

Self-Determined Engagement in Language Learning: The Relations among Autonomy-Support, Psychological Needs, and Engagement

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Abstract

Classroom engagement as a multi-dimensional concept has received considerable attention nowadays in educational research, but there is limited research on this issue in language learning. This study investigates classroom engagement in English as a foreign language (EFL) classrooms, which can be considered the action component of the motivational system. Grounded in self-determination theory and the self-system model of motivational development, it tests a mediation model among indices of context (perceived teacher autonomy-support), self (psychological needs) and action (classroom engagement in language classrooms) with a cross-sectional survey design in 412 EFL learners in Turkey. The study findings indicated that learners' classroom engagement was directly predicted by learners' basic psychological needs, and indirectly by an autonomy-supportive context. Also, classroom engagement was directly predicted by perceived teacher autonomy-support in this model. The study highlights the pivotal role of learners' self and of language teachers in motivation. The findings deepen understanding of classroom engagement and its potential contribution to the quality of learning. They also have implications for language teachers and educators, suggesting that they should adopt autonomy-supportive behaviours to actively engage learners in learning in the language classroom.

Keywords: Autonomy-support, psychological needs, engagement, motivation, language learning.

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Yabancı Dil Sınıflarında Öz-Belirlemeci Ders Katılımı: Özerklik-Desteği, Psikolojik İhtiyaçlar ve Ders Katılımı Arasındaki İlişkiler

Öz

Çok boyutlu bir kavram olan ders katılımı, son zamanlarda eğitim araştırmalarında büyük ilgi görsen de bu konuyla ilgili yabancı dil eğitimi alanında yeterli çalışma yoktur. Bu çalışma, motivasyonel benlik sisteminin eylem bileşeni olan ders katılımının İngilizcenin yabancı dil olarak öğretildiği sınıflardaki rolünü araştırmaktadır. Öz-belirleme teorisi ve öz sistem motivasyonel gelişim modeline dayanan çalışma, Türkiye’de İngilizce eğitimi alan 412 öğrencinin katılımıyla gerçekleşmiş olup öğrenme ortamı (algılanan öğretmen özerklik desteği), öz-benlik (psikolojik ihtiyaçlar) ve eylem (dil sınıflarında ders katılımı) arasındaki ilişkileri aracı değişken modeli ile test etmektedir. Araştırma sonuçları, öğrencilerin ders katılımının öğrencilerin temel psikolojik ihtiyaçları tarafından doğrudan ve özerklik destekli sınıf ortamı tarafından da dolaylı olarak yordandığını göstermiştir. Ayrıca, algılanan öğretmen özerklik desteği, ders katılımını dolaysız olarak yordamaktadır. Çalışma sonuçları ders katılımında öğrencilerin benlik sisteminin rolünü ve öğretmenlerin dil öğrenimindeki önemini vurgulamaktadır. Çalışma, yabancı dil sınıflarında ders katılımının öğrenme kalitesine olan katkısını anlamamıza yardımcı olmaktadır. Ayrıca, yabancı dil öğretmenleri ve eğitimcilerine öğrencilerin derslerdeki aktif katılımının artırılması için öğretmenlerin özerklik destekleyici öğretmen davranışları benimsemeleri gerektiğini önermektedir.

Anahtar Kelimeler: Özerklik desteği, psikolojik ihtiyaçlar, derse katılım, motivasyon, dil öğrenimi.

Introduction

When you observe a second/foreign language (L2) learning class as an outsider, what features catch your eye in that class first? Can you easily decide whether the students engage in the language in the class or not? If yes, what factors have played a role in your judgement? Most probably, you would pay attention to the behaviours of a language teacher and what the students are doing in the classroom at that time. If the students are participating in language learning (LL) activities and teacher seems involved in these practices, you say the students are learning and engaged. However, engagement as a psychological factor is much more than behaviours and involvement in learning languages; it has some affective aspects as well. A language learner who is physically present in the class and does only whatever he is asked to do or participates in teacher-initiated activities can be described as an involved learner, but not fully engaged learner from a motivational perspective and it does not mean that s/he is learning language. To be a fully engaged learner, learners should act freely, with purpose, and collaborate in the class (Harper & Quaye, 2009).

Engagement has been a central topic in educational settings in recent years and L2 learning as well. This interest is because engagement is seen or agreed to be the creator of positive attitudes in the school and an antidote for disruptive behaviours in the school. Engaged students do much more than just physically attend the course or school activities; they show other behaviours and attitudes towards learning and greater school success, too (Fredricks, Blumenfeld, & Paris, 2004). Although a considerable amount of research has been conducted in different fields of education on engagement and its indicators and consequences, there is limited research in L2 domain (Dincer, Yesilyurt, Noels, & Vargas Lascano, 2019; Noels, Vargas Lascano, & Saumure, 2019; Oga-Baldwin & Nakata, 2017). Language learner engagement is a less

travelled terrain and needs exploration to fully engage language learners (Dincer, Yeşilyurt, & Demiröz, 2017; Noels, 2015; Noels, Vargas Lascano, Lou, Chaffee, Dincer, Zhang, & Zhang, in press). Grounded on the premises of self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2017) and self-system model of motivational development (SSMMD; Connell & Wellborn, 1991; Skinner, Furrer, Marchand, & Kindermann, 2008), this study investigates the relations between the variables of perceived teacher autonomy-support, language learners' psychological need satisfaction, and classroom engagement using structural equation modeling. To this end, we start with a definition of engagement in motivational systems, then discuss the relevant L2 research, and lastly, present a theoretical framework for the study.

Classroom Engagement

There are various definitions and names of engagement in the literature, and each focuses on different aspects of engagement (see Eccles, 2016; Furrer & Skinner, 2003; Kahu, 2003; Mitchell & Carbone, 2011). It is a complex term with lots of associations and multiple levels. Broadly speaking, there are two categories of engagement definitions: broad definitions and narrow definitions (Eccles & Wang, 2012). Whereas broad definitions include various details related to engagement such as interventions in school, out of school social context, extracurricular activities, curricula, narrow definitions focus on specific aspects of engagement in class, such as students' active involvement, emotional quality regarding the course, and motivation. In this sense, narrow definitions help to understand how engagement contributes to deep learning (Eccles & Wang, 2012). Whether it is from a broad or narrow perspective, it is agreed that engagement is not only a behavioural reaction, but also includes feelings, sense-making, and students' active involvement in their learning activity (Christenson, Reschly, & Wylie, 2012; Harper & Quaye, 2009; Trowler, 2010). It is highly accepted that it is not one type of construct (i.e., behavioural engagement), it requires multiple dimensions to account for engagement fully (Dincer et al., 2017; Fredricks et al., 2004; Fredricks, Blumenfeld, Friedel, & Paris, 2005; Reeve, 2012). Unlike the common two-part or three-part typologies that include behavioural, emotional, cognitive (Fredricks et al., 2004; Skinner & Belmont, 1993; van Uden, Ritzen, & Pieters, 2013), Reeve and Tseng (2011) argue for a four-part typology of engagement. In addition to the components of behavioural (i.e., on-task attention and effort), emotional (i.e., presence of task-facilitating emotions), and cognitive (i.e., use of sophisticated learning strategies) engagement, the fourth component of agentic engagement indices learners' active and volitional initiative in the activity (Reeve, 2012). These four dimensions are interrelated and play an accumulated role in learning (Dincer et al., 2017; Reeve, 2012, 2013; Reeve & Tseng, 2011; Skinner et al., 2008). Then, a working definition of classroom engagement based on the literature (Connell & Wellborn, 1991; Fredricks et al., 2005; Noels, Lou, Chaffee, & Dincer, 2016; Reeve, 2012, 2013; Skinner et al., 2008) considers a combination of all four types of engagement and refers to learners' behaviourally, emotionally, cognitively and agentially acting in their learning activity in this research.

Self-determined Engagement in Language Learning

Engagement is one aspect of motivational processes. One theory of human motivation that has informed much engagement research in recent years is Self-Determination

Theory (SDT; Deci & Ryan 1985; Ryan & Deci, 2017). As Reeve (2012) suggests, whereas many other motivation theories explain the contribution of students' expectations, beliefs and goals to classroom engagement, SDT focuses on the self-concept first and accepts students' inner motivational resources as the key step in increasing classroom engagement in school. SDT highlights the importance of the social context on learners' inherent psychological needs in education. These needs are as follows: autonomy (perceiving himself/herself as a source of his/her behaviours), relatedness (feeling connected to significant others) and competence (feeling effective in his/her ongoing interactions). According to SDT, these needs are universal and lay a foundation for learners' intrinsic motivation and positive school functioning (Deci & Ryan, 1985, 2016; Ryan & Deci, 2000, Reeve, 2012). Satisfied needs bolster individual's intrinsic desire to act and engage in classroom activities in an educational setting, and thwarted needs diminish learners' intrinsic motivation and volitional participation in their learning (Niemi & Ryan, 2009; Reeve, Jang, Carrell, Jeon, & Barch, 2004; Ryan & Deci, 2016).

In the school context, teachers can play an important role in supporting the satisfaction of learners' basic needs (Reeve, 2013; Ryan, & Deci, 2009, 2016). Within SDT frame, the needs are met or undermined by teachers' motivating styles, which vary on a continuum from highly controlling to highly autonomy-supportive (Black & Deci, 2000; Reeve, 2006, 2010, Reeve et al., 2004; Reeve & Jang, 2006). Controlling teachers undermine learner's achievement, competence, autonomy, and intrinsic motivation (Assor, Kaplan, Kanat-Mayman, & Roth, 2005). According to Jang, Reeve, Ryan, and Kim (2009), an extreme example of a controlling teacher is one who oversees everything the learners do in the class, is inflexible in teaching, uses forceful language, and puts much pressure on students to perform to arbitrary standards. It is typical for a controlling teacher to show this combination of behaviours in his teaching process as these behaviours are all interrelated (Reeve, 2010). In contrast with the controlling style, autonomy-supportive motivating has many superior aspects as it satisfies learners' self-systems and yields positive educational outcomes of education (Black & Deci, 2000; Reeve, 2006, 2009). Autonomy-supportive teachers increase students' intrinsic motivation, curiosity and desire for learning and facilitate their engagement in deep learning (Reeve, 2010, 2012; Ryan & Deci, 2000). These teachers have some common instructional characteristics (Jang et al., 2009; Reeve, 1998, 2010; Reeve et al., 2004). They listen more to their students, use non-controlling language in the class, give rationales before teaching, display patience to initiate self-paced learning, acknowledge and accept expressions of negative affect during learning. These behaviours are integrated and enhance each other (Reeve, 2010).

While SDT focuses on the role of social context in learners' motivational experiences in school, the theory does not provide a complete picture of engagement within motivational self-system including facilitators and consequences of engagement (Dincer et al., 2019; Noels et al., 2019). Connecting multiple motivation theories, SSMMD (Connell & Wellborn, 1991; Skinner et al., 2008; Skinner, Kindermann, Connell, & Wellborn, 2009) draws a linear framework for engagement including the context, the self, action, and learning outcomes. In this holistic engagement model, the interpersonal context includes teachers, classmates and parents of the students. The self is connected with the satisfaction of needs, whereas the action component is about classroom engagement, and the outcome is cognitive

development and learning (see Dincer et al., 2019). Within this simple model, classroom engagement is a malleable concept shaped by context variables via the basic needs in student-teacher dialectical framework (Connell & Wellborn, 1991; Noels, 2009; Noels et al., 2016; Reeve, 2012; Ryan & Deci, 2000; Skinner et al., 2008, 2009). It focuses on how teachers can help learners satisfy their psychological needs in order to enhance classroom engagement or the extent to which learners' inner sources are important mediators of the relationship between learning climate and classroom engagement (Jang, Kim, & Reeve, 2016; Reeve, 2012). In other words, the more that people in the learners' interpersonal context can support the learners' basic psychological needs, the more engaged learners become in courses (Connell & Wellborn, 1991; Ryan & Deci, 2000, 2008).

With a connection to LL motivation models [e.g., socio-educational model of Gardner (1985, 2010) and socio-ecological model of Noels et al. (2016)], engagement as the action component of the SSMDD has relatively little attention in LL, unlike general education domain. Though there are some theoretical studies regarding self-determined engagement (see Noels, 2015; Noels et al., 2016) and studies concerning the relationship between engagement and L2 motivation (Oga-Baldwin & Nakata, 2017), there is quite limited empirical L2 engagement research within the SSMDD framework. In recent research, Noels and colleagues (2019) tested the causal relations among language learners' psychological needs, motivational orientations and engagement (i.e., motivational intensity, Gardner, 2010) across a semester. They found that the three sets of variables were generally reciprocally related, and that although engagement declined over time, this decline was lessened when the learners became more self-determined over time.

In another recent study, Dincer and colleagues (2019) examined the distinctive roles of four engagement types by testing a full model of classroom engagement within the SSMDD. Structural Equation Modelling (SEM) analysis showed that autonomy-supportive teaching style predicted satisfaction of learners' basic needs, which in turn predicted self-determined student engagement. In this relationship, emotional engagement and agentic engagement were predicted higher than the other two behavioural and cognitive engagement types. In addition, considering the outcome variables, L2 proficiency and absenteeism rate, L2 achievement was predicted by both emotional and agentic engagement, and absenteeism in the course was only predicted by the cognitive engagement in the model. Unlike the general belief, behavioural engagement did not predict any outcome variable in the model.

Although previous research in different education domains generally supports the tenets of the self-system model, there is limited LL research exploring the impact of the interpersonal context on dimensions of classroom engagement via basic psychological needs. To this end, this theoretical model was tested in this study.

Theoretical Framework

Based on the literature (e.g., Connell & Wellborn, 1991; Deci & Ryan, 2000; Jang, Kim, & Reeve, 2012; Noels et al., 2016; Ryan & Deci, 2009) a mediation model was tested to find out whether the self-related beliefs mediate the relationship between the context and action components of SSMDD. The hypothesized model is shown as follow:

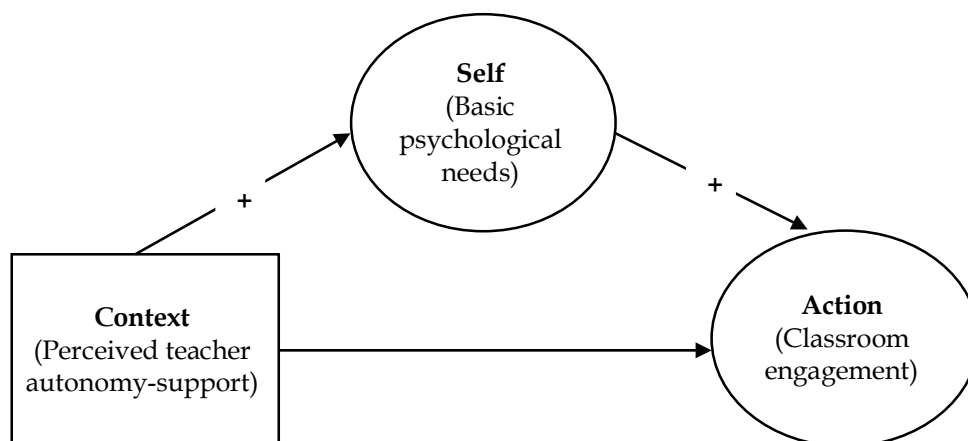


Figure 1. Hypothesized conceptual model

According to the model, EFL learners' basic psychological needs are hypothesized to be an important mediating variable in the relationship between the independent variable (perceived teacher autonomy-support) and the dependent variable (classroom engagement). Specifically, the model represents the following hypotheses (Hs):

H1: Context component, perceived teacher autonomy-support positively predicts self-component, learners' basic psychological needs.

H2: Self-component, learners' basic psychological needs positively predicts engagement.

H3: The positive relation between perceived teacher autonomy-support and learners' classroom engagement will be attenuated by the mediation of learners' basic needs.

Methodology

Research Design

A cross-sectional, predictive correlational research design among the quantitative research methods (Gall, Gall, & Borg, 2007), was employed to investigate the relationships among the variables context (perceived teacher autonomy-support), self (learners' basic psychological needs satisfaction) and action (learners' classroom engagement) components of the motivational self-system. Then, it tested how perceived autonomy support from English language teachers is related to the learners' basic psychological needs satisfaction and classroom engagement in EFL classrooms.

Research Setting and Participants

The research context was a foreign languages school at the largest university of the Eastern Anatolian Region of Turkey. This school of foreign languages delivers different English education programs and provides intensive English education for the preparatory class of students in different departments. The focus of the school is teaching English to the freshman students of the departments whose medium of instruction for 30% of courses is English.

Participants of the study were 412 adult learners of English. Their age range is between 18-25 years ($N = 412$; $M = 19.82$; $SD = 1.27$). They were selected in accordance with the convenience sampling strategy, a non-probability sampling technique

(Cohen, Manion, & Morrison, 2007). All the participants were in the preparatory class of the foreign languages school. They were placed according to the results of an English placement test at the beginning of the term. Because they failed to achieve an adequate score, which was 60% at the time of this research, to be exempted from English courses, they had to take a compulsory preparatory course for one year. Though they graduated from different high schools, they received intensive English language education for the first time in their formal education. Details regarding the participants are given in Table 1.

Table 1
Demographics of the participants

Main categories	Sub-categories	<i>f</i>	%	<i>SD</i>	<i>N</i>
Gender	Male	269	65.3	.48	412
	Female	143	34.7		
	Missing	0	0		
High school graduation	General	207	50.2	1.59	412
	Anatolian	121	29.4		
	Vocational	47	11.4		
	Anatolian Teacher	14	3.4		
	Open	10	2.4		
	Science	7	1.7		
	Missing	6	1.5		
Department	Chemistry Engineering	92	22.3	1.81	412
	Mechanics Engineering	80	19.4		
	Environmental Engineering	77	18.7		
	Civil Engineering	69	16.7		
	Electrics Engineering	52	12.6		
	Tourism Service	18	4.4		
	Accommodation Service	11	2.7		
	Catering Service	11	2.7		
	Missing	2	.5		

As it is seen from the table, high percentages of the participants were male (65.3%) and graduated from general high schools, schools not designed for any specific vocation or field of study, (50.2%). A large majority intended to register in the various engineering departments when they successfully finish the English preparatory class.

Data Collection Instruments

The following three instruments were used to test the relations among the three main variables: perceived autonomy support, basic psychological needs and classroom engagement. These instruments were previously translated from English to Turkish by Dincer (2014). They are five-point Likert-type scales ranging from one "strongly disagree" to five "strongly agree."

Perceived teacher autonomy-support. The Learning Climate Questionnaire (Williams & Deci, 1996), was used to gather data on perceived teacher autonomy-

support. The translated version had 14 items, and the Cronbach's alpha coefficient of the scale was .95. Sample items include "I feel understood by my instructor," "My instructor conveyed confidence in my ability to do well in the course." The scores on this measure serve as the independent variable in the analysis.

Basic psychological needs. The Activity-Feeling States scale (Reeve & Sickenius (1994) was used to explore how strongly learners feel needs satisfaction during their learning activities. The translated version has nine items. The computation of the reliability value of all items was .91; values for each dimension respectively were as follows: autonomy ($\alpha = .87$), competence ($\alpha = .88$) and relatedness ($\alpha = .78$). Sample items include "Being in this English class makes me feel free," "Being in this English class makes me feel capable" and "Being in this English class makes me emotionally close to the people around me." The scores from these subscales served as indices of the single latent variable, termed "need satisfaction".

Classroom engagement. The engagement scale had four dimensions as a complete formulation of the engagement as articulated by Reeve and Tseng (2011). It has been used in several studies within the SDT framework (Reeve, 2012, 2013). The translated version has 17 items (three items for behavioural engagement, five items for emotional engagement, five items for agentic engagement and four items for cognitive engagement). The Cronbach's alpha coefficient of the total scale was computed, and it was found .94. The coefficient of each dimension was as follows: behavioural engagement: .86; emotional engagement: .91; agentic engagement: .87 and cognitive engagement: .88. Sample items include behavioural engagement: "I try hard to do well in this class"; emotional engagement: "I enjoy learning new things in this class"; agentic engagement: "I let my teacher know what I am interested in" and cognitive engagement: "When learning about a new topic in this course, I usually try to summarize it in my own words." With its four sub-dimensions, it forms a single latent variable for engagement in the study.

Data Collection and Analysis

The data were collected by the first author after obtaining official permission from the school. During the data collecting process, the researcher described the importance of the study to the students while their regular instructor was absent from the classroom. He also assured the participants that their instructors would not have any access to the answers, and the answers would not affect their exam scores from this course. It took about 15 minutes to complete the data collection process in each class.

The data analyses were conducted using SPSS 20.0 and Mplus Version 7. First, descriptive statistics and Cronbach's alpha measures were calculated. Second, bivariate correlations (Pearson's coefficient) among context, self and action were computed. Third, the hypothesized mediation model among the variables was tested with an SEM. The model fit was assessed following conventional standards in the SEM literature (Bandalos & Finney, 2010; Kline, 2010), based on values of the Chi-squared test, the root mean square error of approximation (RMSEA) with confidence intervals, the standardized root mean square residual (SRMR), and the comparative fit index (CFI). The good model fit was determined based on the following SEM benchmarks (Bandalos & Finney, 2010; Hu & Bentler, 1999; Kline, 2010): the chi-square test= $p > .05$; RMSEA $< .08$; SRMR $< .08$; CFI $> .95$.

Results

First descriptive analyses were computed, and then the SEM analysis was conducted to answer the research question regarding the mediation role of EFL learners' basic needs satisfaction between perceived teacher autonomy-support and classroom engagement.

Descriptive and Correlational Analyses

Descriptive statistics give details about the central tendency of learners' perceptions concerning teacher autonomy-support, basic needs satisfaction, and classroom engagement in their English course setting and relationships between the variables.

Table 2

Bivariate correlations, alphas and means

Variables	Teacher autonomy-support	Basic psychological needs	Classroom engagement
Teacher autonomy-support	-		
Basic psychological needs	.605**	-	
Classroom engagement	.690**	.714**	-
Alpha	.95	.91	.94
Mean (<i>SD</i>)	3.52 (1.08)	3.01 (1.01)	3.01 (.90)

Note: ** $p < .01$.

The table shows that the scales have internal high consistency, and all means are over the scale midpoint of three (Moderately agree). All correlations were statistically significant with different correlation magnitudes ($p < .01$). There are large positive correlations between the variables which were anticipated results (see $r = .25$ Small; $r = .40$ Medium; $r = .60$ High; Plonsky & Oswald, 2014). They accounted high percentages of the variance (teacher autonomy-support and basic psychological needs, $r^2 = .37$; teacher autonomy-support and classroom engagement, $r^2 = .48$); basic psychological needs and classroom engagement, $r^2 = .51$).

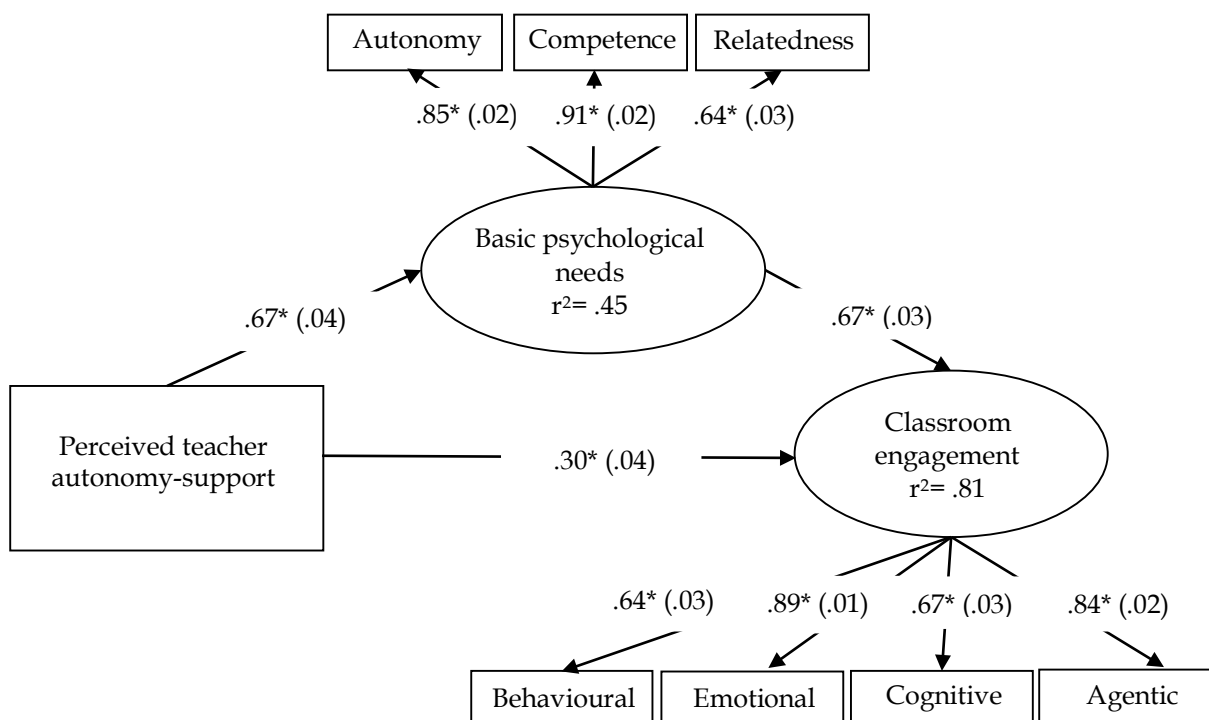
Mediation

The hypothesized model testing whether the self-related beliefs mediate the relationship between context and action was tested, and findings are as follow:

The analysis showed that all regression coefficients for all paths are significant and the model has an acceptable fit according to goodness of fit measures ($\chi^2(412) = 2049.47$; $df = 28$; $p < .001$; CFI = .96; RMSEA = .09, 90% CI [.08 - .12]; SRMR = .03). As expected, the perceived teacher autonomy-support strongly predicted basic needs satisfaction and also predicted learners' engagement through basic needs. The model explained the 81% of the total variance in learners' engagement.

Finally, while total indirect effect on learners' engagement is significant ($\beta = .75$ (.03), $p < .001$), there is still a direct significant path between the perceived teacher autonomy-support and learners' classroom engagement ($\beta = .30$ (.04), $p < .001$). The perceived teacher autonomy-support has a significant indirect effect on learners' engagement through basic needs satisfaction: autonomy-support \rightarrow basic needs \rightarrow engagement ($\beta = .45$ (.04), $p < .001$).

The results indicate that there is partial mediation between the context, self and action. In other words, there are some indirect and direct paths between teachers' self-determined motivating style and engagement. Teachers' motivating style predicts both basic psychological needs satisfaction and engagement and the more autonomy-support students perceive in the class, the more satisfaction of basic needs they feel and engaged they become in LL activities.



Note. Standardized coefficients provided. * $p < .001$.

Figure 2. Hypothesized mediation model of basic psychological needs on the relation between teacher autonomy-support and classroom engagement

Discussion and Conclusion

This study examined the relations among autonomy-supportive motivating style, language learners' needs satisfaction and engagement. Based on a correlational approach, it provides significant insights into EFL learners' motivational systems by testing a model of how the self, and particularly feelings of autonomy, competence, and relatedness mediate the relations between the social context and classroom engagement. Although not without limitations, the findings have important implications for language students' and teachers' practice.

In general, the findings were consistent with expectations. There were high positive correlations between the variables in the manner hypothesized, and the analysis of the hypothesized mediation model generally fit the data with acceptable fit values. Consistent with previous research (e.g., Dincer et al., 2019; Jang et al., 2012; Kaplan, 2018; Noels, 2015), the mediation model showed that perceived teacher autonomy-support positively and indirectly predicted classroom engagement, via students' basic needs satisfaction. In line with our hypothesis, the perceived teacher autonomy-support explained a high percentage of the variance in EFL learners'

engagement through the satisfaction of basic needs. The students who perceived more autonomy-support from their English instructors would feel more basic needs satisfaction and, as reported by Niemec and Ryan (2009), Reeve and colleagues (2004), and Ryan and Deci (2016), become more engaged in classroom activities. This result is supported by the studies about the relationship between classroom atmosphere and classroom engagement (Connell & Wellborn, 1991; Ryan & Deci, 2000, 2009) which suggest that the classrooms which fulfil the basic psychological needs of learners help them become more engaged during the classes.

Not all of the variance between students' perceptions of their teacher and their classroom engagement was accounted for by the satisfaction of the learners' basic psychological needs; there still remained a small, but significant, direct effect of students' perceptions of their teacher on the students' engagement (He, 2009; Kaplan, 2018; Reeve, 2012). This finding is also in accord with some other previous studies (Black & Deci, 2000; Reeve, 2009, 2010, 2012; Ryan & Deci, 2000) which may indicate the positive effects of teacher autonomy-support on different aspects of learning other than autonomy, competence and relatedness, such as the desire for learning. This relationship in the mediation model also might be derived from the assessment of the classroom engagement variable as a single factor with its sub-dimensions in the study. Then, different engagement types might play distinctive roles in this direct relationship. In other words, though the teacher acts in an autonomy-supportive way, some teacher-directed activities such as question-answer technique or homework assignment in language classrooms might increase students' behavioural engagement without the fulfilment of basic psychological needs. Also, teachers' personality might have a direct influence on students' desire to attend the class or make students feel emotionally attached to the lesson just because of the teacher. Engagement is a complex term, and one out of four dimensions is only a single piece of this big puzzle. Much research testing the individual roles of these dimensions is needed for a more thorough understanding of this relationship (see Dincer et al., 2019).

In brief, the study verifies the importance of social context for both EFL learners' self and their action in the classroom. It highlights that the teachers are central in both facilitating language learners' self and action in LL (Dincer et al., 2019; Noels et al., in press).

Accordingly, those learners would try to engage in classroom activities by participating, taking roles in the activities, showing great interest in the course, developing self-regulated learning strategies and expressing their preferences in class, and be architects of their learning.

Limitations and Future Directions

Although the findings support a model in which engagement is integrated into the motivational self-system model, it should be noted that the study has at least three limitations relating to its research design. First, although the results of this study are consistent with the hypothesized causal model, the cross-sectional design limits any causal claims. However, given that there is little prior research investigating the relationships among context, self, action, and outcome in the same study, especially in the LL area (Dincer et al., 2019), establishing these relationships, as was done in the present study, is a necessary first step. Further research should focus on longitudinal

studies which track the development of motivation and engagement of language learners over time (Noels et al., 2019) as well as the reciprocal relation between learner engagement and teacher motivation (Pelletier & Rocchi, 2016; Reeve, 2013). As well, experimental designs researching the causal links between motivational constructs are needed to thoroughly test for causal relations. Second, the present study assumes that greater classroom engagement is associated with increased self-determination, limited absence from class, and greater achievement in the language course. Although these outcome variables were not considered in this research, these relations have been found in other studies (Dincer et al., 2017, 2019). Future research can include such variables for a more complete test of the model. Finally, qualitative viewpoints on engagement are also needed to investigate the model in different settings in order to widen our horizons of motivational engagement in language classrooms (Carreira, Ozaki, & Maeda, 2013; Dincer et al., 2019; Noels et al., in press; Philp & Duchesne, 2016).

Implications for Teachers and Students

The present findings might be of interest to students enrolled in language learning courses in at least two ways. First, it seems plausible that if students wish to improve the effectiveness of their efforts, it would be helpful to them to better understand how the different aspects of engagement can contribute to better learning outcomes. As well, this kind of meta-awareness of the motivational process can also reveal the importance of feeling autonomous, competent and connected with others for improving the students' experiences in class and learning outcomes. If students are aware of their motivational dynamics, they may be better able to communicate their needs with their teachers, and thereby help teachers to help them become more self-determined, engaged learners.

The present study also highlights how language teachers can adapt their communicative style to foster language learners' engagement. It also concluded that perceived autonomy-support from the teacher is strongly linked to the learners' psychological needs to act, which in turn has an impact on high classroom engagement. Based on the findings and in parallel to features of autonomy-supportive teaching (see Reeve, 2016, for teaching practices), following practical recommendations for EFL language teachers and educators can be given:

- The teachers should be mindful that their communicative styles both have a direct impact on the classroom engagement of the learners and indirect impact on the engagement through supporting or hindering the fulfilment of learners' needs.
- The teachers should bear in mind learners' basic psychological needs and strive to help learners meet these needs by using various techniques, such as giving opportunities to all students in the class, choosing personally relevant tasks that learners can accomplish, taking into consideration the learners' proficiency levels in activities, providing constructive feedback, being approachable to students, caring for and respecting the students, and supporting an intimate classroom environment.
- The teachers should attend to the multi-dimensional aspects of classroom engagement. They should consider students' feelings in the classroom in order

to increase positive emotional engagement, educate students to use more cognitive language learning strategies both inside and outside of the classroom, and be open to criticism and suggestion in order to increase agentic engagement.

To conclude, self-determined engagement is a promising area of research that needs further investigation, and any attempt to understand the processes underlying engagement from a broader perspective would be helpful to fully understand learners' language learning process and decrease the problems hindering effective language learning. We hope that the model tested in this study offers some direction towards this end.

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