need for relatedness by being involved in interpersonal relationships with their students (Stroet, Opendakker & Minnaert, 2013). Teacher involvement is showing attitude in an honest and affectionate way resulting in the development of a close bond between the students and the teacher (Censt-Boonstra, Lichtwarck-Aschoff, Denessen, Aelterman & Haerens, 2021a).

In practice, teacher involvement can be observed through interpersonal exchanges between students and the teacher such as the teacher asking about the student's everyday life, and through the cultivation of cooperation among learners such as students helping their peers (Censt-Boonstra et al., 2021a). To support their students' relatedness, teachers can get involved with their students by being warm and open through expressing affection, showing that they like spending time with their students, investing their personal sources such as their time and energy, having close physical proximity by standing close to their students in the classroom, and having detailed and proper information about their students such as their academic and personal histories (Reeve et al., 2004).



**Figure 2.2.** *Four interrelated dimensions of student engagement (Reeve, 2013)*

As Figure 2 demonstrates, all four dimensions stem from motivational sources which are the result of the motivational learning environment in which students' autonomy and competence are supported by the teacher's autonomy-supportive behaviors and provision of structure. However, as the figure above illustrates, agentic engagement affects teachers' autonomy support and provision of structure as well as being affected by them. Agentic students express their feelings, thoughts, and preferences to their teachers by acting proactively and initiatively, which creates a path for teachers to behave in a more autonomy supportive way and provide more structure (Reeve, 2013; Ryan & Deci, 2000).

Teacher's autonomy-supportive behaviors increase learners' motivation, learning, and well-being (Cheon, Reeve, & Moon, 2012; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). Considering its benefits, it is important to comprehend why teachers fulfill their students' autonomy needs and the ways they learn to act in an autonomy-supportive way (Reeve, 2013). For these purposes, a number of intervention-based research has been carried out (Lozano-Jimenez, Huescar, & Moreno-Murcia, 2021; Cheon et al., 2016; Cheon & Reeve, 2015; Reeve & Cheon, 2021; Reeve et al., 2019). These studies have demonstrated that it is possible for teachers to learn how to be autonomy supportive towards their students however, this body of research also points to the fact that teachers

need quite a large amount of help and guidance from the experts to learn how to support their students' autonomy (Su & Reeve, 2011).

In addition to the intervention-based training programs, students with high agentic engagement levels in the classrooms can provide teachers with opportunities for self-learning regarding autonomy-supportive behaviors (Reeve, 2013). As highly agentic students express their point of view, and insert their opinions, emotions, and behaviors into the flow of the lesson, they let their teachers know what they enjoy, require, and ask for (Reeve, 2013). The teacher could utilize these hints and cues to take their viewpoint, accept and implement their opinions, emotions, and behaviors into the course, and bring activities that nurture students' intrinsic motivation by tapping their interest and enjoyment to be more autonomy supportive (Reeve, 2009).

#### **2.4. Related Studies on the Relationship between Teacher Motivating Style and Student Engagement**

The relationship between teacher motivating style and student engagement has attracted the attention of many researchers. Among these researchers, a number of them have examined the relationship between student engagement and all three teacher motivating styles i.e., teacher autonomy support, teacher involvement, and teacher provision of structure (Cents-Boonstra, Lichtwarck-Aschoff, Denessen, Aelterman, & Haerens, 2021a; Cents-Boonstra, Lichtwarck-Aschoff, Lara, & Denessen, 2021b; Michou, Altan, Mouratidis, Reeve, & Malmberg, 2021; Oliver, Galand, Morin & Hospel, 2021; De Loof et al., 2019; Hornstra et al., 2018; Haerens et al., 2013). The findings of these studies have demonstrated that teacher motivating style and student engagement are correlated. In terms of each teacher's motivating style, the literature has reached a diverse range of results.

For example, Hornstra et al. (2018) carried out a study to analyze the relationship between teacher expectations and need-supportive teaching in relation to student motivation and student engagement. For this purpose, 276 secondary school students with their 11 teachers of various branches such as Mathematics, Dutch, and English participated in the study. Teacher expectations, perceived need support, student motivation, and student engagement were assessed through questionnaires. Structural equation modeling analysis demonstrated positive and statistically significant

correlations between teacher expectations and perceived teacher motivating style that is teacher autonomy support, teacher involvement, and teacher's provision of structure. The relationship between teacher expectations and student engagement was also found to be statistically significant and mediated by teacher provision of structure and involvement. These findings implied that when teachers had high expectations for their students, they demonstrated more need-supportive behaviors towards their students, which led an increase in learners' motivation and engagement levels. In other words, students for whom the teachers expected more in terms of academic success perceived their teachers as more autonomy supportive and experienced more involvement from their teachers. Consequently, the students felt more intrinsically motivated and involved in the lesson more compared to the students for whom the teachers had lower expectations. Although this study provided valuable insights into the relationship between teacher expectations and perceived teacher support and how it affected student engagement, it had a several shortcomings. Only one dimension of student engagement that is behavioral engagement was addressed in this study. For a better understanding of the notion, student engagement should be focused on as a four-dimensional concept consisting of behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement. Also, the researchers in this study relied on data collected only by questionnaires. Additional data collected through other instruments such as observations are needed for further explanation of the phenomenon. Moreover, as this study was cross-sectional, it did not reveal the direction of the relationship among teacher expectation, perceived teacher support, student motivation, and student engagement. More longitudinal research employing various data collection tools are needed to uncover the causal relationships among the variables.

Considering these drawbacks, in a study by De Loof et al. (2019), it was aimed to investigate the link between teachers' motivating style, student motivation, and student engagement. To collect data, 30 Science, Technology, and Mathematics (STEM) classes with a total of 27 teachers and 359 9<sup>th</sup> grade students were observed. For the assessment of the teacher motivating style and student engagement, an observation sheet (Reeve et al., 2004) was utilized. Also, individual self-report questionnaires were distributed to the students to gather data on their motivation. The results showed that teacher autonomy support and teacher provision of structure were predictive factors of student engagement. On the other hand, no significant relationship was found between student engagement and

teacher involvement. Students engaged more when their teachers exhibited autonomy-supportive behaviors such as tapping into students' intrinsic motivation, using informational rather than controlling language, accepting rather than counteracting students' negative emotions, and providing structure by setting clear goals, scaffolding with tips and reminders, and providing feedback. The teacher involvement with students to meet their relatedness needs did not affect student engagement. Considering that the data in this study were collected during a specific period of time, the researchers suggested conducting studies with cross-lagged longitudinal design to examine student engagement, teacher motivating style, and student motivation to gain more insight into the causal relationship among the variables. It was also suggested that more studies should be carried out with observational data in addition to self-report. Similar to the study by Horsntra et al. (2018), this study handled student engagement as behavioral engagement only. Other dimensions of student engagement that is, emotional engagement, cognitive engagement, and agentic engagement could be included to better understand the mechanism of the concept.

With this in mind and considering that most studies that have investigated the relationship between student engagement and teacher motivating style, have used questionnaires and gathered data only from the students' perspectives, and combined them with teachers' self-reports, Cents-Boonstra and her colleagues (2021a) conducted a study to uncover specific motivational behaviors of teachers through observation and to find out how these behaviors are related to different levels of student engagement. To this end the motivational behaviors of 52 teachers and the engagement levels of their students were observed. The findings displayed that the teachers demonstrated high levels of relatedness support while the occurrences of autonomy support and structure were low. In terms of student engagement, the researchers found that the students showed emotional and passive behavioral engagement while their active engagement levels fell behind. It was also found that providing relatedness and giving students a voice in class had a crucial role in boosting students' passive behavioral engagement pertinent to their attention and enjoyment in class. On the other hand, giving students the freedom of choice and offering help during the activities led students to ask more questions and show more effort. The findings also indicated that teachers in classrooms with more engaged students demonstrated more motivational behaviors compared to the teachers in classrooms with less engaged students. That is to say, teachers in highly engaged classrooms used more

encouraging language, provided more feedback and help during the lesson, and demonstrated more devotion and put more effort. In light of these findings, the researchers concluded that more in-depth and multilevel analyses are needed to understand the relationship between teacher-motivating style and student engagement especially focusing on active and agentic engagement. Besides, in this study the data was collected through observations only. Teachers' and students' perspectives are also needed for a better understanding of the relationship between teacher autonomy support and student engagement. Student engagement in this study was also regarded as a holistic concept as in the studies by De Loof et al. (2019) and Horsntra et al. (2018). They did not examine the sub-components separately.

On the contrary, some other studies (Parker et al., 2021; Reeve et al., 2019; Wei et al., 2020; Patall, Hooper, Vasquez, Pituch, & Steingut, 2018; Patall, Steingut, Vasquez, Trimble, Pitucg, & Freeman, 2017; Cheon, Reeve, & Song, 2016; Cheon, Reeve, & Moon, 2012; Cheon & Reeve, 2015; de Meyer et al., 2016) has accepted student engagement as a four dimensional concept and has displayed that among the three teacher motivating styles that is, teacher autonomy support, teacher involvement, and teacher's relatedness, especially teacher autonomy support has been reported to increase students' motivation and engagement levels the most. An increase in perceived autonomy support levels of teachers increased students' engagement levels in all four sub-dimensions namely, behavioral, cognitive, emotional, and agentic engagement (Núñez & León, 2019).

In this line, Gutierrez & Thomas (2019) carried out a study to investigate the intercorrelations among teacher autonomy support, students' academic success, students' self-efficacy, and student engagement. For this purpose, 870 students majoring in Educational Sciences and Humanities at a university in Dominican Republic were asked to participate in the study. Questionnaires were utilized to gather data and structural equation modeling was used to analyze the collected data. The findings demonstrated that perceived teacher autonomy support had a direct impact on self-efficacy and on all dimensions of student engagement i.e., behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement. When students perceived their teachers to be autonomy supportive, they showed more effort in the classroom, enjoyed the courses, spent more time to organize their learning process, and took more initiatives during the course. Although the findings of the study are valuable in terms of proving the

relationship between perceived teacher autonomy support and all the four dimensions of student engagement, there are some limitations. The data in this study were collected only through students' self-reports. Other data sources such as teachers' views and observations by independent raters were not included as an additional input.

Similarly, Núñez & León (2019) conducted a more fine-grained study to investigate the effect of perceived teacher autonomy support on all four dimensions of student engagement that is, behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement throughout a semester. The researchers also aimed to translate an engagement measure developed by Jang et al. (2012) into Spanish. To achieve these goals, the researchers collected data on perceived teacher autonomy support, autonomy need satisfaction, and four aspects of student engagement from 448 undergraduate graduate students at the beginning, in the middle, and at the end of the semester through related questionnaires. The findings of the study showed that perceived teacher autonomy support at the beginning of the semester was a significant predictor of students' need for autonomy in the middle of the semester. Students started to feel more autonomous as their teacher fulfilled their autonomy need. Consecutively, students' need for autonomy in the middle of the term predicted changes in all four types of student engagement differentially. As the students felt more autonomous as a result of their teachers' autonomy support, they engaged in the lesson more. These findings signify that when the teachers nurtured their students' intrinsic motivation by stimulating their interest and enjoyment, used more informational rather than coercive language and accepted rather than confronted their negative feelings, their students experienced more autonomy in the classroom. All in all, this study provided valuable insights into the relationship between perceived teacher autonomy support and the four aspects of student engagement longitudinally. However, only students' perceptions were utilized as a source of data.

Along with these studies indicating that teacher autonomy support is related to student engagement to a quite high degree, researchers developed an intervention program called Autonomy Support Intervention Program (ASIP) to help teachers be more autonomy supportive towards their students to increase their engagement level (Cheon et al., 2012). This intervention program takes place as three waves. In the first wave, the teacher receives a 3-hour workshop consisting of scenarios of autonomy supportive and controlling teaching, a presentation and examples on autonomy supportive teaching,

followed by the demonstration of empirical evidence on the effectiveness of autonomy supportive teaching. Six weeks later, the teachers are invited to discussion groups to share their experiences regarding autonomy supportive teaching in their classes in the second wave. After another six weeks, other discussion sessions are held to exchange ideas on how to be more autonomy supportive towards the students during the courses.

Researchers have been investigating the effectiveness of the intervention program by designing various studies (Cheon, Reeve, & Vansteenkiste, 2020; Cheon, Reeve, & Ntoumanis, 2018; Cheon, Reeve, & Song, 2016; Cheon & Reeve, 2015; Reeve & Cheon, 2014). For example, Cheon & Reeve (2015) carried out a study to examine the relationship between teacher autonomy support and student engagement including other related variables such as controlled teaching, student amotivation, and psychological needs satisfaction that is, autonomy, competence, and relatedness. The participants of the study were 16 physical education teachers, who were randomly assigned into experimental and control groups equally, and their 598 students from 11 middle schools and 5 high schools in Korea. To collect data on teachers' autonomy-supportive or controlling behaviors, student engagement, student amotivation, and psychological needs satisfaction, questionnaires were used. In addition, teachers in both experimental and control groups were observed. The findings of the study revealed that teachers in the experimental group were found more autonomy supportive when compared to the teachers in the control group, which means that the intervention program was successful. Also, the results showed that students in the experimental group engaged in the lesson more, experienced needs satisfaction more, and bear less amotivation. As the teachers in the experimental group learned more about autonomy supportiveness, they started to motivate their students intrinsically by addressing their interests and enjoyment, they gave more freedom of choice, used more informational language, and raised their awareness of students' negative effect and acted accordingly. In this line, their students focused more on the course, felt more positive feelings towards the lesson, used more strategies to understand and achieve the task, acted more proactively, and took more initiative. The researchers suggested that further studies were needed with a larger sample size and more variables such as psychological needs frustration.

Considering these suggestions, Cheon and his colleagues (2016) designed a similar study to assess the effect of the same intervention program designed to help teachers be more autonomy supportive on perceived teacher autonomy support from an experimental

and longitudinal perspective. For this purpose, the researchers enlarged their sample size by including a total of 19 teachers (9 in the experimental group and 10 in the control group) and their 1017 students participated in the study. In addition to perceived teacher autonomy support and teacher's controlling behaviors, student engagement and student amotivation, and psychological needs satisfaction, the researchers included psychological need frustration as another variable. To collect data on teachers' autonomy-supportive and controlling behaviors, student engagement and student amotivation, and psychological needs satisfaction and psychological needs frustration, questionnaires were employed. The teachers in both experimental and control groups were observed. Similar to the results of Cheon & Reeve's (2015) study, this research also demonstrated that the intervention program reached its goals as the teachers' autonomy-supportive behaviors in the experimental group increased students' engagement levels, decreased their amotivation levels, and led them to experience more satisfaction of their psychological needs. Additionally, students' psychological needs frustration was found to be reduced by the autonomy-supportive behaviors of teachers. Students felt less forced to act in a certain way, they felt less inadequate during the activities, and they felt less rejected by their teachers as their teachers supported their autonomy. Although this study expanded the vision regarding the effectiveness of the teacher autonomy support on student engagement during a period of time, it only relied on students' perspectives and observational data, lacking teachers' point of view on the issue.

Bearing these shortcomings in mind, Cheon et al. (2020) conducted two studies aiming to reveal the benefits gained both by the teachers and the students through the intervention program mentioned in the studies. As it is explained above the participants were randomly assigned to experimental and control groups. In the first study, the researchers examined teachers' perspectives such as acquiring more autonomy supportive and structured teaching qualities, teacher efficacy, intrinsic goals, harmonious passion, job satisfaction, and relationship satisfaction. For these purposes, 35 Korean Physical Education teachers took part in the study. Related scales were used to collect data on each benefit mentioned before. The findings revealed that teachers in the experimental group learnt how to provide structure in an autonomy supportive way, and this development in their instruction also increased teaching effectiveness, wellbeing, and satisfaction levels regarding their relationship with their students.

In the second study, the researchers investigated the students' perspectives, that is effectiveness of teacher autonomy support and structure support on desired learning outcomes that is student engagement, skill development, and anticipated course performance. To achieve these goals, 3123 Korean secondary grade students were asked to participate in the study. Perceived teacher autonomy and structure support, and desired learning outcomes were assessed through scales. Observation sheets were also utilized to collect additional data on teacher autonomy and structure support. According to the findings, as the teachers acted in a more autonomous way and provided more structure, their students' engagement level increased as well as their perceived skill development and their performance anticipations. The results of the studies indicate that teachers who participated in the interventions became significantly more autonomy supportive, provide structure and integrate structured teaching in supporting students' autonomy. These results were compiled from the responses of the students in the questionnaires. They stated that in addition to their supported autonomy and competence need satisfaction, they became more engaged in the exercises, activities, and lessons. This study contributes to the existing literature by including teachers' perspectives as well as students' point of views and observers' viewpoints as differently from Cheon & Reeve's (2015) and Cheon et al.'s (2016) studies.

All together these studies have proven the effectiveness of the intervention program in increasing teachers' autonomy supportiveness on all four dimensions of student engagement from a longitudinal perspective. However, although these studies have provided valuable insights to our understanding of the relationship between perceived teacher autonomy support and student engagement, and have confirmed that perceived teacher autonomy support is an influential factor in student engagement development the sub-components of student engagement were not treated separately. Additionally, other elements that may have the potential to effect student engagement have been undermined. In addition to the correlational and causal studies, research with qualitative design investigating the factors affecting student engagement is still needed.

Besides the studies indicating the positive effects of perceived teacher autonomy support on engagement as a holistic concept and on each sub-component, other studies put forth that the effect changes among the subcomponents. One of these studies is the one conducted by Reeve, Cheon, and Jang (2020). The results of the study showed that among the four dimensions of student engagement, agentic engagement is the most

effective one explaining the variance in perceived teacher autonomy support. The researchers conducted two studies to investigate the relationship between student engagement and achievement, and teacher autonomy support. For the purposes of the studies, 406 Korean secondary school students with their 11 teachers teaching different branches such as Korean, Social Sciences, Math, and English participated in the study. The first one measured the effect of student engagement as a four-dimensional concept i.e., behavioral engagement, cognitive engagement, emotional engagement, and agentic engagement on the course achievements of the students. Findings demonstrated that with the inclusion of agentic engagement, student engagement explained a wider variance in the course achievement of the students. Student engagement affected students' achievement only when students' proactive, constructive, and reciprocal behaviors such as taking the initiative and starting the conversation with the teacher were included as the fourth dimension (i.e., agentic engagement) of student engagement.

In the second part of the study, the unique effect of each sub-dimension of student engagement i.e., behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement on course achievement in four different subject matters (Korean, Social Science, Math, and English) was assessed. Moreover, bearing in mind the reciprocal and proactive nature of agentic engagement which helps learners gather more motivational support from the environment (Bandura, 2006; Pineda-Báez et al., 2019; Reeve, 2013), the relationship between agentic engagement and autonomy-supportive teaching was also examined. According to the findings, behavioral and agentic engagement predicted changes in students' academic achievement. Regarding teacher autonomy support, only agentic engagement accounted for the perceived autonomy support. In other words, students' agentic engagement levels affected the way they perceived their teachers as autonomy-supportive or controlling. This study is important for two main reasons. Firstly, it explains the effectiveness of agentic engagement in learner achievement. Secondly, it proves the bidirectional path between agentic engagement and perceived teacher autonomy support. Although this study demonstrated that student engagement is an antecedent for perceived teacher autonomy support, it only relied on self-reported data from a single source.

Given that agentic engagement has the closest relationship with perceived teacher autonomy support among the dimensions of student engagement, some researchers have included only agentic dimension of student engagement in their studies and focused on

its relation to perceived teacher autonomy support (Patall, Kennedy, Yates, Zambrano, Lee, & Vite, 2022; Benlahcene, Awang-Hashim, Kaur, & Wan-Din, 2021; Jiang & Zhang, 2021)

For example, Benlahcene et al. (2021) examined the relationship between teachers' autonomy support and personal best goals along with the function of agentic engagement in this association. Even though few studies are concerned with the relationship between teachers' autonomy support and students' agentic engagement, there has been empirical evidence for the theoretical rationale of SDT. The study began with survey questions that asked students to indicate their "perceived level of teachers' autonomy support during class" In addition, to measure their standards of personal best goals and agentic engagement, different scales were employed to make the measurement and direct and indirect relationships between these two factors were tested simultaneously. Also, the role of personal goals between agentic engagement and autonomy support relationship was assessed. The results indicate that the importance of personal best goals in enhancing autonomy supportive teaching style and thus students' agentic engagement could not be underestimated. Together these results provide important insights into two different considerations. First, autonomy-supportive settings supply the environment in which students find the opportunity to use and increase their agency in the classroom and this leads to the enhancement of positive attitudes of the students in agentic engagement. Second, personal goals stand out as a crucial element that helps autonomy-supportive environments to successfully foster and enhance students' agentic engagement in the classroom. Although this study contributes to the existing knowledge of the relationship between perceived teacher autonomy support and agentic engagement, it has some limitations. Firstly, this study was cross-sectional, therefore it did not provide information regarding the causal relation between the two constructs. Secondly, this study only employed questionnaires to collect data. Observations and interviews are needed to gather additional data from both students' and teachers' perspectives. Also, the writers concluded that teachers' controlling behaviors should be included in the research as well as their autonomy supportive behaviors.

Involving teacher controlling behavior as well as autonomy support, Jian & Zhang (2021) investigated the relationship between teachers' autonomy supportive behaviors, controlling behaviors, social relatedness support, and students' agentic engagement controlled by students' mastery approach goals and performance approach goals. For this

purpose, undergraduate students taking English course at a university in China participated in the study. Questionnaires were utilized to collect data. The findings demonstrated that perceived teacher autonomy support positively and significantly explained variance in students' agentic engagement while students' perceptions of teachers' controlling behaviors did not predict any changes in students' agentic engagement. When teachers provided their students' need for autonomy, students engaged in the lesson in a more proactive and constructive way. This study provided valuable outcomes for the understanding of the relationship between perceived teacher autonomy support and students' agentic engagement. However, the fact that the researchers relied on data representing only students' perspectives raises concerns about response-bias. This study took a cross-sectional perspective regarding the issue, but failed to demonstrate the dynamic relationship between perceived teacher autonomy support and agentic engagement. Therefore, studies with longitudinal research design are needed to gain a proper understanding of the relationship between the two constructs.

Besides these, some recent studies put forth that the relationship between agentic engagement and teacher autonomy support is reciprocal in that agentic engagement also affects teachers' autonomy support levels as well as being affected by it (Reeve et al., 2021; Reeve, Cheon, & Jang, 2020; Reeve, Cheon, & Yu, 2020; Reeve et al., 2019; Patall et al., 2019; Matos et al., 2018; Wakefield, 2016; Reeve, 2013). That is, teachers, adapt their instruction in a more autonomy-supportive manner in response to their students' attempts to take initiative to provide input (i.e., agentic engagement) (Reeve, 2013).

In a more comprehensive study by Reeve, Cheon, & Yu (2020) agentic engagement was hypothesized as both the antecedent and the outcome of autonomy support provided by the teacher. Agentic engagement was treated as the outcome of teacher-provided autonomy support during the first half of the academic year and after once developed, it was regarded as the predictor of teachers' autonomy-supportive behaviors during the second half of the year. To achieve this goal, 22 Korean physical education teachers (11 teachers in the experimental group and 11 teachers in the control group) from different high and middle schools, and their 1422 students (757 students in the experimental group and 665 students in the control group) were asked to participate in the study. Teachers in the study were asked to take a year-long course on classroom instructional strategies, which included a daily lecture on autonomy-supportive teacher behaviors, a workshop after the lecture, and a discussion session at the end of the course. Regarding the effect of

this course on autonomy-supportive teaching, it was found that teachers' autonomy-supportive motivating style increased the students' agentic engagement during the first half of the academic year. These students perceived their teachers as autonomy-supportive and became more involved in the lesson proactively and took initiative. After students became agenticly engaged towards the end of the first term, they developed into more active and responsible learners and eventually increased their teachers' autonomy-supportive levels at the end of the second semester. According to these findings, the authors inferred that asserting oneself, communicating needs and opinions, suggesting preferences, and asking questions and explanations "as an authentic expression of one's autonomy need satisfaction" (p. 336) is an extremely crucial in-class event. Conversely, passive behaviors and staying silent in the classroom do not help students develop higher motivation levels and acquire greater relationship support (Reeve, Cheon, & Yu, 2020). As differently from Reeve, Cheon, & Jang's (2020), this study conducted an intervention program on enhancing teachers' autonomy supportiveness and assessed its effectiveness in terms of both student engagement and teacher autonomy support. Thus, both the student perspective and the teacher perspective were included. However, only self-reported data from a single source were utilized. For a stronger methodology, different instruments such as observations could be incorporated for triangulation.

Similarly, Matos et al., (2018) conducted a longitudinal study examining this mutual relationship between agentic engagement and teacher autonomy support, focusing more on the way agentic engagement affected autonomy-supportive teaching. For the purposes of the study, 336 university students enrolled in either Science or Art classes from a private university in Peru participated in the study. The findings demonstrated that particularly students' agentic engagement among the sub-dimensions of student engagement at the beginning of the term uniquely explained the longitudinal changes in the perceived autonomy-supportive teaching at the end of the semester. That is to say, as the students express their needs and opinions further, the teachers become more considerate and more responsive to their students' input. For example, when students ask more why and how questions to their teacher, the teacher starts to make more justificatory explanations about the instruction and the task. This study provided further evidence that among the four components of student engagement, only agentic engagement was the unique component affecting perceived teacher autonomy support directly. As in Reeve, Cheon, & Jang's (2020) study, the data in this study was also collected only from students.

Similarly, Patall et al., (2019) aimed to investigate the effect of students' daily agentic engagement on motivation, perceived teacher autonomy support, and other dimensions of student engagement on daily basis as well as over the course of six weeks. The findings of the study revealed similar results in that agentic engagement predicted the perception that the teachers are responsive to students' autonomy needs. Likewise, regarding the results gained through a longer period of time, agentic engagement predicted perceived teacher autonomy support this time, too. Across the instructional unit, teachers' autonomy support fluctuated in line with the students' autonomy needs. The greater agentic engagement level of the students at the beginning of the six-week instructional unit led teachers to be more autonomy supportive in the middle and at the end of this time period. Students' articulation regarding their interests and needs at the beginning of the period guided teachers to take their students' thoughts into consideration and manage the upcoming courses accordingly. The writers concluded that agentic engagement is a robust instrument in forming students' motivational experiences such as autonomy need satisfaction both in the moment and during a period of time.

Conducting other two studies with a relatively different design, Reeve et al. (2022) studied the causal effect of manipulated agentic engagement on the learning environment. The first study aimed to reveal whether manipulated agentic engagement would cause an increase in desired educational benefits. To achieve this goal, 242 Korean undergraduate students from a private university in South Korea were asked to participate the study. The participants were randomly assigned to classes which had either agentic high or low conditions. To collect data on agentic engagement, perceived teacher autonomy support, autonomy satisfaction, and perceived skill development, self-report scales were used. Also, to collect additional data on teacher autonomy support, observational measures were used. The first study's findings showed that while manipulated agentic engagement did not have much effect in enhancing effective functioning, it increased not only motivational satisfaction but also a supportive learning environment.

In the second study, the aim was to test whether the students would take control of their own learning and demonstrate more effective functioning in two manipulated conditions. In this study, the first manipulated condition was the same as in the first study, which was designed to demonstrate the effect of agentic engagement in changing environment. The second manipulated condition was designed to observe whether agentic engagement would have an impact on effective functioning. Study 2 revealed that having

similar results to the first study, the first manipulation showed no impact on effective functioning though it improved motivational satisfaction and a supportive learning environment. On the other hand, the second manipulation did not produce any benefits. The most obvious finding of this study is that the direct and causal effect of manipulated agentic engagement in creating a more supportive learning environment for oneself cannot be ruled out.

These studies have demonstrated that student engagement affects perceived teacher autonomy support as well as being affected by it. When students take more initiatives and act in a more proactive way to influence the flow of the lesson, their teachers become more autonomy supportive by satisfying their inner motivational sources, speaking in a more informative manner, and accepting students' negative effect towards the lesson.

To conclude, these studies approached the phenomenon of perceived teacher autonomy support and student engagement from different perspectives and using different research tools. Firstly, some studies (Benlahcene et al., 2021; Jiang & Zhang, 2021; Reeve, Cheon, & Jang, 2020; Guiterez & Thomas, 2019; Núñez & León, 2019; Cheon et al., 2016) relied on self-reported data from a single group of informants. To draw a greater picture of the relationship between perceived teacher autonomy support and student engagement, and demonstrate the explanatory power of student engagement on perceived teacher autonomy support, the data needs to be triangulated by collecting information from both the students and the teachers, and adding another measurement such as observations. Secondly, the number of studies examining the effect of student engagement on the development of perceived teacher autonomy support during a semester is quite scarce. Thirdly, these studies had correlational and causal design generally, not focusing on the other possible factors that might affect perceived teacher autonomy support. Considering that student engagement is not the only predictor of perceived teacher autonomy support, a study with mixed methods design allowing qualitative findings as well as quantitative results is needed. To fill this gap in this study mixed methods design is used and thus a qualitative component is added to shed light on the effective factors on teacher autonomy support and student engagement.

In Turkish context, studies examining the relationship between student engagement and teacher autonomy support are quite scarce and have reached different results. For example, Bala Bulut (2017) investigated the relationship between teacher autonomy support, student engagement, and student motivation. The study was conducted with high

school students by observing randomly selected classes on different subjects such as English, Turkish Language and Literature, Biology, and Chemistry. It was found that although teachers' observed autonomy-supportive levels correlated with behavioral, emotional, and cognitive engagement, observed autonomy-supportiveness of teachers did not correlate with agentic engagement. In other words, students' engagement level was not affected by their teachers' autonomy support level or vice versa. On the other hand, Civabas's (2019) study, which was carried out with 5<sup>th</sup> and 6<sup>th</sup> grade English learners to investigate the interrelation between teachers' interaction levels and students' engagement level, demonstrated that students' agentic engagement had a statistically significant negative relationship with teachers' strict and admonishing behaviors. Students demonstrated more agentively engaged behaviors when their teacher behaved in a less rigid and with a less reprimanding tone. Besides, being fewer in number, these studies examining the relationship between student engagement and teacher autonomy-supportive motivating style in the Turkish context have not reached a consensus. They looked at only the correlational relations, which do not indicate the direction of the relationship between student engagement and teacher motivational behavior.

Dincer et al., (2019a) found that teachers' autonomy-supportive behaviors predicted students' engagement in the classroom both directly and through basic psychological needs satisfaction. When teachers acted in a more autonomy-supporting way, the students felt more satisfied in terms of their psychological needs (autonomy, competence, and relatedness), which resulted in more engagement in the lesson. Moreover, student engagement was also affected by teacher autonomy support directly, which meant that some autonomy-supportive teacher behaviors might have affected students' engagement in the classroom without the contentment of basic psychological needs. These findings point to the need for further investigation of the relationship between student engagement and teacher autonomy support. Moreover, this study relied only on self-reports of the students. More vigorously designed studies are needed by including additional data from the other stakeholder that is the teachers, and observations conducted by independent raters.

In the light of the literature presented above the present study aims at filling the gap by conducting a longitudinal and a multi-level research to investigate the relationship between teacher autonomy support and student engagement throughout a semester. This study also uses a mixed methods design, thus adds a qualitative component to shed light

on the effective factors on teacher autonomy support and student engagement. Moreover, collecting data from tripartite data sources i.e., students, teachers, and independent observers, this study delves deeper into the relationship between perceived teacher autonomy support, student engagement, and factors affecting the two constructs.

## CHAPTER 3

### 3. METHODOLOGY

In this chapter, an overview of the research design, context, and participants of the study will be presented. Then, data collection tools which are Four Aspects of Student Engagement Questionnaire (FASEQ), Learning Climate Questionnaire (LCQ), stimulated recall protocols, and semi-structured interviews, observation sheet and hit-steer observation will be explained. Lastly, data collection procedure and data analysis process will be given.

#### 3.1. Design of the Study

This study aims to investigate the extent to which student engagement explained the variance in perceived teacher autonomy support. It also aims to uncover factors that might affect teacher autonomy support and factors that might influence student engagement. The study employed quantitative and qualitative data collection tools to achieve these goals. Thus, the current study is designed according to mixed methods design.

Mixed methods research design helps researchers acquire a better understanding of research problems and questions by combining both qualitative and quantitative methods (Creswell, 2012). Data gathered through quantitative instruments provide numbers that can be analyzed statistically to assess the frequency or the magnitude of phenomena (Creswell, 2012). On the other hand, information collected through qualitative instruments provides first-hand knowledge from the participants themselves, presenting many viewpoints and a multilayered picture of the topic at hand (Creswell, 2012). By combining these quantitative and qualitative methods, mixed methods design provides multiple perspectives by preventing potential limitations in using either quantitative or qualitative methods separately (Mackey and Bryfonski, 2018).

The current study examined the extent to which student engagement explains the variance in perceived teacher autonomy support and the longitudinal increase in teacher autonomy support in relation to student engagement through scales and an observation sheet with a Likert-type scale as quantitative instruments. Further, the study probed on the factors that might lead the teachers to behave in a more autonomy-supportive way and

teacher autonomy-support practices and other factors that might have resulted in student engagement, through semi-structured interviews and stimulated recall protocols as qualitative instruments. These qualitative and quantitative data collection procedures were carried out simultaneously. Therefore, the convergent parallel design as mixed methods design was utilized in this study.

### **3.2. Context of the Study and the Participants**

The study was carried out in the second semester of the 2021-2022 academic year at language preparatory classes of Akdeniz University School of Foreign Languages in Antalya. Each class had two teachers who carried out the lessons consecutively.

In a preparatory class, students were supposed to receive 25 hours of English language education each week for a total of 31 weeks for two semesters within a year. First semester lasted 16 weeks and second semester lasted a total of 19 weeks. Three weeks out of 19 weeks in the second semester were midterm and finals weeks. Thus, the data were collected in the beginning, middle and end of the remaining sixteen weeks. To start their undergraduate education in their faculties, students who are under B2 English level (60 points out of 100) must receive preparatory education and obtain sufficient scores from the quizzes, module exams, and end-of-the-year tests. At the end of the English language education, students had to reach at least B2 (CEFR, 2001, p.24) level to be able to graduate from preparatory school.

In the selection of the participants, purposeful sampling method was utilized. Purposeful sampling is used by researchers when they make deliberate decisions in choosing the participants to understand a central phenomenon (Creswell, 2012). The principle guiding purposeful sampling is the quantity and the quality of information that can be acquired from the participants (Patton, 2014, p. 105). The participants in this study were selected from B1 level students because they were capable of comprehending basic points of standard input, explaining their experiences, dreams, and aims in detail, and could rationalize their plans and opinions in English (CEFR, 2001, p. 23). Since their level of attainment can help create a classroom interaction in which student engagement and teacher autonomy support behaviors could be observed properly. The participation was voluntary, and all the participants were informed by the consent forms for each data collection tool (Appendix-1).

For the quantitative part of the study 212 students attended and for the qualitative part of the study an instructor and 12 students volunteered. Semi-structured interview sessions were held both with the students and the instructor, and stimulated recall protocols were held with the instructor.

### **3.3.Data Collection Tools**

#### **3.3.1. Four aspects of student engagement questionnaire (FASEQ)**

In the current study, students' engagement levels in English classes were evaluated by Four Aspects of Student Engagement Questionnaire (FASEQ), (Reeve and Tseng, 2011). The original questionnaire is composed of 22 items with a 7-point Likert scale from strongly disagree to strongly agree., assessing four sub-dimensions of student engagement i.e., agentic engagement, behavioral engagement, emotional engagement, and cognitive engagement. The lowest point students can get from the questionnaire is 22 while the highest point is 154. The higher score means higher engagement level while the lower score means lower engagement level.

In FASEQ, the first five items were for evaluating the agentic engagement of the students. The internal reliability (Cronbach's alpha) of the agentic engagement category was found to be .82. The items 5, 6, 7, 8, 9, and 10 were related to the behavioral engagement category. These items depict students' behavioral engagement as their in-the-moment attention to a task, their involvement in the lesson, and course-related endeavors. The internal reliability (Cronbach's alpha) of the behavioral engagement category was calculated as .94. Items 11, 12, 13, and 14 evaluated students' emotional engagement related to their dynamic emotional states such as enjoyment, fun, curiosity, and interest. The internal reliability (Cronbach's alpha) of the emotional engagement category was found as .78. To evaluate students' cognitive engagement, items 14, 15, 16, 16, 18, 19, 20, 21, and 22 were utilized. These items assess students' cognitive strategies such as relating to the instruction, planning, monitoring themselves, review their work. The internal reliability (Cronbach's alpha) of cognitive engagement category was .88.

FASEQ was translated into Turkish by Eren (2013). As in the original questionnaire, the translated version also has 22 items with a 7-point Likert scale from strongly agree to disagree. The internal reliability (Cronbach's alpha) of the agentic engagement, behavioral engagement, emotional engagement, and cognitive engagement

categories were found to be .94, .94, .89, and .89 respectively. To assess students' overall engagement levels as well as their agentic, behavioral, emotional, and cognitive engagement levels separately, the translated version of FASEQ was used in the present study (Appendix-2).

### **3.3.2. Learning climate questionnaire (LCQ)**

To assess the degree to which students perceive their instructors as autonomy-supportive, Learning Climate Questionnaire (LCQ; Williams and Deci, 1996) was utilized. LCQ was based on another questionnaire named as Health-Care Climate Questionnaire (Williams, Grow, Freedman, Ryan, and Deci, 1996). In the adaptation of LCQ, William and Deci (1996) applied the questionnaire to 131 university students and calculated the validity and reliability scores. The Alpha reliability of the questionnaire was found as .96.

LCQ contains 15 items with a 7-point Likert scale. The lowest score that can be gained from this questionnaire is 15 while the highest score is 105. The higher score means that the students perceive their instructor as more autonomy supportive while the lower score means the students consider their instructors as less autonomy supportive. LCQ was translated into Turkish by Kanadli and Bagceci (2016). The reliability score of the translated version of the questionnaire was .89 (Cronbach's alpha). Since reliability scores between .80 and 100 are considered highly reliable (Karagoz, 2017) In the current study, translated version of LCQ was used (Appendix-3).

### **3.3.3. Observation**

#### **3.3.3.1. Observation sheet**

To have a deeper understanding of perceived teacher autonomy support and student engagement levels, an observation sheet developed by Reeve, Jang, Carrell, Jeon, and Barch (2004) was employed to collect data (Appendix-4). This rating sheet is based on an extensive analysis of the literature (Deci, 1995; Deci et al., 1991, 1994; Reeve, 1996, 1998; Reeve et al., 2004; Ryan & La Guardia, 1999).

The rating sheet consists of two main parts: teachers' motivating style and student engagement. Teachers' motivating style part measures teachers' autonomy support, teachers' provision of structure, and teachers' provision of involvement. The teachers'

autonomy support section includes four items assessing teachers' reliance on motivational resources or stimulation of intrinsic motivational resources, use of a more controlling or more informational language, negligence of or ability to identify the values and/or importance of task/lesson/behavior, and reaction to a negative event from students' perspective. Each item is provided with a cluster of descriptive statements. These items are in a dichotomous format with a 7-point Likert scale. More autonomy-supportive behaviors are placed on the right side of the dichotomy while more controlling behaviors are located on the left side. The collection of these four items with their clusters gives an overall picture of the perceived autonomy support level of the observed instructor.

The student engagement part of the observation sheet assesses students' active task involvement during instruction. Students' active involvement part assesses whether students are distracted or focused during the lesson, whether they are passive, slow, and show minimal effort or active, quick, and demonstrate intense effort, whether they are verbally silent or participating, whether they give up easily or persists, and whether they feel positive or negative feelings in the face of challenges, failures, or confusion.

In the observation sheet, the observer ticked across the statements that matched with the teacher autonomy support and student engagement behaviors. And at the end, the point which show the level of perceived teacher autonomy support and student engagement was calculated.

The Cronbach's alpha coefficient of teacher autonomy items in the observation sheet was calculated for each observation by the researchers and found as .81, .90, and .82 respectively. Similarly, regarding the student engagement items in the observation sheet, The Cronbach's alpha coefficient was calculated for each observation by the researchers and found as .88, .99, and .86 respectively (Reeve et al., 2004). As it is a reliable tool to collect data on the autonomy-supportiveness of the teachers, this observation sheet was utilized to gather information on teachers' autonomy-supportive behaviors and student engagement in the current study. To ensure the reliability of the data gathered through the observation sheet, a rater, who was informed about student engagement and teacher autonomy support, was required to analyze the videos by using observation sheet. Cronbach's alpha coefficient was calculated to ensure the reliability of the analyses conducted by the two independent raters, and it was found as .86.

### **3.3.3.2. Hit-Steer Observation System**

To assess students' active efforts to contribute to the flow of the lesson in each observed lesson, Hit-Steer Observation System (Fiedler, 1975) was used. This system was adapted to the classroom context by Koenigs et al. (1977). Basically, this system evaluates the frequency of teachers' initiatives to influence students in an effective way as well as students' attempts to affect their teachers in a constructive manner (Reeve et al., 2004)

In the classroom, the flow of the lesson is affected at two levels: teacher influence and student influence, and these influences are expressed by verbal or nonverbal attempts that alter other person's behaviors or decisions (Reeve et al., 2004). By using this system, students' constructive initiatives to affect their teacher (a hit), and the successful ones in influencing the teachers' behaviors or decisions (a steer) are noted down (Reeve and Tseng, 2011). To calculate the proportions of students' active and constructive contributions, the frequencies were used to calculate a ratio:

$$\text{Proportions of students' influence attempts} = \frac{\text{frequency of students' influence attempts}}{\text{frequency of students' influence attempts} + \text{frequency of teachers' influence attempts}}$$

(Reeve et al., 2004)

By using this calculation of students' initiatives to affect their teachers' behaviors and decision-making process actively and constructively, students' agentic engagement levels in the observed lessons were computed.

Hit-Steer Observation System has been utilized by many of the researchers investigating agentic engagement and teacher autonomy support and the findings have demonstrated that the number of the students' attempts to influence their teachers' decisions, behaviors, and flow of the course occurred more in classrooms with autonomy-supportive teachers (Reeve, 2013; Reeve and Tseng, 2011; Jang et al., 2010). Thus, students' agentic engagement in observed classrooms was assessed by using Hit-Steer Observation System.

### **3.3.4. Video Recordings**

The observed lessons were also video recorded. A total of 6 lessons from two classes were recorded. Each lesson was 30 minutes long and each recording covered the

whole lesson. In the lessons, upper-intermediate level of “English File” (Latham-Koenig, Oxeden, Chomacki, 2020) was used as a book.

In the first lesson of the first class, the students were asked to listen to a story about two friends who got lost in the jungle and answer related questions. The teacher wrote the correct answers on papers and hid them in different places around the classroom. The students were grouped, found the papers with answers, and discussed the answers with the group members. After finding the answers to the questions, the teacher made the students watch a trailer of a movie based on the same story.

In the first lesson of the second class, the topic was unreal conditionals. The teacher asked some of the students to come to the board, she gave each student a piece of paper and asked them to form a proper sentence with the words written on the papers. After this activity, the students did a fill in-the-blanks activity on unreal conditionals. Then, the teacher asked a number of hypothetical questions about unreal situations to the students. After students answered teacher’s questions, the teacher made a brief introduction to third conditionals.

In the second lesson of the first class, the teacher started the course with vocabulary teaching. She provided meanings of some English words with visuals and examples. During vocabulary teaching, some of the students asked questions, expressed their opinions, and discussed their ideas both with the teacher and their peers. After vocabulary teaching, the students were required to read a text called “How to Improve Your Acting Skills” and answer related questions. Then, the teacher showed the students a photo of a shocked man, and asked students to find possible reasons that might have shocked the man in the photo. The students worked in groups. When the students finished, they chose the most imaginative reason as a whole class.

In the second lesson of the second class, the students were required to read a text named “The best way to spot a liar... or is it?” Before reading the teacher asked about students’ opinions on detecting liars. Then, the teacher did vocabulary teaching on the words in the reading passage. During vocabulary teaching, the students guessed the meaning of the words, expressed their ideas, and gave examples. Then, the students read first paragraph of the text and answered relevant questions. The teacher walked around the class while students were reading the text. After the students had answered the questions, the teacher continued to teach rest of the vocabulary. When the vocabulary

teaching is completed, the students read the whole text, and match a number of statements with the facts mentioned in the reading text.

In the third lesson of the first class, the teacher started to explain stress and intonation in speaking. She gave some examples on the topic for students to understand better. After the brief training on stress and intonation, the students listened to the beginning of a talk and put slashes when the speaker paused. The students discussed their answers with each other, then they checked the answers with the teacher. Students were asked to work in groups to prepare a speech on a hobby they had or sport they played, an interesting person in their family, a famous person they admired, or the good and bad side of their job or course. While the students were working on their speech in their groups, the teacher wandered around the class, asked some questions, and provided help when students needed. At the end of the course, one of the students volunteered to do the speech he prepared in front of the class.

In the third lesson of the second class, the topic was stress and intonation as it was in the third lesson of the first class. The teacher talked about the importance of stress and intonation in speech. She gave the same examples as she did in the first class. After the examples, the students listened to a small talk and marked the pauses in the script of the talk. The students discussed their answers with their peers, and they checked their answers with the teacher. Then, the teacher said that they were going to prepare a speech on a topic they liked in groups. The teacher walked around the class, asked and answered questions while the students were working on their speech until the end of the lesson.

### **3.3.5. Stimulated Recall Protocols**

To gather data on the instructors' views and opinions regarding student behaviors that lead them to demonstrate more autonomy-supportive practices or be more controlling in the classroom, stimulated recall protocols were conducted.

After the observation and video recording of each lesson, the instructor was asked to participate in stimulated recall protocols. A total of six stimulated recall protocols were recorded. Each stimulated recall protocol took approximately 60 minutes. In these protocols, the instructor was required to watch each one of the video recordings and was asked to stop the recording any time she wanted and comment on her autonomy-supportive and/or controlling behaviors.

Stimulated recall protocols are used to delve into participants' thought processes or strategies applied during a task or activity by requesting them to contemplate their thoughts after they completed the task or the activity (Gass and Mackey, 2016). In stimulated recall protocols, participants are provided with a stimulus such as audio or video recordings of themselves, observational field notes, or transcriptions of conversations (Gass and Mackey, 2016). The biggest advantage of stimulated recall protocols is that they enable gathering data that might be overlooked by using other data collection instruments (Gass and Mackey, 2016). In other words, participants might not recall what they thought while performing a task when they are asked to reflect in a traditional interview session (Dempsey, 2010). As a solution to this problem, stimulated recall protocols to make participants come one step closer to the actual event that happened in the past (Dempsey, 2010) by triggering their memories through the use of audio and/or visual stimuli (Gass and Mackey, 2016). Therefore, this study employed stimulated recall protocols to obtain a more vivid picture of students' engagement behaviors that result in more autonomy support or control from their instructor.

### **3.3.6. Semi-Structured Interviews**

To collect data on how students perceived their instructor in terms of autonomy-supportive and controlling behaviors, what kind of autonomy-supportive or controlling instructor behaviors lead students to become more engaged, and how the instructor viewed their students in terms of student engagement and what kind of student engagement behaviors lead her to adopt more autonomy-supportive or controlling motivating style, semi-structured interviews with open-ended questions were conducted with both the instructor and the students.

The semi-structured interviews were conducted after the lesson had been observed. The open-ended questions in the semi-structured interviews with students asked about how students felt and what they thought during the instruction, whether they attended the lesson or not, whether they initiated any conversation with the instructor, whether they made any contributions to the flow of the lesson, and whether they felt free or repressed during the course (Appendix-5). The open-ended questions in the semi-structured interviews with the instructor scrutinized the instructor's views about her students' engagement levels, how she responded to students' engagement behaviors, how she felt when their students acted in an initiative and proactive way, whether they made any

decisions considering their students' needs and opinions during the flow of the lesson (Appendix-6).

Open-ended questions let participants produce opinions and views instead of being forced to choose from possible answers (Creswell, 2018). Therefore, to collect information on students' views and opinions regarding their instructor's autonomy-supportive instructional behavior and how these behaviors affected their engagement in the classroom, and on the instructor's views and opinions regarding the students' engagement behaviors that might lead her to act more in an autonomy-supportive or controlling way, semi-structured interviews were carried out with both the students and their instructor.

### **3.4. Pilot Study**

The pilot study was carried out in the first week of the second semester. Two random classrooms with a total of 37 students in the School of Foreign Languages were selected and, FASEQ, LCQ, observation sheet, stimulated recall protocol, and semi-structured interviews with open-ended questions were piloted with the students and their instructor in the selected classrooms.

Before the pilot study, open-ended questions prepared for semi-structured interviews were presented to expert opinion. According to the opinions of the experts, necessary changes were performed. This altered version of the open-ended questions was piloted in the interviews before collecting the data. The parts that created vagueness and misunderstandings during the piloting process were detected and required changes were made. Stimulated recall protocols were also piloted with the instructors and, the timing and the prompts to be given during the protocol were practiced.

In the pilot study, validity and reliability scores of FASEQ and LCQ were calculated. The internal reliability (Cronbach's alpha) of the agentic engagement, behavioral engagement, emotional engagement, and cognitive engagement categories in FASEQ were found to be .83, .91, .90, and .77 respectively. The Cronbach's alpha value of LCQ was calculated as .92.

### **3.5.Data Collection Procedure**

The data regarding student engagement and teacher autonomy support were collected during the second semester of the 2021-2022 academic year. Prior to data collection process, institutional review board was applied for research ethics approval and all the required formal permissions were obtained (Appendix-7). Also, permissions to use translated versions of FASEQ and LCQ were also taken from the researchers (Appendix-8). After the conduction of the pilot study in the first week, FASEQ and LCQ were distributed in the second week of the semester (Time 1 (T 1) – beginning of the semester).

In the first lesson, FASEQ and LCQ were applied to all the participants in all classes. Completion of the questionnaires took approximately 15 minutes. In the second lesson, the first classroom was video recorded. Each recorded lesson took approximately 30 minutes. While recording the lesson, the researcher also made observations by using observation sheet. After the second lesson, the instructor was interviewed. In the third lesson, volunteered students were also interviewed. Stimulated protocol were conducted with the instructor in her available time in the same week. The observation and the interviews of the second class were conducted on the following day.

In the ninth week (Time 2 (T 2) - middle of the semester), FASEQ and LCQ were distributed again in the first lesson. In the second lesson, the first classroom was video recorded for 30-minute lesson hour, and the instructor was asked to participate in semi-structured interview for the second time after the lesson. Students were also asked to participate in semi-structured interview sessions for the second time in the third lesson. The instructor was invited to participate in stimulated recall protocols in her preferred time in the same week. The observation and the interviews of the second class were conducted on the following day.

In the sixteenth week (Time 3 (T 3) – at the end of the semester), the same procedure was repeated as in Time 1 and Time 2. Application of FASEQ and LCQ took place in all classes then video recordings and observation, stimulated recall protocols, interviews were conducted respectively in two classes.

A rater also watched the video recordings of the lessons separately and assessed the instructors' autonomy support and student engagement independently.

### 3.6.Data Analysis

Before the analysis of the data collected through scales for this study, the construct validity of the scales was ensured by conducting Confirmatory Factor Analysis (CFAs).

The CFA result of FASEQ is presented in Figure 1 below:

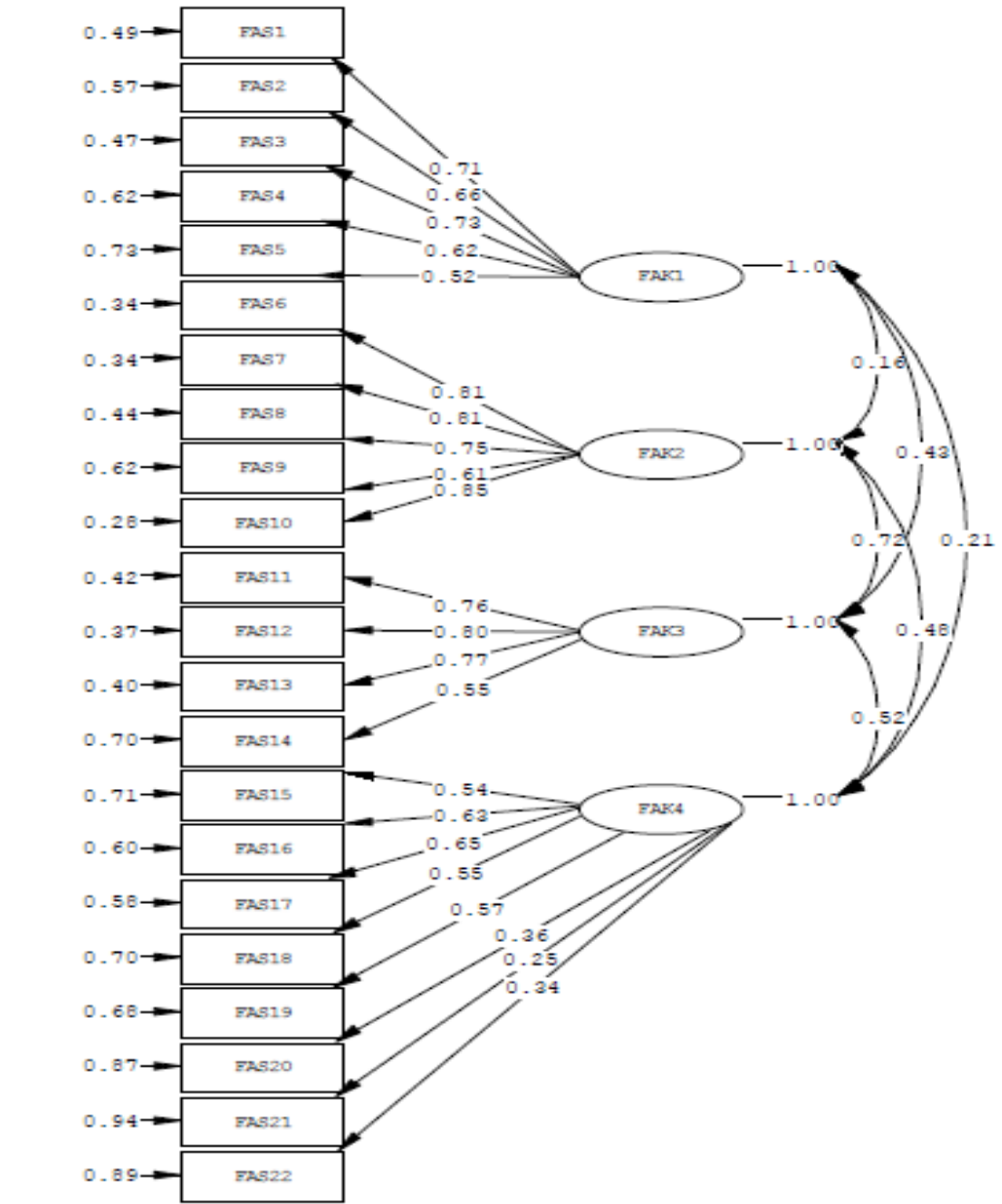
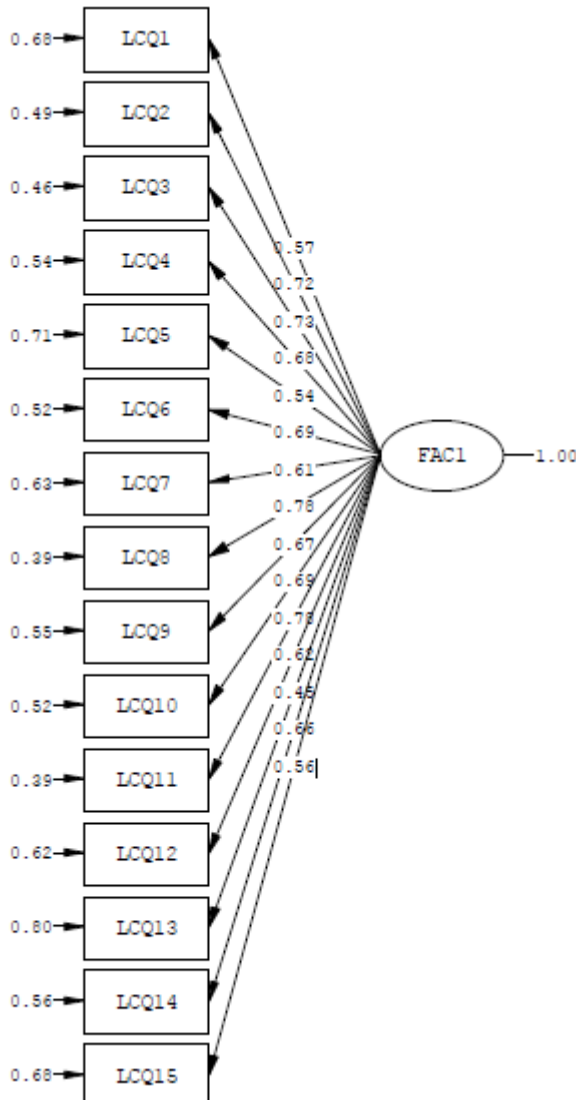


Figure 3.1. Confirmatory factor analysis (CFA) of FASEQ

As it is seen from the figure above, CFA computed on the data collected through FASEQ illustrated standardized coefficients ranging from 0.25 to 0.80, and error variances between .26 and .94. No modifications were performed to the model. Model fit was evaluated by calculating fit indices and acceptable values were reached:  $\chi^2(203) =$

435.88,  $p = .000$ ,  $\chi^2/df = 2.14$ , NNFI = .92, CFI = .93 SRMR = .075, RMSEA = 0.074. In other words, FASEQ was found to be suitable for the sample in the current study.

Regarding the construct validity of LCQ, CFA was carried out. The CFA result of LCQ is given in Figure 2 below:



**Figure 3.2.** *Confirmatory factor analysis (CFA) of LCQ*

As Figure 2 illustrates, CFA calculated on the data collected through LCQ showed standardized coefficients ranging from .45 to .78, and error variances between .39 and .80. No modifications were carried out. Model fit was evaluated by calculating fit indices and acceptable values were reached:  $\chi^2(90) = 253.13$ ,  $p = .000$ ,  $\chi^2/df = 281$ , NNFI = .95, CFI = .96 SRMR = .056, RMSEA = 0.093. In other words, LCQ was found to be suitable for the sample in the current study.

To reveal the levels of perceived teacher autonomy support and student engagement at T 1, T 2, and T 3, descriptive statistics of the data i.e., mean scores and standard deviations were calculated. To investigate the relationship between perceived teacher autonomy support and student engagement Pearson's *r* correlation was carried out between FASEQ and LCQ at T 1, T 2, and T 3.

To investigate the extent to which student engagement (behavioral, emotional, cognitive, and agentic engagement) explains the variance in teacher autonomy support, multiple regression analysis was conducted between FASEQ and LCQ at T 1, T 2, and T 3. Multiple regression analysis is a statistical technique that is utilized to analyze the predictive weight of multiple independent variables on a dependent variable (Moore, Anderson, Das, and Wong, 2006). In the current study, the independent variables were behavioral, emotional, cognitive, and agentic engagement while the dependent variable was teacher autonomy support. By running multiple regression analysis, each independent variable's (behavioral, emotional, cognitive, and agentic engagement) contribution to the variance in teacher autonomy support was calculated.

To examine the longitudinal increase in teacher autonomy support in relation to student engagement hierarchical linear modeling (HLM) will be run between FASEQ and LCQ. Hierarchical linear modeling is applied to analyze the variance in the dependent variable when independent variables have varying hierarchical levels (Woltman, Feldstein, MacKay, and Rocchi, 2012). In the current study, student engagement as the independent variable had a 2-level cross-classified hierarchical structure with repeated measures (Level 1, 3-waves) nested within students (Level 2, N= 212). Waves in Level 1 refer to the three different time points at which the data were collected throughout the semester. By calculating the predictive value of student engagement in T 1 in the explanation of teacher autonomy support in T 2, the predictive value of student engagement in T 1 and T 2 in the explanation of teacher autonomy support in T 3, the longitudinal increase in teacher autonomy support in relation to student engagement was demonstrated.

The data collected through the observation sheet and Hit-Steer Observation System was analyzed through descriptive statistics. To determine the teachers' autonomy supportiveness, mean scores and standard deviations of observation sheet ratings of two independent raters were calculated. To specify the students' agentic contribution to the

lesson, mean scores and standard deviations of the Hit-Steer Observation Points were computed.

The qualitative data collected through semi-structured interviews with students and the instructor, and stimulated recall protocols with the instructor were analyzed by content analysis. In the analysis, the steps proposed by Corbin & Strauss (2008) were followed. Firstly, the whole data were read several times. After reading, the idea units that emerged in the data were coded. In coding the idea units, the processes defined by Saldana (2013): first cycle coding and second cycle coding were followed. In the first cycle of coding, the data were coded with *invivo* coding. After completing the coding, they were written as a list. In the second cycle, the emerged codes were compiled under themes by pattern coding (Miles, Huberman & Saldana, 2014). The table below summarizes the research questions of the study, the tools to collect the data to answer each research question, and the data analysis methods.

**Table 3.1.** *Summary of research questions, data collection tools, and data analyses*

<b>Research Questions</b>	<b>Data Collection Tools</b>	<b>Data Analysis</b>
1. What are the levels of student engagement and perceived teacher autonomy support at the beginning, in the middle, and at the end of the semester?	FASEQ LCQ Observation Sheet Hit-Steer Observation System	Descriptive Statistics
2. What is the relationship between student engagement (behavioral, emotional, cognitive, and agentic engagement) and perceived teacher autonomy support at the beginning, in the middle, and at the end of the semester?	FASEQ LCQ	Pearson's r Correlation
3. To what extent does student engagement (behavioral, emotional, cognitive, and agentic engagement) explain the variance in perceived teacher autonomy support at the beginning, in the middle, and at the end of the semester?	FASEQ LCQ	Hierarchical Multiple Regression Analysis
4. To what extent does student engagement (behavioral, emotional, cognitive, and agentic engagement) explain the variance in longitudinal increase in perceived teacher autonomy support?	FASEQ LCQ	Hierarchical Linear Modeling
5. What are the factors affecting teacher autonomy support?	Semi-structured Interviews Stimulated Recall Protocols	Content Analysis
6. What are the factors affecting student engagement?	Semi-structured Interviews	Content Analysis

## CHAPTER 4

### 4. RESULTS

This study was carried out to investigate the relationship between perceived teacher autonomy support and student engagement. It also aimed to reveal the extent to which student engagement explained changes in perceived teacher autonomy support. The extent to which student engagement explained changes in longitudinal increase in perceived teacher autonomy support throughout a semester was also examined. Additionally, factors affecting student engagement and factors affecting perceived teacher autonomy support were also explored. Four Aspects of Student Engagement Questionnaire (FASEQ) and Learning Climate Questionnaire (LCQ) were distributed to the participants to collect data on student engagement and perceived teacher autonomy levels at the beginning (Time 1 – T1), middle (Time 2 – T2), and end (Time 3 – T3) of the semester. Also, observation sheet was used to gather further data on perceived teacher autonomy support and student engagement. Additionally, hit-steer observation system was utilized to gain further information on agentic engagement. Semi-structured interviews with both the teacher and students and stimulated recall protocols with the teacher were conducted to collect data on factors affecting student engagement and perceived teacher autonomy support.

In this section, the six research questions will be answered respectively. Firstly, levels of perceived teacher autonomy support and student engagement at T1, T2, and T3 will be given. Secondly, the relationship between perceived teacher autonomy support and student engagement at T1, T2, and T3 will be presented. Thirdly, the extent to which student engagement explained changes in perceived teacher autonomy support at T1, T2, and T3 separately will be provided. Then, the extent to which student engagement explained changes in perceived teacher autonomy support increment throughout the semester will be given. Lastly, factors affecting student engagement and factors affecting perceived teacher autonomy support will be presented.

#### 4.1. Levels of Perceived Teacher Autonomy Support and Student Engagement at the Beginning, in the Middle, and at the End of the Semester

To answer the first research question, which examines the levels of teacher autonomy support and student engagement at T1, T2, and T3 the data from the observation sheet, Learning Climate Questionnaire (LCQ) and Four Aspects of Student Engagement Questionnaire (FASEQ) are analyzed by using descriptive statistics.

In the Observation Sheet, student engagement was scored as collectively as a combination of all four dimensions i.e., agentic engagement, behavioral engagement, cognitive engagement, and emotional engagement. Table 4.1 below demonstrates the descriptive statistics of perceived teacher autonomy support and students' collective engagement gained through observation sheet.

**Table 4.1.** *Descriptive observation sheet statistics of perceived teacher autonomy support and students' collective engagement at the beginning, in the middle, at the end of the semester*

	Time 1		Time 2		Time 3	
	M	SD	M	SD	M	SD
<b>Perceived Teacher Autonomy Support</b>	5.56	1.36	5.06	0.92	6.68	0.47
<b>Students' Collective Engagement</b>	4.60	1.20	5.05	0.60	5.95	0.94

According to the table above, students perceived their teachers as highly autonomy supportive at the beginning of the semester. (M= 5.56, SD=1.36). Similarly, teachers were perceived as highly autonomy supportive by their students in the middle of the semester (M= 5.06, SD= .92). As for the end of the semester, the students considered that their teacher provided autonomy support to a high degree (M= 6.21, SD= .47). These findings indicate that students in this study perceived their teachers as highly autonomy supportive at T1, T2, and T3. In other words, the teacher relied more on intrinsic motivation sources, used more informational language, identified the importance of the task more, and accepted negative affect of the students' rather than trying to change it throughout the whole semester.

As for the students' collective engagement, the findings have demonstrated that students' engagement level was moderate at the beginning of the semester (M= 4.60, SD= 1.20). In the middle of the semester, students' collective engagement level went higher (M= 5.06, SD= 0.92). students' collective engagement level was the highest at the end of the semester (M= 5.95, SD= 0.94). these results imply that students' collective engagement level increased throughout the semester. In other words, students focused more attentively, showed more intense effort, asked and answered more questions, did

not give up easily when they encountered with difficulties, and they had more positive feelings towards the course such as enjoyment interest, and fun towards the end of the semester.

To gain further insight into the levels of perceived teacher autonomy support and the student engagement dimensions that is agentic engagement, behavioral engagement, emotional engagement, and cognitive engagement, descriptive statistics of the data on perceived teacher autonomy support gathered through Learning Climate Questionnaire (LCQ) and data on student engagement collected by using Four Aspects of Student Engagement Questionnaire (FASEQ) were also computed. Table 4.2 below illustrates the descriptive statistics of perceived teacher autonomy support and student engagement gathered through LCQ and FASEQ respectively at T1, T2, and T3.

**Table 4.2.** Descriptive statistics of perceived teacher autonomy support (LCQ) and student engagement (FASEQ) at T1, T2, and T3

	T1		T2		T3	
	M	SD	M	SD	M	SD
<b>Behavioral Engagement</b>	5.00	1.13	4.94	1.21	4.99	1.10
<b>Emotional Engagement</b>	5.24	1.03	5.14	1.14	5.06	1.12
<b>Cognitive Engagement</b>	4.90	.80	4.81	.96	5.01	.94
<b>Agentic Engagement</b>	4.70	1.09	4.83	1.13	4.87	1.20
<b>Perceived Teacher Autonomy Support</b>	5.41	.83	5.45	.93	5.76	.88

As Table 4.2. shows, behavioral engagement levels of the students were slightly above moderate at the beginning of the semester (M= 5.00, SD= 1.13). In the middle of the semester, students engaged behaviorally at a moderate level (M= 4.94, SD= 1.21) A little decrease was observed. At the end of the semester, students engaged behaviorally at a moderate level (M= 4.99, SD= 1.10), a little increase is observed. That is, though there were modest changes during the semester students listened to the teacher and showed effort in the lesson.

As for the emotional engagement levels of the students, the table demonstrates that it was slightly above the moderate level (M= 5.24, SD= 1.03). In the middle of the semester, students' emotional engagement levels were also slightly above moderate level (M= 5.14, SD= 1.14). Students engaged emotionally at a slightly above moderate level at the end of the semester (M= 5.06, SD= 1.12). Students generally enjoyed the courses and they were interested in the topic during the courses throughout the semester.

Regarding the students' cognitive engagement level at the beginning of the semester, the table illustrates that it was a moderate level (M= 4.90, SD= .80). In the

middle of the semester, students' cognitive engagement level was at a moderate level ( $M=4.81$ ,  $SD=.96$ ). At the end of the semester, students engaged in the lesson cognitively at a slightly above moderate level ( $M=5.01$ ,  $SD=.94$ ). This may indicate that the students improved their cognitive skills towards the end of the semester. That is, students concentrated on their own learning and focused on their learning strategies.

As for the agentic engagement, it was found that students engaged agenticly at a moderate level at the beginning of the semester ( $M=4.70$ ,  $SD=1.09$ ). Similarly, students' agentic engagement level was at a moderate level in the middle of the semester ( $M=4.83$ ,  $SD=1.13$ ). Students engaged in the lesson agenticly at a moderate level at the end of the semester, too ( $M=4.87$ ,  $SD=1.20$ ). Slight increase is observed. This may indicate that they got to know their teacher better and behaved agenticly. That is, they expressed their thoughts and opinions regarding the flow of the lesson and/or asked and answered questions.

To sum up, it can be concluded from the descriptive statistics that engagement level of the students with its four sub-dimensions did not show great changes throughout the semester. Though there were slight changes between slightly above moderate and moderate level, average engagement level of behavioral, emotional, cognitive, and agentic sub dimensions is at a moderate level throughout the semester.

Regarding the perceived teacher autonomy level, students thought that their teacher fulfilled their need for autonomy at a slightly above moderate level at the beginning of the semester ( $M=5.41$ ,  $SD=.83$ ), in the middle of the semester ( $M=5.45$ ,  $SD=.93$ ), and at the end of the semester ( $M=5.76$ ,  $SD=.88$ ). That is to say, perceived teacher autonomy support level increased slightly throughout the semester. In other words, students perceived their teacher as more autonomy supportive towards the end of semester.

To delve deeper into the agentic engagement levels of the students, hit-steer observation system was utilized. At the beginning of the semester, in the first lesson of the first class, the percentage of attempts made by the students to affect their teacher's behavior was 33.3%. In the first lesson of the second class at the beginning of the semester, the percentage of the attempts made by the students to alter their teacher's behavior was 25%.

In the middle of the semester, the analysis of the observation revealed that students became more assertive and tried to influence their teacher more, resulting in an increase up to 40% in the second observed lesson of the first class. Similarly, in the second

observed lesson of the second class, students showed more agentic engagement behaviors, and the percentage of number of the attempts made by the students to affect their teacher’s behaviors raised up to 60% percent.

At the end of the semester, the observed lesson was about giving a speech in front of public in both classes. The teacher started the lesson talking about stress and intonation in speaking and explained the topic with some examples. The students were required to work in groups to prepare a speech on any topic they wanted, and asked to do their speech in front of the class if they volunteered. During the course, the students were occupied with the preparation of their speech, and they were talking to their group friends. As a result, at the end of the semester, the students did not show any constructive initiative to alter their teacher’s behaviors.

#### 4.2.The Relationship Between Perceived Teacher Autonomy Support and Student Engagement

To reveal the relationship between perceived teacher autonomy support and student engagement across three time points i.e., in the beginning, in the middle, and at the end of the semester, Pearson’s r correlations were calculated. The correlation coefficients from 0.1 to 0.4 are regarded as weak, the correlation coefficients between 0.4 to 0.7 are considered moderate, and the correlation coefficients between 0.7 to 1.0 are interpreted as high level (Dancey and Reidy, 2017). Table 4.3 below illustrates the correlation among the variables of perceived teacher autonomy support, agentic engagement, behavioral engagement emotional engagement, and cognitive engagement at T1, T2, and T3.

**Table 4.3.** Correlation matrix of perceived teacher autonomy support and student engagement at the beginning, in the middle, and at the end of the semester

Variables	Agentic engagement	Behavioral engagement	Emotional engagement	Cognitive engagement
Time 1 PTAS*	.177**	.046	.126	.012
Time 2 PTAS	.235***	.159**	.190**	.076
Time 3 PTAS	.427**	.230**	.328**	.294**

\*PTAS= Perceived Teacher Autonomy Support

\*\*p<.01

\*\*\*p<.05

According to the table above, at the beginning of the semester, perceived teacher autonomy support had a statistically significant, positive, and weak relationship with agentic engagement levels of the students ( $r= .177, p<.01$ ). That is, when the perceived

teacher autonomy support level increased, the students' agentic engagement level also increased or vice versa. However, perceived teacher autonomy support did not correlate significantly with behavioral engagement, emotional engagement, or cognitive engagement at the beginning of the semester.

In the middle of the semester, perceived teacher autonomy support had a statistically significant, positive, and weak relationship with agentic engagement levels of the students ( $r = .235, p < .05$ ). Namely, when the perceived teacher autonomy level increased, students' agentic engagement level also increased or vice versa. Perceived teacher autonomy support was also found to have a statistically significant, positive, and weak relationship with the behavioral engagement levels of the students ( $r = .159, p < .01$ ). That is to say, when the perceived teacher autonomy support levels went up, the students' behavioral engagement levels also went up or vice versa. Lastly, perceived teacher autonomy support had a statistically significant, positive, and weak correlation with the emotional engagement levels of the students ( $r = .190, p < .01$ ). In other words, when the perceived teacher autonomy level ascended, students' emotional engagement levels also ascended, too. However, perceived teacher autonomy support did not correlate with the cognitive engagement levels of the students in the middle of the semester.

Regarding the end of the semester, perceived teacher autonomy support was found to have a statistically significant, positive, and moderate relationship with agentic engagement levels of the students ( $r = .427, p < .01$ ). In other words, when perceived teacher autonomy level increased, students' agentic engagement level also increased too. Also, a statistically significant, positive, and weak relationship was found between perceived teacher autonomy support and students' behavioral engagement levels ( $r = .230, p < .01$ ). That is, the students' behavioral engagement levels went up as the perceived teacher autonomy level went up or vice versa. Moreover, perceived teacher autonomy support had a statistically significant, positive, and weak correlation with emotional engagement levels of the students ( $r = .328, p < .01$ ). Namely, emotional engagement levels escalated higher as the perceived teacher autonomy support escalated higher or vice versa. Perceived teacher autonomy support had a statistically significant, positive, and weak relationship with cognitive engagement levels of the students ( $r = .328, p < .01$ ). When perceived teacher autonomy support level increased, students' cognitive engagement levels also increased. In conclusion, perceived teacher autonomy support

correlated significantly with all four dimensions of student engagement at the end of the semester.

These findings demonstrate that although perceived teacher autonomy support had a positive and statistically significant relationship with agentic engagement at T1, the magnitude of this relationship was weak. Perceived teacher autonomy support correlated positively and significantly with agentic, behavioral, and emotional engagement at T2, but the magnitude of this correlation was weak, too. As for T3, although perceived teacher autonomy support had positive and statistically significant relationships with all sub-dimensions of student engagement, the degree of these relationship was weak, except for agentic engagement.

#### **4.3. The Extent Student Engagement explain the change in Perceived Teacher Autonomy Support throughout the Semester**

To explore to what extent student engagement dimensions i.e., agentic engagement, behavioral engagement, cognitive engagement, and emotional engagement, explain the variance in perceived teacher autonomy support at T1, T2, and T3, four-stage multiple hierarchical regression analyses were run. In the first stage, agentic engagement was entered. Behavioral engagement was entered in the second stage while cognitive engagement was entered in the third stage. Emotional engagement was entered as the last variable in the fourth stage. The table below demonstrates the extent to which student engagement dimensions explained the variance in perceived teacher autonomy support at the beginning of the semester.

As Table 4.4. indicates, R square of this regression model was found to be .037 and it is not statistically significant. This means that at the beginning of the semester, the independent variables in this regression model did not explain any variance in the dependent variable when they are considered all together. That is to say, agentic engagement, behavioral engagement, cognitive engagement, and emotional engagement levels of the students did not have any effect on the perceived teacher autonomy level at the beginning of the semester all together.

**Table 4.4.** Hierarchical multiple regression analysis at the beginning of the semester (dependent variable: perceived teacher autonomy support)

Model	R	R Square	Adjusted R Square	Standard Error	F Model	R Square Change	F Change
Agentic engagement	.177	.031	.027	.824	1	.031	6.796*
Behavioral engagement	.179	.032	.023	.826	2	.001	.116
Cognitive engagement	.181	.033	.019	.827	3	.001	.170
Emotional engagement	.194	.037	.019	.827	4	.005	1.032

\*p<.05

N= 212

To understand the unique contribution of each sub-dimension of student engagement in explaining the changes in perceived teacher autonomy support at T1, R Square Change is examined (table 4.4). As the table demonstrates, agentic engagement has a significant R square change value of .031( $F(1, 211)= 6.796, p<.05$ ), which means that, above and beyond all other three sub-dimensions of student engagement, agentic engagement significantly explains 3.1% of the change in perceived teacher autonomy support at the beginning of the semester. However, behavioral engagement, cognitive engagement, and emotional engagement did not account for any variation in perceived teacher autonomy support at the beginning of the semester. These findings indicated that only agentic engagement uniquely had an impact on perceived teacher autonomy support at T1.

To reveal the effect of student engagement on perceived teacher autonomy support in the middle of the semester, the same four-stage hierarchical multiple regression model was run again with the data collected in Time 2. Table 4.5 below illustrates the hierarchical multiple regression analysis results in the middle of the semester.

According to the table, R square of this regression model was found to be .066 and it is not significant. This means that the independent variables in this model did not explain any variance in the dependent variable all together. In other words, agentic engagement, behavioral engagement cognitive engagement, and emotional engagement did not account for any variance in the perceived teacher autonomy support in the middle of the semester collectively.

**Table 4.5.** Hierarchical multiple regression analysis in the middle of the semester (dependent variable: perceived teacher autonomy support)

Model	R	R Square	Adjusted R Square	Standard Error	F Model	R Square Change	F Change
Agentic engagement	.235	.055	.051	.913	1	.055	12.304*
Behavioral engagement	.252	.063	.054	.911	2	.008	1.764
Cognitive engagement	.252	.063	.050	.913	3	.000	.045
Emotional engagement	.256	.066	.047	.915	4	.002	.461

\*p<.01  
N= 212

When the regression model is investigated further to see whether each student engagement dimension contributed uniquely to the perceived teacher autonomy, it can be seen that agentic engagement had an R square change value of .055 at a significant level ( $F(1, 211) = 12.304, p < .01$ ). This means that among all of the dimensions of engagement, agentic engagement, uniquely explained 5.5% of the variance in perceived teacher autonomy support in the middle of the semester. As for the other dimensions of student engagement i.e., behavioral engagement, cognitive engagement, and emotional engagement, no unique contribution in the model was found. That is, behavioral engagement, cognitive engagement, and emotional engagement did not explain any variation in perceived teacher autonomy in the middle of the semester. These results revealed that only agentic engagement individually caused changes in perceived teacher autonomy support at T2, as it did at T1.

At the end of the semester, the same four-stage hierarchical multiple regression analysis was carried out with the data collected at Time 3 to explore how student engagement explained the variance in teacher autonomy support. Table 4.6 demonstrates the results of the hierarchical multiple regression analysis carried out at the end of the semester.

As Table 4.6 illustrates, R square of this regression model was found to be .441 but it is not significant. This means that the independent variables did not explain any variance in the dependent variable in this model as a whole. That is to say, agentic engagement, behavioral engagement, cognitive engagement, and emotional engagement all together did not account for any variation in perceived teacher autonomy support at the end of the semester.

**Table 4.6.** Hierarchical multiple regression analysis at the end of the semester (dependent variable: perceived teacher autonomy support)

Model	R	R Square	Adjusted R Square	Standard Error	F Model	R Square Change	F Change
Agentic engagement	.427	.182	.179	.739	1	.182	46.873*
Behavioral engagement	.428	.183	.175	.740	2	.000	.085
Cognitive engagement	.440	.194	.182	.737	3	.011	2.760
Emotional engagement	.441	.195	.179	.739	4	.001	.290

\*p<.01  
N= 212

When the regression model is further analyzed for the unique contribution of each student engagement dimension, it can be seen that agentic engagement had R square change value of .182 at a significant level ( $F(1, 211) = 46.873, p < .01$ ), which means that above and beyond behavioral, emotional, and cognitive engagement, agentic engagement accounted for 18% variance in perceived teacher autonomy support at the end of the semester. However, behavioral engagement, cognitive engagement, and emotional engagement did not account for any variance in perceived teacher autonomy support at the end of the semester. These findings pointed out that only agentic engagement independently had an influence on perceived teacher autonomy support at T3, as found in T1 and T2.

To sum up, multiple regression analyses conducted to reveal the effectiveness of student engagement in explaining perceived teacher autonomy support at T1, T2, and T3 separately showed that only agentic engagement explained changes in perceived teacher autonomy support with a magnitude of 3.1%, 5.5%, and 18% respectively. That is, only agentic engagement affected perceived teacher autonomy support uniquely at T1, T2, and T3 separately.

#### **4.4. Longitudinal Increase in Perceived Teacher Autonomy in Relation to Student Engagement**

To see the longitudinal increase in perceived teacher autonomy support in relation to dimensions of student engagement, hierarchical linear modeling (HLM) was conducted. For this aim, it was expected that early semester student engagement (T1) and

mid semester student engagement (T2) would predict late semester perceptions of students regarding teacher autonomy support.

T1 student engagement and T2 student engagement are entered as blocks into the model. For the first block, the predictor variables behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement at T1 (at the beginning of the semester) were analyzed to see their predictable effect on T3 perceived autonomy support. For the second block, the predictor variables behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement at T2 (in the middle of the semester) were analyzed to see their predictable effect on T3 perceived autonomy support. Findings of the multilevel regressions with four student engagement components in three different timelines are presented in Table 4.7.

**Table 4.7.** *Multilevel regressions with the four student engagement components at the beginning (time 1), in the middle (time 2), and at the end (time 3) of the semester predicting perceived teacher autonomy support*

Fixed Effects	Perceived Teacher Autonomy Support	
	<i>B (SE)</i>	<i>β</i>
Engagement Predictors		
Intercept		
Time 1 Behavioral Engagement	6.260 (.082)	.037
Time 1 Emotional Engagement	.013 (.071)	.015
Time 1 Cognitive Engagement	.029 (.084)	-.130
Time 1 Agentic Engagement	-.141 (.069)	-.004
Time 2 Behavioral Engagement	-.129 (.070)	-.179
Time 2 Emotional Engagement	.169 (.078)	.219
Time 2 Cognitive Engagement	.076 (.074)	.084
Time 2 Agentic Engagement	-.079 (.061)	-.101

p<.001

SE= Standard Error

B= unstandardized regression coefficient

β= standardized regression coefficient

The results of the first and second blocks have demonstrated that none of the dimensions of student engagement predicted variance in the longitudinal increase in perceived teacher autonomy support. That is, T1 student engagement with four sub-dimensions and T2 student engagement with four sub-dimensions were not found as significant predictors to predict the longitudinal increase in perceived teacher autonomy support at T3. Although agentic engagement, behavioral engagement, emotional engagement, and cognitive engagement at the end of the semester were found to have a statistically significant relationship with perceived teacher autonomy support (Table 4.2), they did not explain any variance in longitudinal increase in perceived teacher autonomy support.

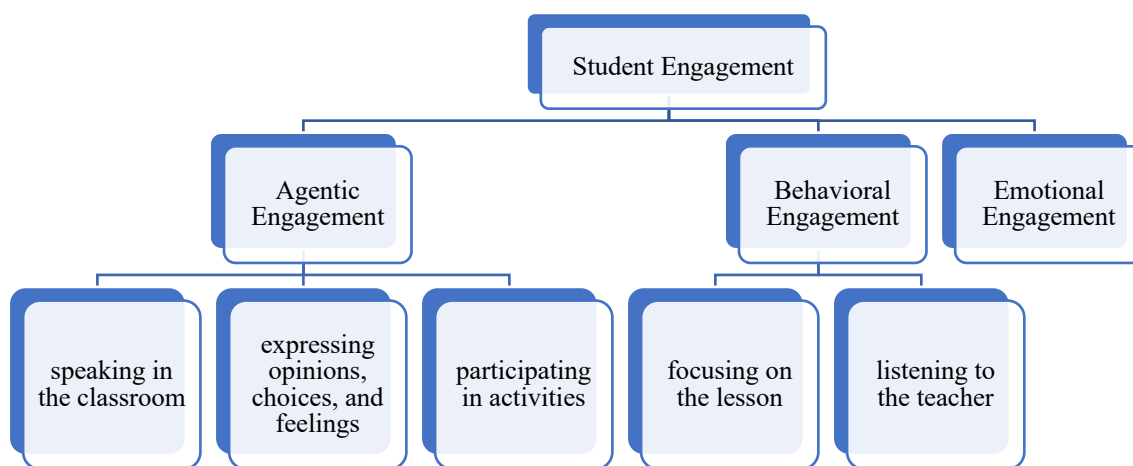
To conclude, agentic engagement, behavioral engagement, cognitive engagement, and emotional engagement at T1 and T2 did not have any effect on the longitudinal increase in perceived teacher autonomy support. The fact that although only agentic engagement was successful in affecting perceived teacher autonomy support at T1, T2, and T3 respectively it did not affect the increment of perceived teacher autonomy support throughout the term. These results imply the existence of other factors affecting perceived teacher autonomy support increment.

#### **4.5. Student Engagement and Factors Affecting Student Engagement: Students' Perspectives**

To reveal the dimensions and the factors affecting student engagement, a series of semi-structured interviews were carried out with the students in the current research. In this section, the findings obtained from the analysis of these interview sessions with the students will be presented. Firstly, the student engagement dimensions from the students' perspectives will be introduced. Secondly, the factors that might have affected the students' engagement levels will be given from their point of view. Thirdly, students' suggestions on enhancing their engagement levels will be given.

##### **4.5.1. Dimensions of student engagement**

The analysis of the data gathered through interviews has shown that students engaged in lessons agentially, behaviorally, and emotionally from their perspective. Students did not mention whether they engaged cognitively or not during the interview sessions. Figure 4.1 summarizes how students were engaged in the lesson according to students' point of view.



**Figure 4.1.** *Dimensions of student engagement*

#### **4.5.1.1. Agentic engagement**

The category of agentic engagement includes speaking in the classroom, expressing her/his opinions, feelings, and choices, and participating in activities. Speaking in the classroom refers to asking and answering questions, expressing her/his opinions, choices, and feelings which pertains to proposing what to do in free time, using body language to express how she/he feels, and enjoying lesson and showing it to the teacher. Participating in the activities bears upon taking part in group and pair works, and doing speech in front of the classroom. The quotes from the interviews with the students below show how students engaged agently in the classroom.

“For example, our teacher asked questions and we tried to guess the answers. Then we watched a video and **discussed the answers.**” Student 1.1.A

**I asked for permission to speak and did my speech in front of the class.** I think I was active during the activity.” Student 2.1.A

“While talking about the word ‘undermine’... I know it means sabotaging. Our teacher did some research and brought us multiple meanings of the word with their context. And **I insisted that it meant sabotaging. We talked with the teacher, and we agreed.**”

“[...] we need to read the passage. But I offered a suggestion to one of her (teacher’s) questions. **She asked whether we would read the passage aloud paragraph by paragraph or individually. I raised my hand for reading aloud [...]**” Student 2.2.B

As seen in the excerpts above, students were willing to involve in the instructional process by answering the teacher’s questions and participating in classroom discussions. The students were also eager to take part in the classroom activities and perform in front

of the class. Moreover, they did not hesitate to express their opinions on a subject, and they were eager to take responsibility by proposing suggestions regarding instructional issues.

#### ***4.5.1.2. Behavioral engagement***

The sub-category of behavioral engagement consists of focusing on the lesson and listening to the teacher. Focusing on the lesson refers to being involved in the lesson by paying attention and working on the activities. Listening to the teacher pertains to concentrating on the teacher's utterances. The excerpts below are provided to demonstrate how students engaged behaviorally in the classroom.

“We have to **listen** very carefully to **answer the questions** when we are practicing listening. How can I say... **I need to pay attention and get actively involved.**” Student 2.2.A

“The flow of the lesson was proceeding well. So, **I just focused on and listen to the lesson.** The courses pass fast.” Student 3.2.A

“**I listened to the teacher throughout the lesson and worked on the examples that she told us to do.**” Student 1.3.A

As it can be seen through the quotations above, the participants in the study were behaviorally engaged throughout the course by directing their attention to the lesson and working on the activities. They also listen to their teacher carefully to get engaged in the lesson. In other words, they demonstrated observable behaviors while engaging in a lesson.

#### ***4.5.1.3. Emotional engagement***

The sub-category of emotional engagement includes feelings such as enjoyment, happiness, and comfort. Quotations from the interviews below demonstrate examples of students' positive feelings regarding the class.

“The lesson was fun. I **enjoyed it.** I think everyone should experience our teacher's class. [...] **I was calm during the lesson. I did not have any extreme feelings.**” Student 1.1.B

“**I felt like I was having quality time with my friends.** People consider school and education as boring generally, but **I have fun during the lesson.**” Student 1.1.A

“Sometimes the lesson ends early, and we play games in our free time like Kahoot. These games help us develop our vocabulary. Also, **we enjoy playing these games and we show**

**our teacher that we have pleasure.** [...] For example, I learn more words while playing these games due to the competitive atmosphere.” Student 3.2.A

As the passages above exemplify, students in this study perceived their teacher’s course as fun because they were allowed to take breaks and play games. They were comfortable during the lesson as they were surrounded by a friendly atmosphere. As a result, they were able to engage in the lesson emotionally.

#### **4.5.2. Factors Affecting Student Engagement**

The analysis of the interview sessions has revealed that students’ engagement in the classroom was affected by a number of factors. These factors are teacher-related factors, course-related factors, environmental factors, and individual factors. Figure 4.2 summarizes factors affecting student engagement.

##### **4.5.2.1. Teacher-related factors**

Teacher-related factors affecting student engagement consist of two themes. These themes are teacher’s motivating style and teacher’s characteristics. Teacher’s motivating style is composed of three components. These components are teacher autonomy support, teacher involvement, and teacher structure.

##### **4.5.2.1.1 Teacher’ motivating style**

First group of views are related to **teacher autonomy support**. Teacher’s autonomy support refers to nurturing intrinsic motivation, understanding negative affect, and paying attention to the students. Nurturing intrinsic motivation includes prompting interest and enjoyment, accepting negative affect instead of trying to change it, and giving the freedom of choice. The extracts taken from the interview sessions below illustrates how teacher’s autonomy support affected students’ engagement in the classroom.

“Student: Our teacher is very considerate. If you are tired and she sees it, she does not force you. **She gives time to you to pull yourself together. She tries to engage you in the course when you feel better.**

Interviewer: How do you feel when she gives you time to pull yourself together?

Student: I gather myself up. I am not someone who sleeps during instruction actually. If I do it, I do it to feel better. **I engage in the lesson quickly when I start to feel at ease again.**” Student 3.2.B

“**Sometimes we listen to music in the background during the course. I sometimes listen to music while I study. It is nice to have some background music.** [...] It is very important

that your teacher listens to your wishes. She does not have to fulfill your wishes, but it is very important that **she pays attention**. It feels good to be valued.” Student 2.2.B

“I think she listens to us very attentively. I have seen that she takes our opinions into account. As a matter of fact, she asks what we think even before we state our thoughts. **She asks if she misses anything, if she needs to change the way she teaches, or whether she needs to focus on any particular section of the course.** She asks our opinions, and we never hesitate to respond to her.” Student 3.1.B

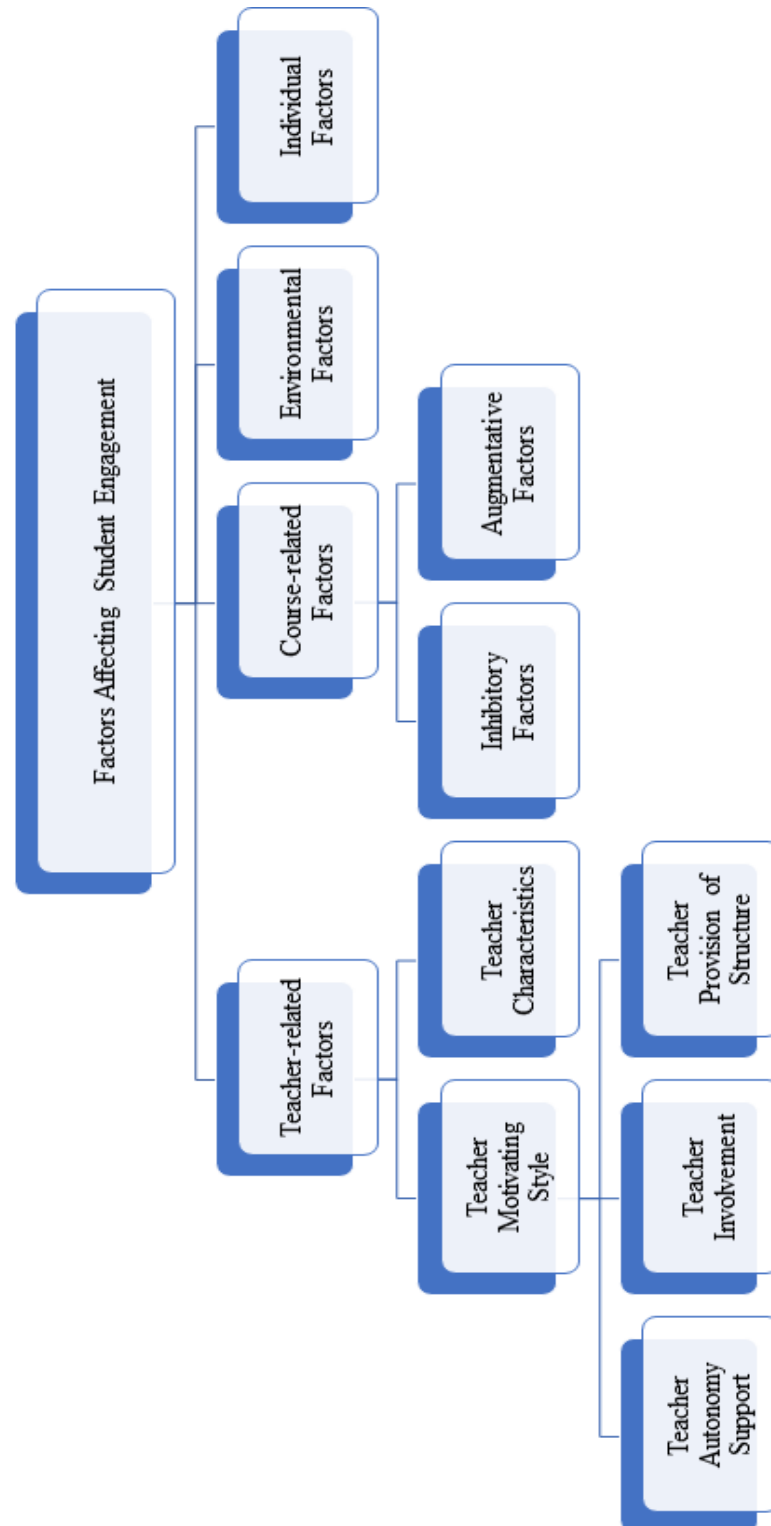


Figure 4.2. Factors affecting student engagement: student perspective

As deduced from the students' statements, the teacher tried to stimulate students' intrinsic motivation through addressing their interests by playing music in the background while the students were tackling with the tasks in the classroom. Moreover, she did not react adversely to the negative affect of the students. She accepted that the students would be in a bad mood and gave them time to regain their spirit instead of countering them or changing their feelings into something else. Also, she asked for feedback from the students regarding her way of teaching and gave them the opportunity to make choices. In this way, she was able to support student autonomy in the classroom.

The sub-category of **teacher involvement** consisted of being warm and open, knowing students, having close physical proximity, and investing personal sources. Being warm and open is related to expressing affection, caring, and enjoying time with the students. Having close proximity pertains to walking over to the students and standing or sitting close to them. Investing personal sources refers to devoting one's time, action, and energy. The quotations below exemplify how students viewed their teacher about her involvement in the class.

"I think she understands how I feel during the lesson. **She knows me. She understands what I want just by looking at the way I sit.** For example, if I sit in a relaxed manner, it means that I do not really care about the course at that time. She knows it and understands it." Student 2.1.B

"There were times when I was feeling really depressed and I couldn't listen to her properly back then. She used to come and talk to me. It would not matter to her if it were me or any other person. **She always asks us about our problems, and I like it very much. She cares about us.**" Student 2.1.A

"Student: I showed her that I was having fun. For example, **I was happy when she approached us while we were working in pairs. I think she understood that I was enjoying the class.**

Interviewer: How did she react when you showed her how you felt?

Student: **She smiled back at me.** Her attitude was nice." Student 3.1.A

"For example, she prepares a vocabulary part for us before the reading activity. She detects the words that we don't know and shows these words to us with their meanings and examples. **She comes to the class prepared and I am very happy about it.** We don't lose time in this way. **She brings pictures sometimes. This one of the things I love the most.**" Student 3.2.A

As inferred from the statements of the students, they had a close relationship with their teacher in that they mentioned their teacher knew them so well that she could understand them just by observing them. The students also uttered that their teacher was interested in their well-being by occasionally asking about their problems. In other words, students and the teacher formed a strong bond throughout the course. It is also clear from the passages above that students were happy when their teacher checked on them while they were engaged in group or peer work. Moreover, students referred to their teacher's preparedness before the class, which means that the teacher used her time and energy outside the classroom to plan her lesson.

The sub-category of the **teacher structure** is composed of scaffolding, showing strong leadership, and giving feedback. Scaffolding includes helping students finish their sentences, helping nervous students talk, asking if the topic was understood, and adjusting questions to students' level. Showing strong leadership is observing the students and providing them with the opportunity to speak. Giving feedback is evaluating and commenting on students' production in a skill-building, informative, and instructive way. The excerpts below exemplify the teacher's motivating style in relation to structure from the students' perspective.

"For example, what we can do or to what kind of questions we can answer... for example, let's say she is going to ask a difficult question, but **she adapts that question to our level so that we can understand more easily.**" Student 1.1.A

"She was very attentive. **She was observing us to see if we were listening or speaking.** She was trying to take our attention." Student 2.2.A

"**She asked if we understood the topic as always.** We cannot manage to comprehend and do the exercises sometimes. **She corrects our mistakes in that case.**" Student 2.1.A

As the passages above illustrate, the teacher tried to scaffold the students by tailoring the questions to their level so that the students could understand the questions and answer properly. She was also leading the instruction by monitoring the students to see if they were engaged in the lesson or not. She was concerned with the students' comprehension of the topic, and she provided feedback by correcting the students' mistakes.

#### ***4.5.2.1.2. Teacher's Characteristics***

In addition to the teacher's motivating style, the analysis of the interview sessions with the students has uncovered that the teacher's characteristics are also an influential factor in student engagement. The sub-category of teacher's characteristics is composed of teacher being easy-going, respectful, energetic, and helpful. The scripts below demonstrate how the teacher's characteristics affected student engagement from the students' perspective.

"I hesitate to speak in English normally. I don't like speaking very much, but **our teacher is the one with whom I feel the most comfortable. So, I don't shy away from engaging in her class. This is the class in which I speak the most.**" Student 3.2.B

"Our teacher was very nice in this lesson. Her attitude is always good in general. **She cares about our opinions and behaviors during the lesson, and she tries to act accordingly. I don't think she confines us in any way.**" Student 3.1.B

"We know **our teacher will not judge us no matter what we say**, and she **will always respect our opinions in the classroom.** We do not feel restricted since we know these." Student 3.1.B

"She knows how to communicate well. **She understands what we want to say without us saying anything.** She helps us a lot. For example, if a student comes to the class in a bad mood, **she immediately shows understanding and helps her/him solve their problems.**" Student 1.1.A

As the first quotation illustrates, the student felt relaxed to engage in the lesson due to her comfort character trait. In the second excerpt, it is seen that the teacher respects students' thoughts and actions and tried to carry out the lesson in accordance with the students' wishes. It is also evident that the students felt free during the lesson as a result of their teacher's non-judgmental personality. Also, even though the students were in a bad mood, she tried to support them by the virtue of her helpful trait.

#### ***4.5.2.2. Course-related factors***

Course-related factors affecting student engagement in the classroom are divided into two sub-categories. These categories are augmentative factors that increase student engagement and inhibitory factors that decrease student engagement.

Course-related **augmentative factors** are about lesson being interactive and contributive, and about students being content with the lesson. The excerpts below

illustrate how augmentative course-related factors boosted student engagement in the classroom.

“My general feelings are good because it was an **interactive lesson**. We watched a video, commented on it, and made guesses. This **contributed to our English (language development)**.” Student 1.1.A

“This lesson is **more interactive** when compared to the other two lessons. I think **students are given more permission to speak** and we can **share our ideas** more in this lesson. Naturally, we **have more chances to practice and develop our speaking skills in this lesson**. Also, I can say I feel a little bit more relaxed in this lesson.” Student 3.1.B

“The lesson was **nurturing** in terms of our development. **I was quite satisfied**.” Student 1.1.B

As the passages above demonstrate, students in this study thought that they could attain the opportunity to have more chances to practice English because the lessons created an environment in which the students could interact with each other in a contributory way. As a result, their engagement level in the course increased.

Students in the study also mentioned that they did not make any contribution to the flow of the lesson as they were satisfied with the course and engaged in the lesson. That is to say, as the students felt satisfied with the flow of the course, they did not interfere with the lesson by making suggestions. The excerpts below illustrate how being content with the lesson affected student engagement in the classroom.

“**I was pleased with the flow of the lesson**. The teacher was maintaining the lesson as I wished. So, I did not interfere with the flow of the lesson.” Student 3.1.A

“I was not bothered by anything in the lesson. **Nothing affected me in a bad way. So, I did not feel like proposing anything**.” Student 2.1.A

The above passages demonstrate that the students were satisfied with the way the teacher carried out the lesson. Therefore, although they did not propose any alternative activities, they were still engaged in the lesson.

On the other hand, course-related **inhibitory factors** refer to having less variety of exercises, excessive reading time, and boring topic. The quotations below demonstrate how course-related inhibitory factors reduced student engagement in the classroom.

“**I got bored a little bit because there was not plenty of exercise**. The reading part was excessive. So, I got bored.” Student 2.1.A

“We generally speak in the classroom. So, it is fine. But as you see, **the reading passages are too long. It makes the course boring.** But if it is a speaking or a writing exercise, then it becomes fun.” Student 2.1.B

“I felt a little bit bored. The topic was ‘pausing’. It was only – **it was a course only on pausing.** So, **it was a little bit boring.**” Student 3.2.B

According to the excerpts above, students became inattentive in the lesson based on the abundance of exercises, skills being practiced, and the content of the lesson. In other words, the students got disinterested when the exercises were scarce in number, the skill being practiced required extended individual attention, and the topic of the course was not appealing to the students. As a result, the students were not able to engage in the lesson properly.

#### **4.5.2.3. Environmental factors**

The analysis of the interview sessions with the students revealed that student engagement in the classroom is also affected by environmental factors. These environmental factors are classroom interaction and having silence in the class. Environmental factors pertaining to classroom interaction are having a family atmosphere in the classroom, feeling comfortable due to the classroom climate, and having fun in the classroom owing to the interrelations with the friends and the teacher or having periods of silence in class when no one is making contribution. The excerpts below are provided to demonstrate how environmental factors affected student engagement.

“**We were free and peaceful as always.** You know our class... **Our class has a family-like atmosphere.** We have fun, do the lesson... **We learn with fun.** I don’t think I would learn in a boring classroom where I can stand my ground barely. It would be a waste of time.” Student 1.1.A

“I always feel relaxed and don’t get tense because **we have good communication with each other as a class.** My friends also help me when I don’t understand something. So, I didn’t feel restricted.” Student 3.1.A

“**I am not that eager to participate in the class in general.** I don’t speak much because I know the answer. Everyone was saying everything in this class. So, I did not engage actively. **I participated and expressed my opinion only when there was silence.**” Student 2.1.B

As the first two excerpts indicate, learners felt free in the class due to the close relationship they had with each other and the teacher. They also had fun while learning due to the sincere environment in their classroom. The students were able to get engaged

in the lesson since they felt surrounded by people with whom they had friendly communication.

As for student 2.1.B., in third extract, for some students silence in the classroom was motivating. He indicates that when nobody made contribution or answered the questions, he shared his opinion or answered the questions asked though he was not eager to participate most of the time. This student feels himself above the level of the class knows the answers so he doesn't contribute when other students answer the questions. Nevertheless, he decided to answer the teacher's question to break the silence in the classroom atmosphere. Therefore, it can be deduced that although the student was not inclined to participate, environmental factors such as silence in the classroom made him engage in the lesson.

#### **4.5.2.4. Individual factors**

The examination of the interview sessions with the students have revealed that student engagement was also affected by individual factors. These individual factors are feeling confident, momentary emotions, feeling impatient, and being unwilling. The quotations below demonstrate how student-related individual factors affected student engagement in the classroom.

**“I am not afraid to give answers and our teacher does not hold our mistakes against us.** She helps us quite a lot. So, I feel relaxed during the lesson.” Student 2.2.A

**“I felt a little anxious at the beginning because we were supposed to do a speaking exercise.** I am not that confident in speaking honestly. But then, **I did not feel that much anxious afterward thanks to the comfort our teacher provided for us.**” Student 3.1.B

“What else did I feel? **I felt impatient.** I wanted to leave as soon as possible. Yes, **boredom, impatience...** I wanted the subject end to immediately. It would have been better if it were a speaking activity.” Student 2.1.B

“I was neither free nor restricted in the lesson. I was just there for the sake of being there. **I was just doing what I had to do. I was not that willing.**” Student 1.1.B

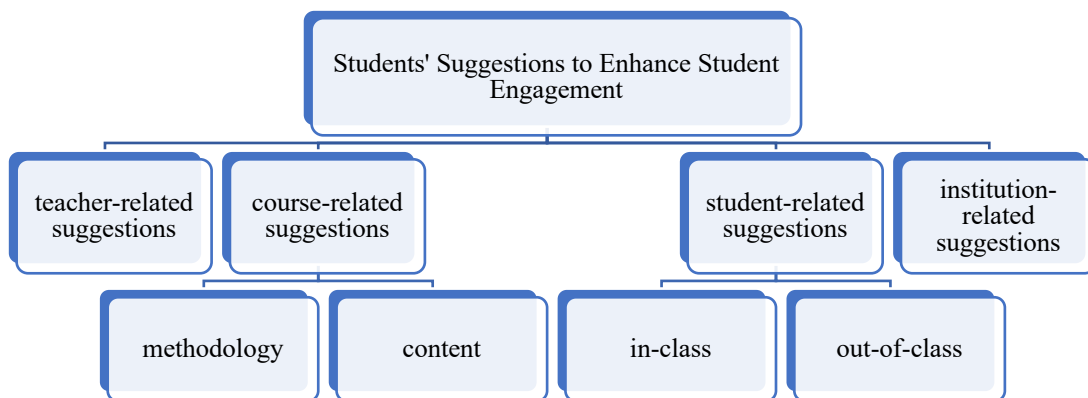
According to the excerpts above, students felt confident, and they did not feel intimidated to respond their teacher's questions. They were comfortable to engage in the lesson due to feeling confident and their teacher's non-judgmental personality. Moreover, although they felt-anxious due to the skill being practiced at the beginning of the course, this feeling was momentary and they started to feel better with the comforting nature of

their teacher. In other words, students were able to engage in the lesson due to their personality traits with the help of their teacher.

However, some of the individual factors affected their engagement in the classroom negatively. It is seen from the quotes above that some students felt disinterested and restless. They could not keep up with the lesson and wanted to leave as soon as possible. Also, some other students were in the classroom because they had to. They did not feel any urge to attend the course. All in all, some students did not engage in the lesson as a result of being unwilling, and feeling bored and impatient.

### 4.5.3. Students' Suggestions to Enhance Student Engagement

In the interview sessions, the students were asked about their opinions regarding how they can get more engaged. The analysis of the data gathered through these interviews has revealed four categories. These categories are course-related suggestions, teacher-related suggestions, student-related suggestions, and institution-related suggestions. The figure below shows categories of students' suggestions for boosting student engagement.



**Figure 4.3.** *Students' suggestions to enhance student engagement*

#### 4.5.3.1. Teacher-related suggestions

In the interviews, students asserted that they were content with their teacher when they were asked what their teacher could do to engage them more in the lesson. However, they also proposed several suggestions for their teacher to increase their engagement levels in the classroom. Students' teacher-related suggestions for enhancing student engagement include asking more questions to the students, making students talk even if

they are not willing to, and bringing different activities. Here, several quotations from interview sessions are provided to exemplify students' teacher-related suggestions.

**"I think she can bring more speaking activities. I also think she must make all the students speak even if they do not want to."** Student 2.1.A

"I would not want to change anything. I was satisfied with the course. [...] I think students must produce something. **Instead of copying the board, the teacher must make us involve in an activity.**" Student 1.1.B

"Actually, our teacher does her best but maybe **we could do more exercise.**" Student 2.2.A

According to the excerpts above, students' suggestions to their teacher are related to the activities she did in the classroom. Students in the study pointed out that the teacher should bring various activities to the classroom. Moreover, although the teacher decided not to make students who did not want to talk, the students proposed that she should try to make all students involve in the speaking activities even if they do not wish.

#### ***4.5.3.2. Course-related suggestions***

Students' course-related suggestions are divided into **methodology** and **content**. **Methodological course-related** factors are shortening the length of reading passages, decreasing the time devoted to reading skills and increasing the time issued for the development of speaking skills, doing more speaking activities, and reading as groups instead of reading individually. The excerpts below demonstrate what kind of methodological suggestions the students proposed.

"I don't like long paragraphs. I can speak until morning, but reading is very boring. I don't know... **Answering questions is fine, learning grammar is fine... But reading is very boring.**" Student 2.1.B

"[...] **I would rather read part by part as a group instead of reading individually.** It would be better and more fun." Student 2.2.B

**"I would giving my speech in public part longer if I had the opportunity."** Student 3.1.A

As the students stated, they did not enjoy reading long passages in the classroom. They expressed that they prefer practicing speaking skills instead of reading skills. It is clear from the passages above that they would rather be involved in group work than study individually while doing reading activities. In addition to preferring speaking over reading, they also wished to increase the time devoted to speaking skills.

**Course-related suggestions regarding content** are about whether it is fun or boring. Extracts taken from the students' utterances in the interview sessions demonstrate what kind of suggestions they made about the content of the lesson. The passages taken from the student interviews are provided as examples of students' course-related suggestions for boosting student engagement.

“I would really want to change the topic of the reading passage. [...] **I would rather read something addressing my interests.**” Student 2.2.B

“We only talked about ‘pausing’. **We could have done more instead of focusing on one subject.** We could have caught up with the book.” Student 3.2.B

According to the examples above, the students did not want to carry out the lesson if they were not interested in the topic. They recommended that the topic of the course should be changed into something they were interested in.

#### ***4.5.3.3. Student-related suggestions***

Students' suggestions in relation to themselves to enhance student engagement are composed of two sub-categories. These sub-categories are in-class and out-of-class suggestions. **In-class** suggestions include having more speaking activities, asking and answering more questions, and not having out-of-context talk in the course. The excerpts below illustrate students' suggestions for themselves to increase student engagement.

“There is nothing our teacher can do. **It is completely up to me. I think I can engage more if I take more part in speaking activities.**” Student 3.2.A

“**Sometimes my friends talk about unrelated stuff too much.** I think I would like to change that. **That is something they can do though.**” Student 3.2.B

As deduced from the quotations above, students were aware that they were responsible for their learning. Moreover, they also recognized that they needed to take more initiative to keep the classroom atmosphere peaceful and focus only on the course.

Students in the interviews made some suggestions concerning themselves related to both out-of-class activities and in-class acts. **Out-of-class** suggestions consisted of getting prepared for the lesson beforehand and doing more speaking and listening activities outside the classroom. The examples below show suggestions regarding out-of-class activities.

**“If I had looked at the part in the book and studied before the class, I would have engaged in the lesson more.”** Student 3.1.A

“We can do more speaking activities outside the classroom – **we can talk to ourselves if we don’t have anybody to talk to. We can do more listening activities.** [...] We can spend more time on activities outside the classroom.” Student 3.1.B

As the excerpts above suggest, students realized that studying before the class might help them engage more during the instruction in the class. They also asserted that practicing out of class can also increase their engagement levels in the classroom.

#### ***4.5.3.4. Institution-related suggestions***

Regarding the institution-related suggestions, the students mentioned two points. These points are about the starting time of lessons and the number of lessons in a day. The passages from the interview sessions below are provided to exemplify students’ suggestions related to the institution.

“The classroom hours are a little bit problematic. **We come to school every day. We could do lesson five hours a day and take a day off instead.**” Student 1.1.A

“The starting time of the classes is why I look depressed. The classroom hours can be altered. **The classes start too early. I cannot wake up that early.** The classes are not that hard for me but waking up too early... also we cannot be absent from school without permission.” Student 2.1.B

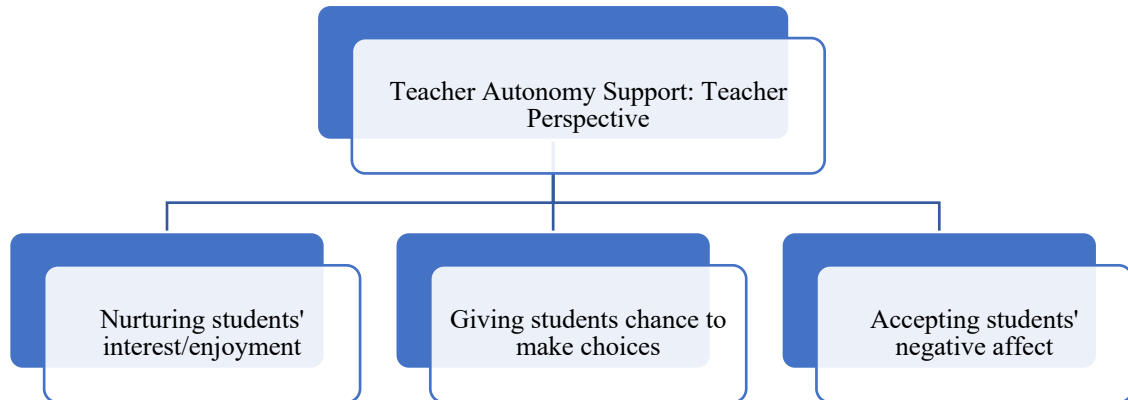
As understood from the examples above, students mentioned the starting time of the classes and daily classroom hours when they were asked what could be done to increase their engagement in the classroom. They asserted that they could be given an extra day off by putting more hours in four days a week. They also stressed that if the classrooms did not start early, they could be more engaged in the lesson. So, they proposed that the starting time of the classes should be changed.

## **4.6. Factors Affecting Teacher Autonomy Support: Teacher’s Perspective**

### **4.6.1. Teacher autonomy support**

The analysis of the semi-structured interviews and stimulated recall protocols revealed three categories of teacher autonomy support. These categories are nurturing students’ interest/enjoyment, giving students chance to make choices, and accepting

students' negative affect. The figure below illustrates the categories of teacher autonomy support.



**Figure 4.4.** *Teacher autonomy support: teacher's perspective*

The category of **nurturing students' interest/enjoyment** refer to making the lesson as fun as possible by bringing music and/or videos to the classroom, making the students physically active, and provoking their interest by doing group and/or pair work activities. The quotations below demonstrate how the teacher tried to support student autonomy by nurturing their interest/enjoyment.

**“Everyone engaged in the group work. Even that student who was sleeping in the class. Everyone tried to find a reason. [...] I actually observe if they are interested or not. Generally, the engagement level was above ninety five percent.”** Teacher Interview 2.A

Teacher in the video: okay. They might have died. Here, it is based on a true story. This is real and luckily; I watched the film. Now, I am going to show the trailer, okay? Maybe today you can watch it because they are famous actors. Ready?”

Teachers' comment on the video: When I find something like this - like survival technique videos or so – **I bring the trailers to the classroom, and we watch it together because our students love to watch the videos as they are young.** Luckily, I watched this movie and showed them the trailer.” Stimulated Recall 1.A

Teacher in the video: “Let's eat grandma. If we say, “Let's eat grandma” and if we don't pause, what does it mean?”

Teacher's comment on the video: “This was a good example. They laughed. Humor works well sometimes. They liked it. **I tried to choose from the examples that might attract their attention while preparing the lesson.**” Stimulated Recall 3.A

According to the excerpts above, the teacher tried to tap the students' interest and enjoyment by involving them in group work. The teacher also knew her students well and

brought materials that could attract their attention such as a trailer of a related movie. Moreover, also paid attention to the students' interest while getting prepared for the upcoming lesson, and she tried to engage students into the lesson by taking their attention to the subject with interesting examples. By taking her students' interest and enjoyment into consideration, the teacher managed to increase the level of student engagement in the classroom.

The category of giving students **chance to make choices** pertains to letting students choose the topic about which they wanted to talk, letting students decide on the activity to be done, and giving them the opportunity to decide on the way to do a specific activity. The excerpts below illustrate how the teacher gave students chance to make choices to reinforce the students' autonomy in the classroom.

**"I asked them if they wanted to work in groups or do the speech in public.** They did not express themselves verbally, but they made some facial expressions – they raised their eyebrows for public speaking. **I left the decision to them.**" Teacher Interview 3.B

**"I also let them suggest a topic to talk about.** There were topics on the book, but they might not feel happy about the topics on the book [...] **I thought it might increase the engagement level. I gave them options.**" Stimulated Recall 3.A

Teacher in the video: "Would you like to read aloud? Someone? Paragraph by paragraph? Would you like to read aloud? No? who says yes (raising hand gesture)?"

Teacher's comment on the video: "Here, I am asking what they want to do (reading aloud or in silence) but they do not give any answers. **I asked because I could have changed the way as they wished.** But there was no answer..." Stimulated Recall 2.B

As the above quotations suggest, the teacher gave students options to choose between. Considering that the students might not feel comfortable about doing public speech, the teacher let the students choose between public speech or group work. Furthermore, she let them choose any topic they would like to talk about. Although the students did not express any preference, they were also allowed to decide on how to read the passage. In other words, she tried to involve her students in the decision-making process in the classroom. when students have voice in the classroom, they might engage in the lesson voluntarily.

The category of **accepting negative affect** is related to listening to the students, being open to the complaints, and showing valid reaction to students' negative affect. The

excerpts below are provided to show how the teacher tried to boost students' autonomy by accepting their negative affect in the classroom.

Teacher's comment on the video: "Here, she was playing with her phone. I asked if she was looking for the meaning of a word. She said I could not do the two of the exercises – or something like this. I said it did not matter. **I tried to show her that I understood her. She said it was the reading was long and I accepted that.**" Stimulated Recall 2.B

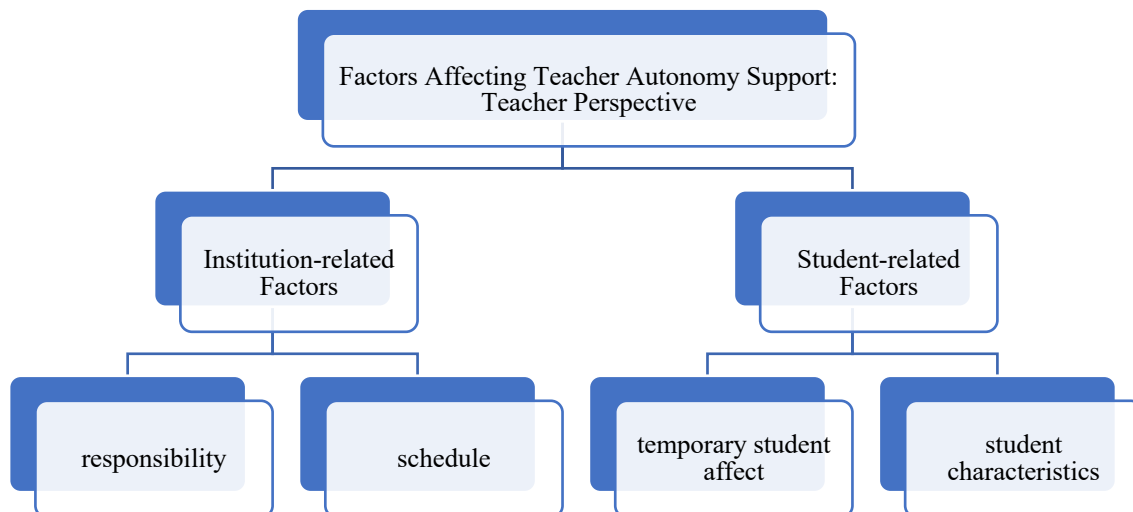
"For example, **one of the students said he did not want to participate. I did not take it personally. I let them be sometimes.** I did not force him to engage because he does not do that often. **He engaged in the lesson afterward anyway,** he took notes. Sometimes it helps to turn a blind eye." Interview 1.B

"They wanted to do the lesson outside. [...]. I showed them that I understood. I said 'Yes, the weather is nice, and I also would like to do the lesson outside.' But the management does not allow that. **I really understand how they feel, and I feel myself desperate sometimes.**" Interview 2.B

As the excerpt above implies, the teacher tried to show the students that she understood them. She validated their negative affect instead of trying to change how the students felt. She did not force her students engage in the lesson. Instead, she left them in peace and let them do what they wanted at that moment. Consequently, the students engaged in the lesson by themselves.

#### **4.6.2. Factors affecting teacher autonomy support**

The analysis of the data collected through semi-structured interview sessions and stimulated recall protocols with the teacher uncovered two main factors that affect teacher's autonomy support in the classroom. These factors are institution-related factors and student-related factors. The figure below illustrates the factors affecting teacher autonomy support.



**Figure 4.5.** *Factors affecting teacher autonomy support: teacher perspective*

#### **4.6.2.1. Institution-related factors**

The category of institution-related factors refers to the implementations practiced by the management of the School of Foreign Languages. Institution-related factors are divided into two sub-categories. These sub-categories are the **teacher’s responsibilities** to their partners and strict **schedule** mandated by the management. The scripts below demonstrate how institution-related factors affected the teacher’s autonomy support in the classroom.

“As I said earlier, the listening part took a little bit longer. I don’t know what to do about it, maybe I could have divided into two, but it was not possible due to the flow of the lesson. **As our partners continue from where we end, we have to do the lesson as scheduled. We cannot make many changes.**” Teacher in Stimulated Recall 1.A

“Unfortunately, I don’t ask students how they feel or what they want to do often. Because **we have a strict plan to follow. We intervene if something bad happens in the classroom.**” Teacher Interview 2.A

As the passages above exemplify, even if the teacher wanted to make changes during the course to make the lesson more fun, she was unable to make any adjustments due to **her responsibilities** to her partner. That is, if the teacher had changed the flow of the lesson, her partner would have started from where she had left, which would cause some delay in the syllabus. The teacher also made it clear that she could not ask students’ needs and opinions even if she wanted to because she knew she could not fulfill their wishes due to the strict plan they had to follow.

#### 4.6.2.2. Student-related factors

The category of student-related factors that affected teacher autonomy support is composed of two sub-categories. These sub-categories are **students' momentary feelings** related to the course and **students' characteristics**. The sub-category of students' momentary feelings related to the course includes being content with the lesson, being occupied with the activity, and lack of willingness. The quotations below illustrate how students' momentary feelings pertinent to the course affected the teacher's autonomy.

“Everything was going fine. **If something was going wrong, they would have let me know.** [...] I think they did not need anything else – I mean, if the lesson were boring, they would have proposed new ways to carry out the lesson or they would have said that they were bored. I don't think they needed that.” Teacher Interview 2.A

“I said we can change the way because reading took too long. I had already spoken too much and all they did was looking at me. I asked them we could change something about the way we read. **They did not propose anything. I could not receive any answer because they are not willing.** [...] Sometimes, I realize that they are bored, and I even say you can walk around in the class if you want. **Just to make them move to motivate them. They do not even do that.**” Stimulated Recall 2.B

According to the first excerpt above, the teacher did not feel the need to examine the students' level of autonomy any further because she thought that they are content with the lesson. In the second excerpt, she also expressed that even though she asked about their opinion, she could not receive any response. Namely, the teacher could not be as autonomy supportive as she wished because she could not obtain any feedback from her students due to their lack of willingness.

The sub-category of **student characteristics** refers to the nervousness and shyness of the students, and their generational characteristics. The passages below are provided to exemplify how student characteristics had an influence on teacher autonomy support in the classroom.

Teacher in the video: “Okay. Now, here on the next column in part C, we have some topics. You are going to choose one of them. And prepare – here it is given as a three-minute talk, but it is too long for us because we will not have time – two minutes talk, okay? [...] **It is up to you.** Would you like to do it – give your talk in front of the class? or you can give your

talk in a group. [...] **You are free. If you don't, if you are a little bit shy and if you don't feel yourself self-confident, you can do in your group.**"

Teacher's comment on the video: "Here, **I wanted to let them decide.** If I said, you would do a public speech in front of everyone, I know it would not work. **Some of them gets really nervous during speaking. Sometimes – you know it happens, confident and motivated ones want to do the speech in front of the class. [...] They were happy that I let them decide. They were freer.**" Stimulated Recall 3.A

"I have just realized that they did not finish the exercise. You cannot expect all students engage in the lesson. I don't know – **maybe it is about their age – I did not force them to engage in the lesson.** I mean, what can I do? If I force them twice, I know they will not engage in the third time even if they want to. **Sometimes, I let them be and I think it affects their learning process positively in the long run.**" Stimulated recall 3.B

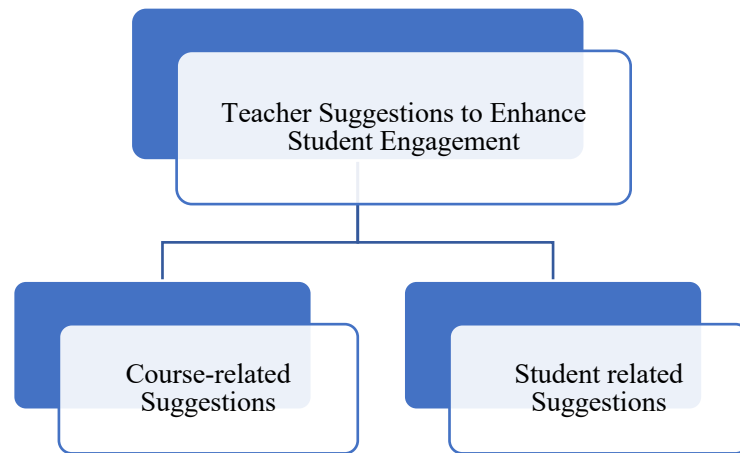
According to the excerpts above, the teacher took the students' characteristics into account while trying to boost their autonomy in the classroom. That is, the teacher gave students the freedom of choice considering that they might have felt anxious or hesitant. She also kept the age group of her students in mind, try to act accordingly. In other words, she did not force the students to engage in the lesson in order not to cause any negative reaction because she thought that it might be effective trying to motivate the student extrinsically due to their age.

#### **4.6.3. Teacher's Suggestions to Enhance Student Engagement**

The analysis of the data collected through semi-structured interviews and stimulated recall protocols revealed that teacher autonomy support was affected by many factors such as the institution, the students, and the teacher herself. Although it was found that the adjustments and changes the teacher could do were limited to the institution's allowance, she tried to boost her students' autonomy by tapping their intrinsic motivation and accepting their negative affect. The teacher also commented that she could understand whether her students were satisfied with the lesson. However, when she asked for further reaction from her students regarding her behaviors to increase the autonomy, she could not receive much feedback. To increase their level of willingness by enhancing their engagement levels, the teacher provided a number of suggestions.

The suggestions proposed by the teacher to enhance student engagement are grouped under two categories. These categories are course-related and student-related

suggestions The figure below illustrates the teacher’s suggestions to enhance student engagement in the classroom.



**Figure 4.6.** Teacher suggestions to enhance student engagement

**Course-related suggestions** pertains to informing students about the aim/purpose of the course structure and informing students about the usage of the structure. The quotations below demonstrate the teacher’s course-related suggestions to increase student engagement in the classroom.

“Firstly, **it would be nice to inform them about the aims.** we can make them think about the reasons for learning the subject. Teacher Interview 1.A

“**Maybe I could have given the frame of the lesson at the beginning – like we were going to do this and that. [...]** Asking them if everything is okay or not can be nice, too.” Teacher Interview 2.A

“**I could have given an example of public speech (the topic of that course). Maybe I could have made them watch some videos on pausing. They like visual things – watching videos.** I could have taken a part from a TedX video as an example of giving talk in front of public. I might have asked the students where the speaker stopped etc. It could have been interesting.” Teacher Interview 3.B

As passages above implies, the teacher thought that letting the students know about the purposes of the course would make them more interested in the lesson. according to the teacher, students might engage in the lesson since they have a purpose.

The category of **student-related suggestions** is related to asking about the students’ needs and interests, and paying attention to individual differences. The quotations below present the student-related suggestions proposed by the teacher to increase the level of student engagement in the classroom.

“Secondly, **we can motivate the students by bringing materials that might interest them such as movies** [...]” Teacher Interview 1.A

“For students to engage more actively [...] the **individual differences** could be paid more attention. **Of course, it is all about getting to know your students better and having more information about their background.**” Teacher Interview 1.B

According to the excerpts above, the teacher believed that taking students’ attention by bringing interesting materials to the classroom might also increase their level of engagement. She also mentioned that individual differences of the learners should also be taken into consideration while preparing materials for the students. Students might engage more in the lesson if the materials prepared for them address various types of learning styles.

## CHAPTER 5

### 5. DISCUSSION, CONCLUSION, AND SUGGESTIONS

The present study was conducted to investigate the relationship between student engagement and teacher support for autonomy. Specifically, it aimed to examine the relationship between the four dimensions of student engagement i.e., agentic engagement, behavioral engagement, cognitive engagement, and emotional engagement and teacher autonomy support. In addition, the extent to which student engagement with its four dimensions explains perceived teacher autonomy support at the beginning, middle, and end of the semester was examined. It also examined the extent to which student engagement with its four dimensions explained the increase in the perceived teacher autonomy support. In addition, the study also aimed to uncover the factors that influence student engagement and teacher autonomy support.

For this purpose, a mixed methods design research was conducted and both quantitative and qualitative data were collected. First group of quantitative data were collected from 212 participants through Four Aspects of Student Engagement Questionnaire (FASEQ) and Learning Climate Questionnaire (LCQ) at the beginning, middle, and end of the semester. Second group of quantitative data were gathered from two of the classes (26 students) through observation using an observation sheet and hit-steer observation system at the beginning, middle, and end of the semester. For the qualitative part of the study, 12 students and their instructor volunteered to participate. The students were interviewed to gather more information about student engagement and to uncover factors that may have influenced student engagement. The teacher was asked to participate in stimulated recall protocols as well as semi-structured interviews. The quantitative data were subjected to a series of statistical analyses. The qualitative data were analyzed through content analysis. This chapter discusses the results of these analyses in light of the existing literature. Furthermore, conclusion with a brief summary of the research, pedagogical implications, limitations of the study, and recommendations for further studies are included.

## 5.1. Discussion

The findings of the study demonstrated that the relationship between perceived teacher autonomy support and student engagement, correlated significantly and positively only for the agentic engagement of the students across all three time points that are, in the beginning (T1), middle (T2), and end of the semester (T3). This result is in line with the previous research in the literature (Reeve et al., 2022; Benlahcene et al., 2021; Dincer et al., 2012; Flunger et al., 2022; Jang et al., 2016b; Liu et al., 2021; Nunez and Leon, 2019; Yilmaz Bodur, 2021; Wakefield, 2016). These studies demonstrated that students became more proactive and constructive, and they expressed their feelings and opinions more when their autonomy was supported by their teacher. Given that this relationship between teachers perceived autonomy support and student engagement is reciprocal, one could also conclude that the teacher supported autonomy when her students took more initiative and tried to make their sound more audible in the classroom. To the extent that students took more leading roles in the classroom decision making, the teacher began providing them more opportunities to make decisions, accepting students' negative feelings rather than fighting with them and intrinsically motivating them by appealing to their interests.

Besides agentic engagement, perceived teacher autonomy support also correlated with behavioral engagement in the middle and at the end of the semester in the present study. That is, students started to engage in the lesson behaviorally as their teachers provided more autonomy support. Considering that teachers' level of autonomy supportiveness was almost similar across the whole semester, the students were more hesitant to answer their teachers' questions at the beginning of the semester because they don't know about their teachers' reactions. As they got to know their teacher more and as their teacher showed support and continued to fulfill the students' need for autonomy, students started to pay more attention to the lesson, show more effort during the lesson, and study harder in the middle of the semester. It is very common to see students in collectivist societies like Turkish society stay silent in teacher-fronted classes and answer questions only when called upon (Hofstede, 2010). Students in the current study preferred to stay silent at the beginning of the semester. When they got used to their teacher, they started to demonstrate more behavioral engagement. So, this result shows difference with some of the studies (Matos et al., 2018; Patall et al., 2019; Reeve et al., 2004).

The fact that agentic engagement correlated with perceived teacher autonomy support throughout the semester unlike behavioral engagement which correlated in the

middle and at the end of the semester could also be explained by student characteristics. That is, more confident students did not hesitate to express their thoughts and ideas during the course independently. The qualitative results of the study supported these results. The analysis of the semi-structured interviews with the students demonstrated that individual factors were effective in student engagement. These individual factors were about feeling confident, momentary emotions, feeling impatient, and being unwilling. Students in this study mentioned that they were not hesitant to answer the teacher's questions as they were self-assured. The feeling of confidence has been found as an influential factor by researchers in the related literature (Groves, Sellar, Smith, and Barber, 2015; Wang and Eccles, 2013). The feeling of confidence affects learners' self-belief which increases learners' motivation, resulting in more student engagement in the classroom (Zepke et al., 2010).

The findings of the study also demonstrated that perceived teacher autonomy support correlated with emotional engagement in the middle and at the end of the semester. That is, students started to enjoy and show interest in the lesson starting from the middle of the semester. At the beginning of the semester, the students were probably hesitant to show positive feelings towards the course since they did not know their teacher. As the teacher continued to provide autonomy support, the students were more enthusiastically engaged in the lesson.

This study also showed that perceived teacher autonomy support correlated with cognitive engagement only at the end of the semester. Namely, students began to use learning strategies at the end of the semester. When teachers kept fulfilling the students' need for autonomy throughout the semester, students engaged in the lesson cognitively at the end of the semester. This result might stem from the fact that learners focused more on their studies towards the end of the semester since they would take exams at the end of the semester.

Furthermore, the analysis of Pearson's  $r$  correlation has shown that although the relationship between perceived teacher autonomy and the dimensions of student engagement is statistically significant and positive, the level of the relationship between the variables was weak across the three time points (T1 beginning - T2 middle - T3 end of semester). However, perceived teacher autonomy had a statistically significant, positive, and moderate relationship with agentic engagement level at the end of the semester. These findings indicate that the level of the relationship between perceived

teacher autonomy support and the students' agentic engagement grew stronger towards the end of the semester. In other words, as the students and the teacher got to know each other towards the end of the semester, they might have felt more comfortable in expressing their opinions and wishes. As a result, the teacher might have offered more choices, provided more meaningful rationale, accepted frustration, and stimulated the interest of her students.

Concerning the effectiveness of student engagement in explaining the variance in perceived teacher autonomy support, it was found that behavioral engagement, cognitive engagement, and emotional engagement did not contribute uniquely to the variance in perceived teacher autonomy support at the beginning of the semester. However, agentic engagement was able to explain 3.1% of the variance in perceived teacher autonomy support at the beginning of the semester (T1). Similarly, behavioral engagement, cognitive engagement, and emotional engagement did not contribute uniquely to the variance in perceived teacher autonomy support in the middle of the semester. Nevertheless, the findings demonstrated that agentic engagement explained 5.5% of the variance in perceived teacher autonomy in the middle of the semester (T2). As for the end of the semester (T3), behavioral engagement, cognitive engagement, and emotional engagement did not contribute uniquely to the variance in perceived teacher autonomy support. On the other hand, agentic engagement explained 18% of the variance in perceived autonomy support. That is, agentic engagement of the students was the only dimension of student engagement that affected the perceived teacher autonomy support.

These findings point out that, as students engaged in the lesson more agentively by asking more questions, expressing what they liked or disliked, letting the teacher know about their interests, articulating their thoughts, and making suggestions regarding the flow of the lesson, their teachers nurtured students' intrinsic motivation by bringing interesting activities to the class, by challenging their students, by increasing their competence, and by giving them the choice of freedom, used a more informational and flexible language rather than a coercive language, and accepted and validated their students' negative feelings towards the lesson instead of confronting them. These findings echo in the related literature (Reeve et al., 2022; Patall et al., 2019). For example, similar results were also reached in Patall et al.'s (2019) study. In their study conducted with 208 high school students from United States, they controlled all student engagement dimensions and a number of variables to be effecting students' engagement and their

perceptions of the environment such as age, gender, course domain, and course difficulty. The researchers found that only daily agentic engagement explained the increases in daily perceived teacher autonomy support. The writers commented that fulfilling adolescents' need for autonomy bears particular importance for their psychological development and functioning (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan, & Mac Iver, 1993, as cited in Patall et al., 2019). Considering the majority of the participants in the present study are adolescents since they just graduated from high school and started School of Foreign Languages as the first step of their undergraduate education, fulfillment of their need for autonomy might have increased their engagement in the lesson, which in turn resulted in higher levels of perceived teacher autonomy support.

Similarly, in a study by Reeve et al. (2022), it was found that manipulated agentic engagement led to the recruitment of more autonomy support from the teachers. That is, when teachers gave instruction to the students who are highly engaged agentially, they provided more autonomy support to the students. Agentic engagement had a direct and positive impact on students' creation for more autonomy supportive environment for themselves. As students took initiative and acted proactively by expressing their thoughts and opinions, and communicating their likes and dislikes, the teachers realized their students' needs and interests, and adapted their instruction accordingly. To be more specific, high levels of agentic engagement created a pathway for teachers to be more autonomy supportive towards their students. As the participants in this study had high levels of agentic engagement throughout the whole semester, their high engagement level has probably guided their teachers in acting more autonomy supportively.

Although agentic engagement was an effective predictor of perceived teacher autonomy support at the beginning (T1), middle (T2), and end (T3) of the semester when each time period is taken separately, it was not successful in explaining the variance in the increase of perceived teacher autonomy support during the semester. That is, none of the engagement dimensions i.e., agentic engagement, behavioral engagement, cognitive engagement, or emotional engagement at T 1 and T2, explain any variance in perceived teacher autonomy support at T 3. Therefore, it can be concluded that student engagement did not have any effect on explaining the increase of perceived teacher autonomy support throughout the semester.

These findings contradict with some of the results of the studies in the literature (Patall et al., 2019; Matos et al., 2018; Reeve, 2013; Jang et al., 2012). For example,

Reeve (2013) found that middle school students with high levels of agentic engagement at the beginning of the semester perceived their teachers as more autonomy supportive towards the middle and end of the semester. That is, highly engaged students led their teachers to be more autonomy supportive towards the end of the semester. When students asked questions, expressed their preferences and interests, and conveyed their wishes and needs, their teachers became more responsive to their students. Reeve (2013) also found that although agentic engagement was able to explain changes in perceived teacher autonomy support to some degree, perceived teacher autonomy support stabilized towards the end of the semester. Given that the students in the present study perceived their teachers almost equally supportive throughout the semester, stabilization could be one of the reasons accounting for the fact that student engagement at the beginning and in the middle of the semester did not explain the changes in perceived teacher autonomy support at the end of the semester. Although hierarchical regression results demonstrated an increase in the amount of explanatory power of student engagement on teacher autonomy support (3.1% at the beginning, 5.5% in the middle, and 18% at the end of the semester), this increase is mild. In the same line, descriptive statistics results of FASEQ and LCQ also provide further evidence that perceived teacher autonomy support level increased slightly throughout the semester ( $M= 5.41$ ,  $SD= .83$ , at the beginning of the semester,  $M= 5.45$ ,  $SD= .93$  in the middle of the semester, and  $M= 5.76$ ,  $SD= .88$  at the end of the semester). However, the level of this increase was weak. As it is seen, throughout the semester, the level of perceived teacher autonomy support did not change significantly, and the students perceived their teachers' autonomy supportive almost equally high at T1, T2, and T3.

Investigating the longitudinal relationship between student engagement and teacher autonomy support as well as the daily relationship between the two constructs, Patall et al., (2019) found that agentic engagement at the beginning of the semester predicted changes in perceived teacher autonomy support in the middle of the semester, and agentic engagement in the middle of the semester explained variance in perceived teacher autonomy support at the end of the semester. That is, agentic engagement was the strongest factor among the dimensions of student engagement in explaining the development of perceived teacher autonomy support. In their study, Patall et al. (2019) controlled a number of factors that might potentially affect students' engagement and their understanding of the environment such as sex, age, course difficulty, race, and prior

course grade. Thus, student engagement in their study could be investigated as a more refined concept. However, these potentially effective variables were not controlled in the current study quantitatively. The current study looked for possible factors that might be effective on both student engagement and teacher autonomy support through qualitative data. These are discussed below.

Similar to Patall et.al (2019) study, Matos et al., (2018) found that agentic engagement levels of university students at the beginning of the semester predicted significant variance in perceived teacher autonomy support at the end of the semester. Other dimensions of student engagement that is, behavioral engagement, emotional engagement, and cognitive engagement of the students at the beginning of the semester did not explain any variance in perceived teacher autonomy support at the end of the semester. The researchers concluded that the teachers in their study became more autonomy supportive and paid more attention to their students' wishes and needs as their students let their teachers know what they asked for. Matos et al. (2018) carried out this study in Peru with university students enrolled in either Science or Liberal Arts programs. However, the students in the present study were from School of Foreign Languages, where two instructors attended one class. Therefore, the instructors in this study held responsibilities for each other, leaving less room for student autonomy during the course. The fact that instructors in School of Foreign Languages had to follow a strict schedule and did not want to give their partners extra work load might have affected perceived teacher autonomy support. That is, institution-related factors might have had greater impact on perceived teacher autonomy support than students' agentic engagement. According to the results obtained from the analysis of the semi-structured interview sessions and stimulated recall protocols, the teacher in this study was required to follow a strict rule administered by the institution, she might not have fulfilled the wishes of her students during the lesson. Also, the teacher had a responsibility towards her partner because her partner was obligated to continue the lesson where she left off. She might have ignored her students' proactive initiatives to avoid leaving her partner extra workload. These findings agree with the previous research in the literature conducted in Turkish context (Bagci and Aydin, 2021). In Bagci and Aydin's (2021) study, instructors working in School of Foreign Languages at a large public university in Turkey filled out a questionnaire asking about their motivational orientations focusing on controlled or autonomy supportive teaching. The researchers found that instructors' moderate level of

autonomy support might be related to having a strict syllabus to follow in the school of foreign languages, which might inhibit the teachers' potential to be more creative in their courses. The participants in their study also asserted that Turkish educational system did not put enough emphasis on autonomy. Likewise, Reeve, Vansteenkiste, Assor, Ahmad, Cheon, Jang, Kaplan, Moss, Olaussen, & Wang (2014) pointed out that teachers' autonomy-supportive motivating behaviors were culture-specific. In their study, Reeve et al. (2014) demonstrated that teachers from collectivist societies described their way of teaching to be more controlling when compared to teachers from individualistic societies. Accordingly, the culture and the society could be one of the factors shaping teachers' motivational behaviors to support student autonomy.

In the aforementioned studies by Patall et al. (2019), Matos et al. (2018), and Reeve (2013), it was concluded that as the students act more proactively and constructively by expressing their needs and opinions, the teachers learn to behave in a more autonomy-supportive way. However, in the present study, although students' constructive initiatives to alter the flow of the lesson affected perceived teacher autonomy at the beginning, in the middle, and at the end of the semester respectively, these initiatives of the students at the beginning and in the middle of the semester did not have any effect on the increase of teacher's autonomy supportive behaviors at the end of the semester. Considering that the increase in perceived teacher autonomy level is quite low across three different time points, it can be concluded that students' proactive and initiative behaviors do not always end up with an increase in teachers' autonomy support (Matos et al., 2018). In some cases, some agentic engagement behaviors of students might lead teachers to act in a more autonomy controlling way and suppress student input by asserting that they are the teacher that is they are the authority, and they just want their students to follow their instructions. (Matos et al., 2018). In other cases, agentic engagement behaviors of the students may result in autonomy-thwarting behaviors of teachers when teachers are required to follow a daily plan while they also attempt to fulfill their students' needs and wishes (Patall., 2019).

Additionally, the analysis of the semi-structured interviews and stimulated recalls demonstrated that perceived teacher autonomy support was also affected by various student-related factors. These student-related factors affecting teacher autonomy support were about students' temporary feelings pertinent to the course and students' characteristics. Students' feelings pertaining to the course included being content with the

lesson, being occupied with the activity, and lack of willingness. The teacher in this study expressed that she did not need to provide many opportunities for students to express their feelings as they seemed to be happy with the flow of the lesson. Correspondingly, the students also mentioned that they did not feel the urge to interfere with the flow of the course by proposing suggestions because they were satisfied with the lesson. Therefore, it might be concluded that some students at different times did not feel the need to make contribution depending on the flow of the lesson or when the teacher did not initiate a discussion to express their ideas on how to carry out the lesson better, or did not create an environment for the opinion exchange between the students and the teacher.

The findings also demonstrated that the teacher was willing to give more freedom of choice when she observed that the students were shy and nervous due to the requirements of the activities such as doing a public speech in front of the classroom. However, the teacher also mentioned that the students did not give proper responses even if she asked about their opinions or wishes. In other words, although she offered a choice, the students did not express their preferences. The teacher also mentioned that she did not want to force her students in getting engaged in the lesson because using force on the students might result in negative reactions such as disengagement due to the young age of the students.

As it is seen, although the teacher gave the students the opportunity to engage agenticly by providing them the chance to express their needs and opinions, students did not prefer to articulate their thoughts and wishes. This finding implies that there might be other factors affecting student engagement as well as teacher autonomy support and satisfaction with the lesson. The analysis of the qualitative data demonstrated that students were affected by other course-related factors in addition to being content with the lesson. These factors are augmentative course-related factors and inhibitory course-related factors. Augmentative course-related factors were about the lesson being interactive and contributive. Inhibitory course-related factors refer to having less variety of exercises, excessive reading time, and boring topics. Karanfil and Oguz (2019) also highlighted that students' engagement level decreased by having an intensive and routine curriculum, boring topics and not being focused on speaking skills.

In addition to these qualitative findings, observations conducted in this study also revealed that the skills being practiced and the classroom activities affected students' agentic engagement. Students' agentic engagement levels increased when they were

given opportunity to express their thoughts through activities such as listening and answering questions, and vocabulary teaching in which they were allowed to ask questions about the meaning of some words. On the other hand, when students were required to participate in group activities, they did not have the chance to express their feelings and opinions to change the flow of the lesson. These findings might imply that students' engagement levels changed depending on the skills being practiced and the type of classroom activities.

The analysis of the interviews with the students revealed that student engagement was also affected by individual factors. The students mentioned that they felt anxious at the beginning of the course because they were going to do a public speech in front of the class. This finding might imply that students' momentary feelings of anxiety might be related to the task and skill being practiced. As De Waelsche (2015) pointed, students in collectivist nations abstain from engaging in communicative activities where they perform and share their ideas in front of the class as a result of being accustomed to teacher-fronted classroom where rote learning takes place to prepare students for the exams (Ramos, 2014).

The results of the current study have revealed that student engagement was also affected by teacher-related factors. Teacher-related factors were divided into two sub-categories. These categories were the teacher's motivating style and teacher's characteristics. Teacher's motivating style refers to teacher's autonomy support, the teacher's involvement, and the teacher's structure. Students in the current study expressed that they engaged in the lesson more as their teacher motivated them intrinsically by making them interested in the course, gave the students the freedom of choice, and accepted their frustration towards the course rather than trying to change it. It was also found that when the teacher expressed affection, cared her students, and showed that she enjoyed her time with the students, the students became more engaged in the lesson. Furthermore, when the teacher provided scaffolding and feedback to the students by adapting her questions according to the students' level, correcting their mistakes, and observing them constantly, students engaged in the lesson more. These results resonate with the findings of the prior studies (Cents-Boosta, Lichtwark-Aschoff, Denessen, Aelterman & Haerens; 2021; Hornstra, Stroet, van Eijden, Goudsblom & Roskamp, 2018). Teachers in classrooms with highly engaged students used more inviting language to promote autonomy support, provide positive feedback to increase competence needs,

and show more affection and empathy, and invest more personal sources to increase students' relational needs. On the other hand, teachers were found to allow more chaos in classrooms with less engaged students (Cents-Boosta, Lichtwark-Aschoff, Denessen, Aelterman & Haerens; 2021).

Regarding the teacher's characteristics, in the current study it was found that when the teacher was perceived as easy-going, respectful, energetic, and helpful, students were more comfortable and felt free during the lesson as a result of their teacher's non-judgmental personality. This finding is in line with the previous literature (Abdullah, Bakar & Mahbob, 2012; Aidinlou & Ghabadi, 2012). The participants in Abdullah et al.'s (2012) study were undergraduate students from Faculty of Social Sciences and Humanities at a public university in Malaysia. The researchers found that positive personality traits of the instructor such as being friendly and non-judgmental towards the students increased the verbal engagement of the students in the classroom (Abdullah et al., 2012). Similarly, based on the self-report data collected from M.A. students from the English Language Teaching Department at Islamic Azad Universities, Aidinlou & Ghabadi (2012) also revealed that teacher encouragement was one of the main factors enhancing oral participation of students. These findings suggest that when the teacher acted more open and approachable, students did not feel afraid to speak and had more voice in the classroom. As SDT also points out, when teachers involve with students by being warm, caring and by expressing affection, their students need for relatedness will be fulfilled, which in turn increase their engagement in the lesson (Reeve, 2012).

On the other hand, feeling impatient and being unwilling were reported as impeding factors of student engagement. Some students in the current study mentioned that they got bored and felt restless during the course. The concept of boredom as a factor thwarting student engagement has been investigated by many scholars in the literature recently (Derakshan, Fathi, Pawlak & Kruk, 2022; Xie, 2021; Sharp, Sharp & Young, 2018; Tze, Klassen & Daniels, 2014). These studies have found that boredom correlated negatively with student engagement. That is, as students feel more bored, their level of participation in the course decreases. Boredom leads students to show less effort and dedication toward the course (Tze et al., 2014), which turns into unwillingness to engage in the lesson.

Additionally, environmental factors were among the factors that had an impact on student engagement in the current study. These environmental factors were related to having a family atmosphere in the classroom, feeling comfortable due to the classroom

climate, and having fun in the classroom owing to the interrelations with the friends and the teacher. Having a positive classroom climate with qualified student-teacher interaction increases student engagement in the classroom (De Vito, 2016; Gunuc and Kuzu, 2014). The quality of the interaction and positive atmosphere in the classroom boost students' involvement (Gomez, Arai, and Lowe, 1995). These factors increase students' sense of belongingness, resulting in more student engagement in the classroom (Vardal-Ocakli, 2019).

## **5.3 Conclusion**

### **5.3.1. Summary of the Results**

The findings of the study demonstrated that perceived teacher autonomy support correlated significantly with agentic engagement at the beginning, in the middle, and at the end of the semester. These findings show that as the students acted more in a proactive way by expressing their opinions and choices, and taking more responsibilities, their teacher became more autonomy supportive throughout the semester.

Furthermore, perceived teacher autonomy support also correlated significantly with behavioral and emotional engagement in the middle and at the end, and with cognitive engagement only at the end of the semester. So, at the end of the semester, it correlated with all four dimensions of student engagement. Towards the end of the semester, the students started to show more behavioral engagement such as listening to the teacher more carefully, paying more attention to the course, and studying harder to learn the new topics being taught in class. The students also started to engage more emotionally towards the end of the semester by having more fun in the class and being more interested in the topics being taught. Moreover, the students showed an increasing level of cognitive engagement by observing their own learning, applying different learning strategies depending on the topic, and trying to connect what they learned to their own life. As the students became more agentic, behaviorally, cognitively, and emotionally engaged in the lesson, the teacher became more autonomy supportive.

It was also revealed that agentic engagement was the only student engagement dimension that was able to explain the variance in teacher autonomy support to some degree across three data collection points that is, at the beginning, in the middle, and at

the end of the semester at each time period separately. Students took initiatives by asking questions, asserting their preferences and ideas, expressing their likes and dislikes, and making suggestions regarding the flow of the lesson. These behaviors of students led the teacher to adjust her behaviors in an autonomy supportive way. She started to provide more freedom of choice, take students' attention by motivating them intrinsically, and accepting their negative affect rather than resisting it at the beginning, in the middle, and at the end of the semester separately.

However, none of the student engagement dimensions explained any variance in the increase of perceived teacher autonomy support throughout the semester, which could indicate presence of other factors. In this line, the study's qualitative findings revealed that teacher autonomy support might have been affected by various factors.

According to the qualitative findings, perceived teacher autonomy support is affected by two main factors. These factors are student-related factors and institution-related factors. Student-related factors were students' characteristics and students' momentary feelings pertinent to the course. Regarding the students' characteristics, it was found that the teacher tended to be more autonomy supportive as she thought that the students needed more freedom of choice because they felt shy and nervous due to the requirements of some activities. The teacher also thought that she did not want to put pressure on the students by forcing them to engage in the lesson in order to avoid any negative reactions. Besides, according to the teacher, she did not have many chances to practice autonomy support because of some institutional reasons such as strict schedule and responsibility she has for her partner.

It was found that the relationship between student engagement and teacher autonomy support is reciprocal that is, student engagement was also affected by perceived teacher autonomy support. For further insight into the factors that might have affected student engagement, the qualitative data collected through semi-structured interviews were analyzed. The results demonstrated that student engagement was affected by teacher motivating style including teacher autonomy support, teacher involvement, and teacher structure, teacher characteristics such as being non-judgmental and easygoing, both inhibitory and augmentative course-related factors, environmental factors such as the classroom atmosphere, and individual factors.

To sum up, teachers' autonomy supportive behaviors were related to how their students were authentically engaged. However, the teachers' longitudinal increase in

autonomy supportiveness throughout the semester was not affected by student engagement. In line with this finding, the study also revealed that teacher autonomy support might be affected by a number of factors in addition to student engagement.

### **5.3. Conclusion**

This study attempts to investigate the relationship between perceived teacher autonomy support and student engagement from a longitudinal and multilevel perspective. The study focuses on student engagement's capability to explain variance in teacher autonomy support. It also investigates whether student engagement was successful in explaining the increase in perceived teacher autonomy support throughout the semester.

The findings demonstrated that only agentic engagement explained the variance in perceived teacher autonomy support at T1, T2, and T3. However, it did not explain the increase in teacher autonomy support throughout the semester. Other factors were also effective on both perceived teacher autonomy support and student engagement. According to the results, some of the factors like institutional ones such as to follow a strict schedule administered by the institute and holding responsibility to their partners restricted both the teacher autonomy and teacher autonomy support. Besides results related to the effective factors like course related ones and teacher motivating style mentioned by the students indicate that intervention programs might assist some teachers in becoming more autonomy supportive (Cheon et al., 2012; Reeve et al., 2022; Jang and Reeve, 2021; Reeve et al., 2020b).

As a conclusion, it can be stated that agentic engagement affects the way students perceived their teacher as autonomy supportiveness to a certain degree. However, it did not explain any longitudinal increases in perceived teacher autonomy support throughout the semester. In this study, including teacher as well as student views helped us take a multiple perspectives in the relationship between perceived teacher autonomy support and student engagement. By this way, we were able to demonstrate that teacher autonomy support can be affected by other cultural and institutional factors in addition to student engagement.

#### **5.4. Pedagogical Implications**

In light of the findings of the current study, a number of pedagogical implications are proposed, which are likely to provide insights for students, both pre-service and in-service teachers, and teacher educators.

First of all, although agentic student engagement has been proven to be determinant in the increment of perceived teacher autonomy support in the related literature, this might not always be the case. As a matter of fact, although agentic engagement was the only student engagement dimension determining the changes in perceived teacher autonomy support at the beginning, in the middle, and at the end of the study, it was not found to be a factor affecting perceived teacher autonomy increase. That is, agentic engagement does not always pave the road for teachers to be aware of their students' needs and adjust their instruction accordingly. Therefore, teacher-focused intervention and in-service seminars on the ways to increase their autonomy supportiveness could be beneficial for in-service teachers.

Secondly, considering the effectiveness of teacher autonomy support on student engagement, teacher educators in higher education institutions could also give lectures on how to become more autonomy supportive to pre-service teachers. These lectures might help teacher candidates gain awareness of the importance of autonomy supportive teaching, which might result in further applications by future teachers in their instruction.

Thirdly, teachers could gain more information regarding their students and design their courses accordingly. In order to be more autonomy supportive, teachers need to address the student's intrinsic motivation. To achieve this, teachers need to concentrate on students' interests and enjoyment, prepare challenging activities, boost students' competence and confidence, and let them be part of the decision-making process. For example, the teacher could bring audio-visual materials to the classroom, ask more questions, increase the time devoted to speaking activities, and promote group work in the classroom.

Last but not least, as the qualitative findings revealed that perceived teacher autonomy was affected by some other factors such as students' characteristics, strict plan they were required to follow, and their responsibilities towards their partners. Knowing such factors some guidelines could be prepared for the teacher how to organize their lessons considering different situations. Some reorganizations could be made in the syllabuses.

### **5.5. Limitations and Suggestions for Further Research**

In the analysis of the qualitative data, it was found that not only teacher's autonomy support but other teacher motivating styles that is, teacher's involvement and teacher's structure had an impact on student engagement. Therefore, teacher's autonomy, teacher's involvement, and teacher's structure might be investigated altogether in future studies.

This study was designed to examine the relationship between teacher autonomy support and student engagement, and the role of student engagement in determining perceived teacher autonomy support. However, findings demonstrated that although agentic engagement explained a certain amount of variance in perceived teacher autonomy support at the beginning, in the middle, and at the end of the semester, it was not a determinant in the increment of perceived teacher autonomy support. Therefore, other mediating factors such as teacher self-efficacy, teacher identity, and the teacher's level of expertise might be included in future studies.

Current study was carried out during the second semester of the academic year. The instructors were already perceived as moderately autonomy supportive at the beginning of the semester. Thus, their perceived autonomy supportiveness might not have fluctuated during the semester. More longitudinal studies with longer period of time might be carried out to see the potential increase in perceived teacher autonomy support.

This study was carried out in the School of Foreign Languages with university-level students and their instructors. It might also be beneficial to conduct the study in other contexts such as primary schools, middle schools, high schools, or private institutions.

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## APPENDICES

### APPENDIX-1. Consent Forms

#### Appendix-1.1. Consent Form for Video Recordings and Observations

### VİDEO KAYDI VE GÖZLEM ARAŞTIRMA GÖNÜLLÜ KATILIM FORMU

Bu çalışma, **Öğrenci Katılımı ve Öğretmen Motivasyon Stili: Eylemsel Katılım ve Öğretmenin Özerklik Destekleyici Motivasyon Stili Arasındaki İlişkiye Boylamsal ve Çok Düzeyli Bir Bakış** başlıklı bir araştırma çalışması olup doktora tezi olma amacını taşımaktadır. Çalışma, Arş. Gör. Gizem BERBER tarafından yürütülmekte olup, sonuçları ile bilimsel camiaya sunulacaktır.

- Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, **sınıflarınızın video kaydı alınacak ve sınıflarınız gözlemlenecektir.**
- İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz/araştırmada katılımcıların isimleri gizli tutulacaktır.
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İstemeniz halinde sizden toplanan verileri inceleme hakkınız bulunmaktadır.
- Sizden toplanan veriler titizlikle korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama sürecinde/süreçlerinde size rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı ... adresine yöneltebilirsiniz.

**Araştırmacı Adı** :

**Adres** :

**İş Tel** :

**Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabileceğimi bilerek verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.**

Katılımcı Ad ve Soyadı:

İmza:

Tarih:

## Appendix-1.2. Consent Form for FASEQ

### DÖRT BOYUTLU ÖĞRENCİ KATILIM ÖLÇEĞİ ARAŞTIRMA GÖNÜLLÜ KATILIM FORMU

Bu çalışma, **Öğrenci Katılımı ve Öğretmen Motivasyon Stili: Eylemsel Katılım ve Öğretmenin Özerklik Destekleyici Motivasyon Stili Arasındaki İlişkiye Boylamsal ve Çok Düzeyli Bir Bakış** başlıklı bir araştırma çalışması olup doktora tezi olma amacını taşımaktadır. Çalışma, Arş. Gör. Gizem BERBER tarafından yürütülmekte olup, sonuçları ile bilimsel camiaya sunulacaktır.

- Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, 7'li Likert tipi **Dört Boyutlu Öğrenci Katılım Ölçeği** ile derse katılımınıza yönelik bilgi toplanacaktır.
- İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz/araştırmada katılımcıların isimleri gizli tutulacaktır.
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İstemeniz halinde sizden toplanan verileri inceleme hakkınız bulunmaktadır.
- Sizden toplanan veriler titizlikle korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama sürecinde/süreçlerinde size rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı ... adresine yöneltebilirsiniz.

**Araştırmacı Adı** :

**Adres** :

**İş Tel** :

**Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabileceğimi bilerek verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.**

Katılımcı Ad ve Soyadı:

İmza:

Tarih:

### Appendix-1.3. Consent Form for LCQ

#### ÖĞRENME İKLİM ÖLÇEĞİ ARAŞTIRMA GÖNÜLLÜ KATILIM FORMU

Bu çalışma, **Öğrenci Katılımı ve Öğretmen Motivasyon Stili: Eylemsel Katılım ve Öğretmenin Özerklik Destekleyici Motivasyon Stili Arasındaki İlişkiye Boylamsal ve Çok Düzeyli Bir Bakış** başlıklı bir araştırma çalışması olup doktora tezi olma amacını taşımaktadır. Çalışma, Arş. Gör. Gizem BERBER tarafından yürütülmekte olup, sonuçları ile bilimsel camiaya sunulacaktır.

- Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, 7'li Likert Tipi **Öğrenme İklim Ölçeği** ile öğretmenlerinizin özerklik destekleyici davranışlarıyla ilgili görüşlerinize ilişkin veri toplanacaktır.
- İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz/araştırmada katılımcıların isimleri gizli tutulacaktır.
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İstemeniz halinde sizden toplanan verileri inceleme hakkınız bulunmaktadır.
- Sizden toplanan veriler titizlikle korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama sürecinde/süreçlerinde size rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı ... adresine yöneltebilirsiniz.

**Araştırmacı Adı** :

**Adres** :

**İş Tel** :

**Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabileceğimi bilerek verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.**

Katılımcı Ad ve Soyadı:

İmza:

Tarih:

## Appendix-1.4. Consent Form for Stimulated Recall Protocols

### UYARILMIŞ HATIRLAMA PROTOKOLLERİ ARAŞTIRMA GÖNÜLLÜ KATILIM FORMU

Bu çalışma, **Öğrenci Katılımı ve Öğretmen Motivasyon Stili: Eylemsel Katılım ve Öğretmenin Özerklik Destekleyici Motivasyon Stili Arasındaki İlişkiye Boylamsal ve Çok Düzeyli Bir Bakış** başlıklı bir araştırma çalışması olup doktora tezi olma amacını taşımaktadır. Çalışma, Arş. Gör. Gizem BERBER tarafından yürütülmekte olup, sonuçları ile bilimsel camiaya sunulacaktır.

- Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, derslerden sonra **uyarılmış hatırlama protokollerine** davet edileceksiniz.
- İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz/araştırmada katılımcıların isimleri gizli tutulacaktır.
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İsteminiz halinde sizden toplanan verileri inceleme hakkınız bulunmaktadır.
- Sizden toplanan veriler titizlikle korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama sürecinde/süreçlerinde size rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı ... adresine yöneltebilirsiniz.

**Araştırmacı Adı** :

**Adres** :

**İş Tel** :

**Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabileceğimi bilerek verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.**

Katılımcı Ad ve Soyadı:

İmza:

Tarih:

## Appendix-1.5. Consent Form for Semi-Structured Interviews

### YARI YAPILANDIRILMIŞ GÖRÜŞMELER ARAŞTIRMA GÖNÜLLÜ KATILIM FORMU

Bu çalışma, **Öğrenci Katılımı ve Öğretmen Motivasyon Stili: Eylemsel Katılım ve Öğretmenin Özerklik Destekleyici Motivasyon Stili Arasındaki İlişkiye Boylamsal ve Çok Düzeyli Bir Bakış** başlıklı bir araştırma çalışması olup doktora tezi olma amacını taşımaktadır. Çalışma, Arş. Gör. Gizem BERBER tarafından yürütülmekte olup, sonuçları ile bilimsel camiaya sunulacaktır.

- Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, derslerden sonra **yarı yapılandırılmış görüşmelere** davet edileceksiniz.
- İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz/araştırmada katılımcıların isimleri gizli tutulacaktır.
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İstemeniz halinde sizden toplanan verileri inceleme hakkınız bulunmaktadır.
- Sizden toplanan veriler titizlikle korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama sürecinde/süreçlerinde size rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı ... adresine yöneltebilirsiniz.

**Araştırmacı Adı** :

**Adres** :

**İş Tel** :

**Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabileceğimi bilerek verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.**

Katılımcı Ad ve Soyadı:

İmza:

Tarih

## APPENDIX-2: Four Aspects of Student Engagement Questionnaire (FASEQ)

Please think about this class as you respond to the following questions.

		Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
		1	2	3	4	5	6	7
1	I let my teacher know what I need and want.							
2	During this class, I express my preferences and opinions.							
3	When I need something in this class, I'll ask the teacher for it.							
4	During class, I ask questions to help me learn.							
5	I let my teacher know what I am interested in.							
6	I am free to express my opinions in this class.							
7	I feel like I have a lot of input in deciding how to learn in this class.							
8	The teacher takes my perspective into consideration in this class.							
9	I do not think the tasks I do in this class are very stimulating.							
10	I enjoy the challenges this class provides.							
11	Most days I feel a sense of accomplishment from doing work in this class.							
12	The teacher cares about me and my progress.							
13	The teacher is pretty friendly towards me.							
14	I don't feel the teacher understands me.							
15	My classmates care about me.							
16	My classmates are pretty friendly toward me.							
17	I don't feel my classmates understand me.							
18	I make up my own examples to help me understand the important concepts I study.							
19	Before I begin to study, I think about what I want to get done.							
20	When I am working on my schoolwork, I stop once in a while and go over what I have been doing.							
21	As I study, I keep track of how much I understand, not just if I am getting the right answers.							
22	If what I am working on is difficult to understand, I change the way I learn the material.							

## APPENDIX-2. Derse Katılım Ölçeği (Turkish)

Adı-Soyadı: ..... Sınıf:.....

Değerli öğrenciler; aşağıdaki maddelere ilişkin görüşlerinizi “İngilizce” öğretmeninizi dikkate alarak belirtiniz. Aşağıdaki görüşe yönelik düşüncenizi doğru veya yanlış gibi düşünmeden katılım düzeyini belirtiniz. Her ifadenin karşısına tek bir kutucuğu işaretleyiniz. Eğer yanlış kutucuğu işaretlediğinizi düşünüyorsanız lütfen üzerine çarpı atıp doğru kutucuğu yuvarlak içine alınız.

		Hiç katılmıyorum	Katılmıyorum	Çok az katılmıyorum	Kararsızım	Çok az katılıyorum	Katılıyorum	Kesinlikle katılıyorum
		1	2	3	4	5	6	7
1	Ders süresince sorular sorarım.							
2	Öğretmenime nelerden hoşlanıp hoşlanmadığımı söylerim.							
3	Öğretmenimin neyle ilgilendiğimi bilmesini sağlarım.							
4	Ders süresince tercihlerimi ve fikirlerimi ifade ederim.							
5	Dersin daha iyi nasıl işlenebileceğine ilişkin önerilerde bulunurum.							
6	Dersi dikkatlice dinlerim.							
7	Derste çok gayret gösteririm.							
8	Öğretmenim yeni bir konu açıklarken onu çok dikkatli dinlerim.							
9	Derste yeni bir şeye başladığımızda sıkı çalışırım.							
10	Derse dikkatimi veririm.							
11	Derste yeni şeyler öğrenmekten hoşlanırım.							
12	Derste bir şeyler üzerinde çalıştığımızda ona ilgi duyarım.							
13	Dersteyken, öğrendiğimiz şeyleri merak ederim.							
14	Ders eğlencelidir.							
15	Ödevlerimi yaparken, öğrendiklerimi önceden bildiklerimle ilişkilendirmeye çalışırım.							
16	Ders çalışırken, öğrendiklerimi kendi yaşantılarıma bağlamaya çalışırım.							
17	Ders çalışırken, tüm farklı fikirleri birbirleriyle uyumlu ve anlamlı hale getirmeye çalışırım.							
18	Çalıştığım önemli kavramları anlamama yardımcı olmaları için kendi örneklerimi oluştururum.							
19	Çalışmaya başlamadan önce neye ulaşmak istediğimi düşünürüm.							
20	Ders çalışırken, bir an durur ve o ana kadar yaptıklarımı gözden geçiririm.							
21	Ders çalıştığımda, yalnızca doğru cevapları verip vermediğimi değil, ne kadar anladığımı da değerlendiririm.							
22	Eğer üzerinde çalıştığım konunun anlaşılması güçse, onu öğrenme yöntemimi değiştiririm.							

**APPENDIX-3: Learning Climate Questionnaire**

		Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Strongly disagree	Agree	Strongly agree
		1	2	3	4	5	6	7
1	I feel that my instructor provides me choices and options.							
2	I feel understood by my instructor.							
3	My instructor conveyed confidence in my ability to do well in the course.							
4	My instructor encouraged me to ask questions.							
5	My instructor listens to how I would like to do things.							
6	My instructor tries to understand how I see things before suggesting a new way to do things.							
7	I am able to be open with my instructor during class.							
8	I feel that my instructor accepts me.							
9	My instructor made sure I really understood the goals of the course and what I need to do.							
10	I feel a lot of trust in my instructor.							
11	My instructor answers my questions fully and carefully.							
12	My instructor handles people's emotions very well.							
13	I feel that my instructor cares about me as a person.							
14								
15	I feel able to share my feelings with my instructor.							

### APPENDIX-3: Öğrenme İklimi Ölçeği (Turkish)

Bu ölçek sınıfta öğretmeninizin sunduğu öğrenme yaşantıları ile ilgili maddeler içermektedir. Öğretmenlerin öğrencileri derse motive etmek için farklı stilleri vardır. Bu ölçeğin amacı öğretmeninizin sizi motive etmek için kullandığı stili belirlemektir. Bu bir sınav değildir ve vereceğiniz cevaplar gizli tutulacaktır. Cevaplarınızın samimi ve içten olması bizim için önemlidir.

		Hiç katılmıyorum	Katılmıyorum	Çok az katılmıyorum	Kararsızım	Çok az katılıyorum	Katılıyorum	Kesinlikle katılıyorum
		1	2	3	4	5	6	7
1	Öğretmenimin bana seçenekler sunduğunu ve tercih hakkı verdiğini düşünüyorum.							
2	Öğretmenim tarafından anlaşıldığımı hissediyorum.							
3	Ders sırasında öğretmenime karşı rahat ve samimi olabiliyorum.							
4	Öğretmenim derste başarılı olmam için yeteneklerime güvendiğini ifade eder.							
5	Öğretmenim benim dersle ilgili olumsuz duygularımı kabul eder.							
6	Öğretmenim dersin amaçlarını ve bu amaçlara ulaşmak için ne yapmam gerektiğini anlamamı sağlar.							
7	Öğretmenim beni derste soru sormam için cesaretlendirir.							
8	Öğretmenime çok güven duyuyorum.							
9	Öğretmenim sorularımı dikkatli bir şekilde tam olarak cevaplar.							
10	Öğretmenim benim herhangi bir konuda bir şeyleri nasıl yapmak istediğimi önemser.							
11	Öğretmenim insanların duygularını çok iyi anlar.							
12	Öğretmenimin beni bir birey olarak önemsemediğini düşünüyorum.							
13	Öğretmenimin benimle konuşma şeklinin çok iyi olmadığını düşünüyorum.							
14	Öğretmenim bana herhangi bir konuda bir şeyler yapmak için yeni bir yöntem önermeden önce, benim bu konudaki fikirlerimi anlamaya çalışır.							
15	Öğretmenimle duygularımı paylaşabileceğimi düşünüyorum.							

# APPENDIX-4. Observation Sheet

**Ratee:**  
**Teacher:**  
**Classroom:**  
**Number of Students:**  
**Day/Date/Hour:**

**Rating Period (circle one):**  
 1st 10 min   2nd 10 min   3rd 10 min   4th 10 min   5th 10 min

Teacher's Autonomy Support						Teacher's Structure																	
1	2	3	4	5	6	7	1	2	3	4	5	6	7										
<b>Relies on Extrinsic Motivational Resources</b> <ul style="list-style-type: none"> <li>Incentives, Consequences</li> <li>Directives, Deadlines</li> <li>Make a-assignments</li> <li>Seeks Compliance</li> </ul>						<b>Nurtures Intrinsic Motivation</b> <ul style="list-style-type: none"> <li>Interest, Enjoyment</li> <li>Challenge</li> <li>Competence/Confidence</li> <li>Choice Making</li> </ul>						<b>During Introduction/Directions</b> <ul style="list-style-type: none"> <li>Absent, Confusing</li> <li>Unclear, Complicated</li> <li>Rules, Procedures are Confusing, Absent</li> <li>Little or No Organization</li> </ul>						<b>Clear, Predictable</b> <b>Understandable, Detailed</b> <ul style="list-style-type: none"> <li>Clearly Stated Procedures</li> <li>Frames Upcoming Lesson Well</li> <li>Clear Organization</li> </ul>					
<b>Controlling Language</b> <ul style="list-style-type: none"> <li>Controlling, Coercive</li> <li>Should, Must, <u>Have</u> to, Got to</li> <li>Pressuring, Rigid, No nonsense</li> </ul>						<b>Informational Language</b> <ul style="list-style-type: none"> <li>Informational</li> <li>Flexible</li> <li>Not at All Controlling</li> </ul>						<b>During Lesson/While Students Learn</b> <ul style="list-style-type: none"> <li>Poor Leadership</li> <li>Fails to Show Leadership</li> <li>No Plan, No Goals</li> </ul>						<b>Strong Leadership</b> <ul style="list-style-type: none"> <li>Organized, Leader, Conductor</li> <li>Clear Plan, Clear Goals</li> </ul>					
<b>Neglects Value, Importance of Task/Lesson/Behavior</b> <ul style="list-style-type: none"> <li>Neglects Value, Meaning, Use, Benefit, Importance</li> </ul>						<b>Identifies Value Importance of Task/Lesson/Behavior</b> <ul style="list-style-type: none"> <li>Identifies Value, Meaning, Use, Benefit Importance</li> <li>"This is important because..."</li> </ul>						<b>During Feedback, Post-Performance</b> <ul style="list-style-type: none"> <li>Commentary</li> <li>None, Ambiguous, Off-Task, Rambling</li> </ul>						<b>Skill-Building, Informative, Instructive</b>					
<b>Reaction to Negative Affect: Is Not Ok: Change It</b> <ul style="list-style-type: none"> <li>Neg. Affect in Unacceptable</li> <li>Tries to Fix, Counter or Change into Something Else</li> </ul>						<b>Is Ok: Listens, Accepts</b> <ul style="list-style-type: none"> <li>Listens Carefully</li> <li>Open to Complains</li> <li>Accepts as Ok, Valid Reaction</li> </ul>																	
Teacher's Involvement						Student's Collective Engagement																	
1	2	3	4	5	6	7	1	2	3	4	5	6	7										
<b>Seems Cold/Closed</b> <ul style="list-style-type: none"> <li>Business-like</li> <li>Doesn't Enjoy Time with Ss</li> </ul>						<b>Seems Warm, Open</b> <ul style="list-style-type: none"> <li>Express Affection, Caring</li> <li>Does Enjoy Time with Ss</li> </ul>						<b>Dispersed Attention</b>						<b>Focused Attention</b>					
<b>Withholds Personal Resources</b> <ul style="list-style-type: none"> <li>Time, Action, Energy</li> </ul>						<b>Invest Personal Resources</b> <ul style="list-style-type: none"> <li>Time, Action, Energy</li> </ul>						<b>Verbally Silent</b> <ul style="list-style-type: none"> <li>Students Don't Talk, Ask Questions, Discuss</li> </ul>						<b>Verbally Participating</b> <ul style="list-style-type: none"> <li>Students Do Talk, Ask Questions, Discuss</li> </ul>					
<b>Physical Proximity: Distant</b> <ul style="list-style-type: none"> <li>Keeps Distance</li> <li>Stays Up Front During Class</li> </ul>						<b>Physical Proximity: Close</b> <ul style="list-style-type: none"> <li>Walks over to Students</li> <li>Stands Near/Sits Close</li> </ul>						<b>During Challenge, Failure or Confusion</b> <ul style="list-style-type: none"> <li>Give Up Easily</li> <li>Decrease Effort Over Time</li> </ul>						<b>Persists</b> <ul style="list-style-type: none"> <li>Increase Effort Over Time</li> </ul>					
<b>Know Students: Not at all</b> <ul style="list-style-type: none"> <li>No mention of Names, Academic/Personal Histories</li> </ul>						<b>Know Students: Yes, Detailed Knowledge</b> <ul style="list-style-type: none"> <li>Knows Names, Academic/Personal Histories</li> </ul>						<b>Flat Emotive Tone</b> <ul style="list-style-type: none"> <li>Bored, Disinterested, Flat</li> </ul>						<b>Positive Emotional Show</b> <ul style="list-style-type: none"> <li>Enjoyment, Interested, Fun</li> </ul>					

**Note for each rater: Use the bold, underlined 4 as your anchor/starting point.**

## APPENDIX-5. Student Interview Questions

1. Bu ders karşısında öğretmeninizin tutumunu açıklar mısınız?
2. Bu dersle ilgili genel duygularınız nelerdir? Örnekleyerek açıklar mısınız?
3. Bu derste öğretmeninizle olan iletişiminiz hakkında bilgi verir misiniz?
4. Bu derste katılım sağladınız mı? Cevabınız evet ise ne tür bir katılım sağladınız?
5. Öğretmeninize dersle ilgili görüş, düşünce ve isteklerinizi belirtmek için herhangi bir çaba sarf ettiniz mi?
  - A) Cevabınız **evet** ise ne tür bir çaba sarf ettiniz?
  - B) Cevabınız **hayır** ise nedenini açıklar mısınız?
6. Öğretmeninize görüş, düşünce ve isteklerinizi belirttiyseniz, görüş, düşünce ve isteklerinizin karşısında öğretmeninizin tutumunu açıklar mısınız?
7. Dersin akışına yönelik herhangi bir öneride bulundunuz mu?
  - A) Cevabınız **evet** ise ne tür bir katkıda bulundunuz?
  - B) Cevabınız **hayır** ise nedenini açıklar mısınız?
8. Dersin akışına yönelik öneride bulunduysanız önerinizin derse etkisi nasıl olmuştur?
9. Bu derste kendinizi özgür hissettiniz mi? Cevabınız evet ise nedenini açıklar mısınız?
10. Bu derste kendinizi kısıtlanmış hissettiniz mi? Cevabınız evet ise nedenini açıklar mısınız?
11. Öğretmeninizin hangi davranışları sizi bu derste daha özgür veya kısıtlanmış hissettirdi?
12. Bu dersle ilgili değiştirmek istediğiniz noktalar var mıdır? Varsa nelerdir?
13. Derse daha aktif katılımınızı sağlamak için neler önerirsiniz?

## **APPENDIX-6. Teacher Interview Questions**

1. Bu dersteeki öğrencilerinize karşı tutumunuzu açıkla mısınız?
2. Bu dersle ilgili genel duygularınız nelerdir? Örneklerle açıkla mısınız?
3. Bu derste öğrencilerinizle olan iletişiminiz ile ilgili bilgi verir misiniz?
4. Öğrencilerinizin bu derse katılım sağladığını düşünüyor musunuz? Cevabınız evet ise öğrencilerinizin ne tür bir katılım sağladığını düşünüyorsunuz?
5. Öğrencileriniz dersle ilgili görüş, düşünce ve isteklerini belirtmek için herhangi bir çaba sarf ettiler mi?
  - A) Cevabınız evet ise ne tür bir çaba sarf ettiler?
  - B) Cevabınız hayır ise nedenini açıkla mısınız?
6. Öğrencileriniz dersle ilgili görüş, düşünce ve istekleriniz belirttilerse bu duruma karşı tutumunuzu açıkla mısınız?
7. Öğrencileriniz dersin akışına yönelik herhangi bir öneride bulundular mı?
  - A) Cevabınız evet ise ne tür bir öneride bulundular?
  - B) Cevabınız hayır ise nedenini açıkla mısınız?
8. Öğrencileriniz dersin akışına yönelik herhangi bir öneride bulundularsa bu önerinin etkisi nasıl olmuştur?
9. Sizce öğrencileriniz bu derste kendilerini özgür hissettiler mi? Cevabınız evet ise nedenini açıkla mısınız?
10. Sizce öğrencileriniz bu derste kendilerini kısıtlanmış hissettiler mi? Cevabınız evet ise nedenini açıkla mısınız?
11. Sizce hangi davranışlarınız öğrencilerin kendilerini daha özgür veya daha kısıtlanmış hissetmelerine yol açmış olabilir?

## APPENDIX-7. Research Ethics Approval



ANADOLU ÜNİVERSİTESİ  
SOSYAL VE BEŞERÎ BİLİMLER BİLİMSEL ARAŞTIRMA VE YAYIN ETİĞİ KURULU  
KARAR BELGESİ

ÇALIŞMANIN TÜRÜ:	Doktora Tez Çalışması
KONU:	Eğitim Bilimleri
BAŞLIK:	Öğrenci Katılımı ve Öğretmen Motivasyon Stili: Eylemli Katılım ve Öğretmenin Özerklik Destekleyici Motivasyon Stili Arasındaki İlişkiye Boylamsal ve Çok Düzeyli Bir Bakış
PROJE/TEZ YÜRÜTÜCÜSÜ:	Prof. Dr. İlknur KEÇİK
TEZ YAZARI:	Gizem BERBER
ALT KOMİSYON GÖRÜŞÜ:	-
KARAR:	Olumlu

## **APPENDIX 8 – PERMISSONS TO USE FASEQ AND LCQ**