The effect of teacher support on academic engagement: The serial mediation of learning experience and motivated learning behavior

Majid Sadoughi[1] · S. Yahya Hejazi[2]

Abstract

Given the crucial importance of engagement in learning English as a Foreign Language (EFL) and the increasing interest in its psychological dimensions, this study was an attempt to examine the effect of teacher support on engagement by considering the serial mediating roles of learning experience and motivated learning behaviour. Participants were 384 EFL learners chosen through multi-stage cluster sampling. The SEM results demonstrated that teacher support directly and positively predicted engagement. Additionally, teacher support affected engagement through the serial mediating roles of learning experience and motivated learning behaviour. Teachers can provide learners with substantial support and encouragement to enhance their learning experience, which could in turn considerably affect their motivated learning behaviour. Consequently, EFL learners who are motivated and willing to exert effort in learning and classroom activities would be more engaged in their learning process. Finally, important implications and suggestions for future research are presented.

Keywords Academic engagement · Teacher support · Learning experience · Motivated learning behaviour · English as a Foreign Language (EFL)

Introduction

There is widespread consensus among applied linguistics researchers and scholars about the crucial importance of student engagement for meaningful learning (Hiver et al., 2021a, 2021b), enhancement of learning efficiency, and successful learning of English as a Foreign Language (EFL) (Dörnyei, 2019; Mercer, 2019). Learner engagement in classroom activities and learning processes is a very desirable outcome since "when students are optimally engaged in their studies, they are on task, thinking, and enjoying the learning process" (Oga-Baldwin & Nakata, 2017, p. 152). There is a growing body of studies emphasizing the important role of engagement as a valuable outcome which is associated with other important educational factors such as school completion rate (Archambault et al., 2019) and academic achievement (Lei et al., 2018). Hence, it is vital to examine factors which can affect and promote learners' engagement in learning key subject matters such as mathematics, science, and foreign languages.

Engagement, as an important research topic in the theoretical and empirical literature of educational psychology (Fredricks, 2015), has drawn significant attention in different domains including mathematics (e.g., Alrajeh & Shindel, 2020; Wang et al., 2020) and science (Salmela-Aro et al., 2021; Schmidt et al., 2018). Over the past few years, an increasing number of studies have addressed engagement in foreign/second language (L2) learning (Hiver et al., 2021a, 2021b; Oga-Baldwin, 2019). A review of past studies on L2 engagement indicates that most studies have focused on certain areas such as task-level engagement (e.g., Aubrey et al., 2020; ChengChiang Chen & Kent, 2020; Mohamadi, 2017; Svalberg & Askham, 2020), linguistic engagement (e.g., Oga-Baldwin & Fryer, 2018; Oga-Baldwin & Nakata, 2017; Svalberg, 2017), interactions among learners while performing tasks (e.g., Edstrom, 2015; Phung, 2017), engagement with feedback (Fan, & Xu, 2020; Koltovskaia, 2020), and engagement relating to different language skills such as writing (e.g., Yu et al., 2020), speaking (Bagheri

✉ S. Yahya Hejazi
  s.yahya.hejazi@gmail.com; s.yahya.hejazi@ut.ac.ir

  Majid Sadoughi
  sadoughi@kashanu.ac.ir; sadoughi.psy@gmail.com

1   Psychology Department, Faculty of Humanities, University of Kashan, Kashan, Iran

2   English Department, Faculty of Foreign Languages and Literature, University of Tehran, Tehran, Iran

& Zenouzagh, 2021), and reading (Yulia et al., 2020). To the best of our knowledge, apart from few recent studies (e.g., Eren and Rakıcıoğlu-Söylemez, 2020; Wang et al., 2021), psychological dimensions of engagement in L2 research have received scanty attention. In addition, a relatively few number of studies have explored the predictors of engagement in L2 learning (e.g., Khajavy, 2021; Sadoughi & Hejazi, 2021).

Therefore, given the essential role of engagement highlighted in dominant L2 learning paradigms (e.g., communicative) and major L2 learning theories (e.g., complexity/dynamic systems theory) (Philp & Duchesne, 2016), its domain specificity (Sinatra et al., 2015), and the negligible attention paid to its psychological aspects in L2 research, the present study aims to examine the predictors of engagement in EFL learning. Since student engagement is dependent on a large number of situational and individual factors (Reinders & Nakamura, 2022), the current study examines learner internal as well as learner external factors which could contribute to a better understanding of EFL learners' engagement.

Given the recent growing research on L2 engagement and the importance of motivation for L2 learning, this study investigates the role of teacher support, as a key learner external factor, in promoting learners' engagement by taking into account the possible mediating roles of learners' learning experience and motivated learning behaviour. More specifically, this study is an attempt to shed light on whether learning experience and motivated learning behaviour (individual factors) can play a mediating role in the relationship between teacher support and engagement, which could contribute to the L2 engagement literature by enhancing our understanding about how teacher support can promote learners' engagement.

Literature Review

Engagement or the "active, goal directed, flexible, constructive, persistent, and focused interactions with the social and physical environments" (Furrer & Skinner, 2003, p. 149) is a multi-dimensional construct with four main aspects: agentic, behavioural, cognitive, and emotional (Reeve & Tseng, 2011). The agentic dimension concerns learners' active and "constructive contribution into the flow of the instruction they receive" (Reeve & Tseng, 2011, p. 258) by intentionally personalizing instructional materials via stating their preferences, asking for clarification, and making suggestions. Behavioural engagement, as the most noticeable aspect of engagement, is related to body language, class participation, and attention to instructional tasks (Oga-Baldwin, 2019). The cognitive dimension concerns "how students actively think about

the learning material by puzzling out meanings, making connections, solving problems, committing concepts to memory, and answering questions" (Oga-Baldwin & Nakata, 2017, p. 152). Finally, emotional engagement is related to students' negative and positive emotional reactions such as boredom and enjoyment to learning tasks and materials (Skinner et al., 2008). The four aspects of academic engagement are inter-related and can substantially contribute to and predict learners' L2 achievement (Oga-Baldwin, 2019) and intention to continue studying English (Zhang et al., 2020a).

Student engagement in the process of mastering a foreign language not only is highly desirable but also could be considered even more important than other subject areas such as science and mathematics since EFL learners should invest a considerable amount of sustained effort, time, and attention in practicing the learning materials to guarantee the automatization of language skills (Mercer & Dörnyei, 2020). A recent study by Dincer et al. (2019) showed that engagement could predict achievement and absenteeism in EFL courses. Furthermore, considering the utmost importance of meaningful learning as recommended in task-based and communicative language teaching approaches (Dörnyei, 2019), it is essential to carefully examine learner engagement in foreign language education as well as the factors which could contribute to its enhancement.

Given the fact that language learners are "active self-reflective agents of interaction with their social context" (Taylor, 2013, p. 34), teachers could play a highly important role in providing them with valuable social support. Teachers have numerous interactions with EFL learners and can offer them different types of support in the language learning process. Past research in education has demonstrated that teacher support could promote students' self-regulation (McEown & Sugita-McEown, 2019), motivation (Skaalvik et al., 2015), self-confidence (Ucar & Sungur, 2017), self-efficacy (Li et al., 2020), positive achievement emotions (Lei et al., 2018), and academic achievement (Sakiz et al., 2012).

The crucial importance of teacher support in L2 learning has been highlighted by Piechurska-Kuciel (2011) who maintains that successful and effective learning of a foreign language could be 'difficult, if not impossible' without teachers' generous and active support of learners. However, teacher support has not received due attention in L2 empirical and theoretical literature (Sadoughi & Hejazi, 2021). The scanty research in this field indicates that teacher support can enhance EFL learners' willingness to communicate (Aomr et al., 2020; Piechurska-Kuciel, 2015), motivation (Chen, 2016; Fryer & Bovee, 2016), positive emotions (Sadoughi & Hejazi, 2021), and cooperative learning (Ghaith, 2002). Furthermore, the results of a study by Jin et al., (2017) showed that teacher support can promote student cohesiveness and reduce foreign language anxiety.

Based on self-determination theory, contextual factors which help fulfil learners' basic psychological needs (i.e., autonomy, competence, and relatedness) can considerably foster internalization and integration of behavioural regulations, which may result in increased creativity, learning, and performance (Ryan & Deci, 2017). Teachers, as an essential factor in learning situations, play a key role in building a motivating, supportive, secure, and friendly environment to enhance students' foreign language achievement. More specifically, teachers can establish positive rapport with learners to maximize their self-motivation for as well as persistence and engagement in learning activities (Reeve, 2012) and provide them with considerable support so as to improve their concentration on learning tasks (Boulton et al., 2012). In doing so, they can provide their students with various kinds of support such as appraisal, emotional, and instrumental. Appraisal support refers to teachers' comments, criticism, and evaluative feedbacks as well as recommendations and suggestions on learners' performance (Malecki & Demaray, 2003). Emotional support is related to teachers' care, friendliness, respect, and personal support (Patrick et al., 2007). Finally, instrumental support concerns teachers' tangible support related to time, services, and skills (Tennant et al., 2015).

Past studies have indicated that teacher support could improve learner engagement. However, teacher support, as an external factor, can affect other internal factors, which might consequently enhance engagement (Helgeson & Lopez, 2010). Hence, it would be crucial to investigate the possible underlying mechanism(s) via which teacher support can promote learner engagement. A careful review of previous L2 research indicates that such possible mechanisms have not received sufficient attention. Given the fact that teachers are an essential aspect of learning experience in L2 Motivational Self System (L2MSS) (Dörnyei, 2019), they can motivate students to exert more effort and become more engaged in their learning. Therefore, it seems that L2 learning experience and L2 motivated learning behaviour could possibly play a mediating role in the relationship between teacher support and engagement.

L2 learning experience, as an essential component of L2MSS which has been recently applied in research conducted in a wide range of contexts (Mahmoodi & Yousefi, 2021), concerns situated motives and experience in the immediate learning situation including teacher, teaching methodology, syllabus, curriculum, peer/learner group dynamics, instructional materials, classroom setting, and experience of success (Dörnyei, 2005; Dörnyei & Ryan, 2015; Dörnyei & Ushioda, 2010). The contribution of L2 learning experience to motivation has been confirmed and supported by increasing research (e.g., Al-Hoorie, 2018; Csizér & Kálmán, 2019; De Bot et al., 2007; MacIntyre & Serroul, 2015; Ushioda, 2009). For example, studies by

Lamb (2012) and Teimouri (2017) showed that it was the strongest predictor of motivation in the L2MSS. In addition, the results of a study by Olsen (2017) indicated that L2 learning experience was associated with enjoyment and played a more important role, in comparison to the other aspects of L2MSS, in preventing student attrition. In another study by Papi (2010), L2 learning experience mediated the relationship between future self-guides and L2 motivated learning behaviour.

L2 learning experience has attracted less research attention vis-à-vis the other aspects of L2MSS (i.e., ought-to and ideal L2 selves) (Csizér, 2019; Csizér & Kálmán, 2019; Wen & Piao, 2020). Past studies have mostly investigated the effects of L2MSS components on each other (e.g., Csizér & Kormos, 2009; Papi & Teimouri, 2012) as well as other variables such as L2 motivated learning behaviour (Csizér & Kormos, 2009; Moskovsky et al., 2016; Taguchi et al., 2009), self-regulation (Iwaniec, 2014), and willingness to communicate (Munezane, 2013) while paying scanty attention to the role of L2 learning experience in engagement as a key educational outcome in L2 learning. Therefore, it seems necessary to examine the effect of L2 learning experience on academic engagement and consider its possible mediating role in the association between teacher support and academic engagement.

Another important factor which can affect learner engagement in EFL learning is L2 motivated learning behaviour, which is defined as the amount of effort students are willing to expend in learning (Dörnyei, 2005). In fact, learning an L2 is a dynamic and gradual process which requires learners' considerable effort and persistence in their task behaviour (Dörnyei & Ushioda, 2010). Previous research has confirmed the significance of L2 motivated learning behaviour as an important predictor of foreign language achievement (Dörnyei, 2005). It has been extensively used as a criterion measure in a growing body of research on L2 motivation in various contexts (e.g., Arslan & Çiftçi, 2021; Khany & Amiri, 2018; Sato, 2021). Several studies have shown that it is significantly associated with L2 learning experience, as well as other components of LSMSS, in different countries (Csizér & Kormos, 2009; Huang, 2019; Papi, 2010; Taguchi et al., 2009; Yetkin & Ekin, 2018).

The review of literature indicates that there is a research gap relating to the predictors of psychological aspects of engagement in L2 research (Sadoughi & Hejazi, 2021) and the underlying causal effect of different motives in L2 learning experience (Al-Hoorie, 2018; Hiver et al., 2019). The present study is motivated by Csizér's (2019) and Csizér and Kálmán's (2019) suggestions for further research exploring the effect of different components of L2MSS, particularly L2 learning experience, on the L2 learning process as well as important learning variables. More specifically, the current study aims to investigate the serial mediating roles of L2

learning experience and L2 motivated learning behaviour in the association between teacher support and engagement as two key factors in foreign language learning. The following hypotheses were formulated in this study:

H₁: Teacher support can positively predict academic engagement.
H₂: Teacher support can affect academic engagement through L2 learning experience.
H₃: Teacher support can affect academic engagement through L2 motivated learning behaviour.
H₄: Teacher support can affect academic engagement through the serial mediating roles of L2 learning experience and L2 motivated learning behaviour.

Method

Participants and Procedure

The data were gathered as part of a larger research project on engagement. The participants were 384 Iranian EFL learners (50.5% males & 49.5% females; mean age = 22.05 years) who were selected through multi-stage cluster sampling from eight language institutes in Kashan (a major city in Isfahan province, Iran) in summer 2021. First, 8 private language institutes were chosen. Subsequently, 6 classes from each institute and 7–10 students from each class were chosen randomly. The students were all Persian native speakers and their English proficiency level was intermediate based on the results of Oxford Placement Test (OPT) run by their institutes. The ethical considerations were taken into account by obtaining learners' informed consent and assuring them about confidentiality and anonymity of the collected data. Incomplete questionnaires as well as lack of willingness for continuing the study and giving informed consent were the exclusion criteria. Out of the 400 questionnaires distributed among the learners, thirteen incomplete questionnaires were removed, which led to n return rate of about 96.7%. The EFL learners provided their demographic features (gender and age) and filled in four questionnaires assessing their academic engagement, perceived teacher support, L2 learning experience, and L2 motivated learning behaviour.

Measures

Academic Engagement

Academic engagement was measured by adapting Reeve and Tseng's (2011) Academic Engagement Scale, which is a five-point Likert scale with four sub-scales: agentic (5 items; e.g., *In my English class, I express my preferences and opinions.*), behavioural (5 items; e.g., *I work hard when we start*

something new in my English class), cognitive (8 items; e.g., *Before I begin to study English, I think about what I want to get done.*), and emotional (4 items; e.g., *When we work on something in my English class, I feel interested.*). This scale had good construct validity and high internal consistency coefficients (0.78-0.94) (Reeve & Tseng, 2011). In the current study, the scale had good construct validity according to confirmatory factor analysis ($\chi^2/df = 1.76$, CFI = 0.954, RMSEA = 0.045, SRMR = 0.045) and high internal consistency. The Cronbach's α reliability coefficients were 0.86, 0.89, 0.83, and 0.85 for different sub-scales, respectively.

Teacher Support

Teacher support was measured using three five-point Likert scale measures. Emotional support was assessed by four items (α = 0.84; sample item: *My English teacher tries to help me when I am sad or upset.*) adapted from Patrick et al. (2007). Additionally, appraisal support (4 items; α = 0.78; sample item: *My English teacher tells me what I need to do to become better in English.*) and instrumental support (5 items; α = 0.88; sample item: *My English teacher continues teaching until the students understand.*) scales were taken from Wong et al. (2018) and adapted for this study. The CFA results showed that the three-factor teacher support scale in this study had good model fit indices ($\chi^2/df = 2.803$, CFI = 0.952, RMSEA = 0.069, SRMR = 0.042). Further, the α coefficients were 0.79, 0.80, and 0.89, respectively.

L2 Learning Experience

L2 learning experience scale was adopted from Papi (2010), which was originally developed based on Taguchi et al. (2009). This instrument has six five-point Likert-scale items (e.g., *Do you think time passes faster while studying English?*). Papi (2010) reported α coefficient of 0.85 for this scale. In the present study, the scale had construct validity ($\chi^2/df = 2.562$, CFI = 0.987, RMSEA = 0.064, SRMR = 0.025) and high reliability (α = 0.87).

L2 Motivated Learning Behaviour

L2 motivated learning behaviour scale was adopted from Papi (2010), which was originally designed based on Taguchi et al. (2009). This scale has six five-point Likert-scale items (e.g., *I would like to spend lots of time studying English.*). Papi (2010) reported α coefficient of 0.80 for this scale. In the current study, the scale had construct validity ($\chi^2/df = 2.913$, CFI = 0.981, RMSEA = 0.071, SRMR = 0.029) and high reliability (α = 0.86).

Data Analysis

The data analyses were conducted by SPSS (Version 22) and Amos (Version 26) using Maximum Likelihood Estimation (MLE). Missing data, outliers, and normality were examined. There was an approximately low rate of missing data ranging from 0.3 to 2.1% for behavioural engagement. The results of Little's test demonstrated that the data were missing completely at random (MCAR) (*chi-Square* = 2384.02, *df* = 2325, *sig.* = 0.193). The missing data were assessed using Expectation Maximization (EM), which is an iterative algorithm for restoring the complete data matrix through maximum likelihood estimation (Little & Rubin, 2019).

Z-standardized values and scatter plots were checked to examine univariate outliers. The Z-standardized values must be in the range of -3 and + 3. In the present study, three cases were excluded because they were not within this range. Skewness and kurtosis values between -2 and + 2 show no substantial departure from normality (Kunnan, 1998). Based on skewness and kurtosis values presented in Table 1, the assumption of univariate normality was not violated. Moreover, Mahalanobis distances were computed to examine multivariate outliers (Meyers et al., 2016), which resulted in removing no cases below the critical chi-square with a stringent α level of 0.001. Furthermore, four separate CFAs were performed to assess the construct validity of the scales, which showed that each instrument had adequate model fit (See *Measures*). Further, Structural Equation Modelling (SEM) was used for checking the serial mediating role of L2 learning experience and L2 motivated learning behaviour in the association between perceived teacher support and academic engagement.

Results

Descriptive statistics including means and standard deviations for variables are: academic engagement (79.13 ± 10.29 for males & 78.87 ± 10.41 for females), perceived teacher support (47.98 ± 7.31 for males & 47.76 ± 7.28 for females), L2 learning experience (18.62 ± 4.12 for males & 18.65 ± 3.87 for females), and L2 motivated learning behaviour (19.48 ± 4.36 for males & 19.37 ± 4.15 for females). The independent samples *t* tests indicated no statistically significant differences between females and males in academic engagement (*t* = 0.238, *p* = 0.812), perceived teacher support (*t* = 0.295, *p* = 0.768), L2 learning experience (*t* = -0.075, *p* = 0.940), and L2 motivated learning behaviour (*t* = 0.238, *p* = 0.812). Table 1 presents the means, standard deviations, kurtosis, skewedness, as well as the Pearson correlation coefficients among the variables.

Table 1 shows that all components of academic engagement have significant positive correlations with L2 learning experience and L2 motivated learning behaviour as well as all components of perceived teacher support. SEM was performed for investigating the serial mediating roles of L2 learning experience and L2 motivated learning behaviour in the association between perceived teacher support and academic engagement. Furthermore, bootstrapping resampling with 500 times iterations, as a powerful technique

**Table 1** Descriptive statistics and correlations between the variables

Variables	1	2	3	4	5	6	7	8	9	10	11
1) ETS	1										
2) ITS	.35**	1									
3) ATS	.25**	.31**	1								
4) TS (total)	.69**	.82**	.67**	1							
5) L2 LE	.13**	.26**	.17**	.27**	1						
6) L2 MLB	.11*	.24**	.21**	.26**	.45**	1					
7) AE	.20**	.22**	.18**	.27**	.39**	.43**	1				
8) BE	.03	.12*	.06	.10*	.43**	.25**	.32**	1			
9) CE	.08	.19**	.14**	.20**	.43**	.44**	.25**	.30**	1		
10) EE	.18**	.31*	.14**	.30**	.33*	.30*	.28**	.20**	.22	1	
11) En. (total)	.17**	.31**	.20**	.32**	.59**	.54**	.69**	.68**	.72*	.57**	1
Mean	13.63	19.58	14.65	47.87	18.64	19.42	15.46	18.59	29.54	15.40	79.00
SD	2.91	4.06	2.86	7.29	3.99	4.25	3.90	3.76	4.61	3.02	10.33
Skewness	.13	-.56	-.07	-.80	-.23	.05	.36	-.44	-.15	-.35	-.37
Kurtosis	-.41	-.74	-.94	-.18	-.25	-.44	-.57	-.99	-.51	-.97	-.27

* *p* < .05 ** *p* < .01, *ETS*: Emotional Teacher Support, *ITS*: Instrumental Teacher Support, *ATS*: Appraisal Teacher Support, *L2 LE*: L2 Learning Experience, *L2 LMB*: L2 Motivated Learning Behaviour, *AE*; Agentic Engagement, *CE*: Cognitive Engagement, *EE*: Emotional Engagement, *BE*: Behavioural Engagement; *En*: Engagement

for examining indirect effects (Hayes, 2009), was used for estimating sampling distribution. The model fit of the structural equation study was evaluated using several goodness of fit indices, which showed that the adequate fit of the suggested model ($\chi^2/df = 2.320$, GFI = 0.971, AGFI = 0.944, CFI = 0.951, NFI = 0.902, IFI = 0.952, RMSEA = 0.059, SRMR = 0.043). Figure 1 presents the standardized parameter estimates for perceived teacher support, L2 learning experience, L2 motivated learning behaviour, and academic engagement model.

The significance levels of the indirect effect for the hypothesized model were examined by bootstrap procedure. According to Table 2, academic engagement was positively and directly predicted by perceived teacher support ($\beta = 0.243$), L2 learning experience ($\beta = 0.501$), and L2 motivated learning behaviour ($\beta = 0.406$). In addition, perceived teacher support significantly and positively predicted L2 learning experience ($\beta = 0.356$), and L2 learning experience significantly and positively predicted L2 motivated learning behaviour ($\beta = 0.378$). Furthermore, academic engagement was indirectly predicted by perceived teacher support once through L2 learning experience ($\beta = 0.178$) and once through L2 motivated learning behaviour ($\beta = 0.085$). Further, the indirect effect of perceived teacher support on academic engagement through L2 learning experience and L2 motivated learning behaviour was significant ($\beta = 0.135$)
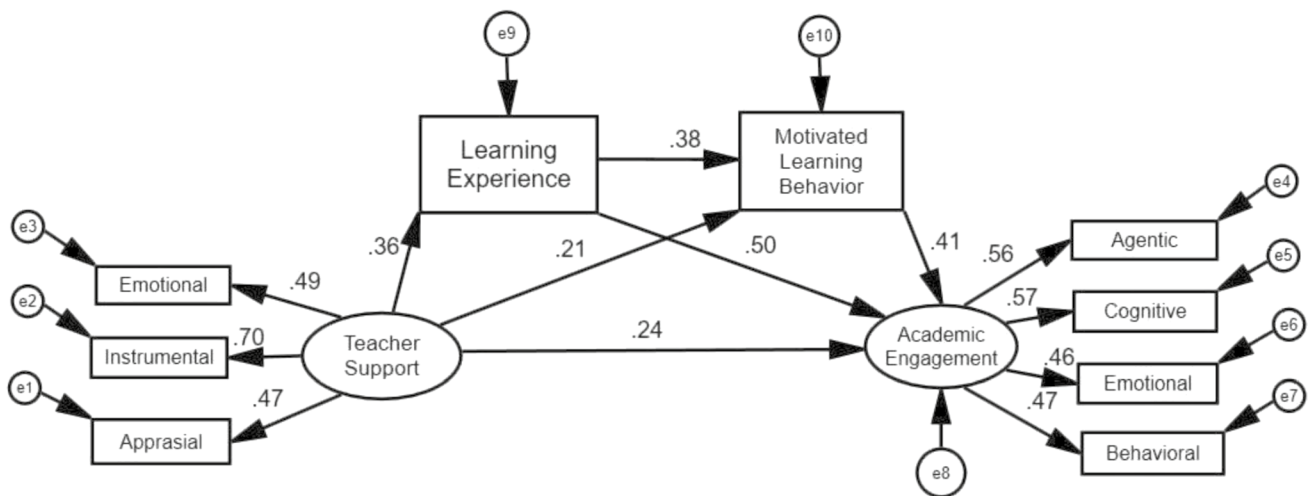
Note: All Beta coefficients are significant at .01 level.

Fig. 1 *Structural model of teacher support, L2 learning experience, L2 motivated learning behaviour, and academic engagement*

Table 2 Direct and indirect effects and 95% confidence intervals for the structural model

Model pathways	b	β	P	95% CI	
				Lower bound	Upper bound
Direct effects					
Teacher support → Academic engagement	.391	.243	<.001	.077	.398
Teacher support → Learning experience	1.05	.356	<.001	.240	.489
Teacher support → Motivated learning behaviour	.659	.209	<.001	.080	.324
Learning experience → Motivated learning behaviour	.403	378	<.001	.262	.474
Learning experience → Academic engagement	.273	.501	<.001	.353	.641
Motivated learning behaviour → Academic engagement	.207	.406	<.001	.306	.527
Indirect effects					
Teacher support → Learning experience → Motivated learning behaviour	.424	.135	<.001	.285	.642
Teacher support → Learning experience → Academic engagement	.287	.178	<.001	.200	.436
Teacher support → Motivated learning behaviour → Academic engagement	.137	.085	<.001	.066	.230
Learning Experience → Motivated learning behaviour → Academic engagement	.084	.154	<.001	.058	.117
Teacher support → LE → MLB → Academic engagement	.088	.135	<.001	.058	.141

b and β are unstandardized and standardized coefficients, respectively

in a sequential manner. As shown by 95% confidence intervals in which zero does not fall between lower and upper bounds (Table 2), direct and indirect effects of perceived teacher support on academic engagement, and particularly the chain of perceived teacher support, L2 learning experience, L2 motivated learning behaviour, and academic engagement, are significant.

Discussion

The current study investigated the association between perceived teacher support and academic engagement as well as the serial mediating roles of L2 learning experience and L2 motivated learning behaviour. The results demonstrated that perceived teacher support positively and directly predicted academic engagement, which is in agreement with the results of previous research (e.g., Ansong et al., 2017; Liu et al., 2018; Tas et al., 2019). As Oga-Baldwin maintains (2019), engagement is considered as "the doorway that teachers open for students; by taking action and stepping through, students may enter into new linguistic worlds" (p. 8). Following the main tenets of communicative language teaching approaches, teachers can promote participation of learners in various class activities by providing them with substantial support to actively practice and use L2 in classes (Mercer, 2019). For example, they can offer learners constructive feedback serving motivational and instructional purposes (Mercer & Dörnyei, 2020), which can encourage them to exert more effort and become more engaged in the learning process.

As argued in planned behaviour theory in social psychology (Ajzen, 1988), teachers can support learners to gain and strengthen their control and ownership of their learning process. When learners feel control over their learning and develop desirable emotions, they would be more willing to devote efforts to learning and become engaged in classroom activities. Furthermore, teachers can help learners become more proactive and self-regulated by constructing a supportive and positive classroom atmosphere and emotionally supporting them so that they can feel more control and responsibility over their learning and, consequently, have higher levels of agentic and emotional engagement.

Additionally, teachers' role in learner engagement could be discussed with respect to self-determination theory. More specifically, teachers play a determining role in fulfilling learners' three basic psychological needs: relatedness, competence, and autonomy. Accordingly, it is essential that teachers foster positive classroom and group dynamics and culture by establishing and maintaining a motivating and positive classroom atmosphere as well as building friendly rapport with students to increase their motivation and concentration on instructional activities (Reeve, 2012), which

can help promote learner engagement (Skinner et al., 2008). In fact, when students feel their teacher's care and support, they would develop a stronger sense of belonging to their class (Roeser et al., 1996) and become more prone to be engaged in different aspects of the foreign language learning experience (Mercer & Dörnyei, 2020). In addition, in response to learners' need for competence, teacher support could be considered as a valuable scaffolding since it can enhance learners' self-confidence (Ucar & Sungur, 2017), positive emotions (Lei et al., 2018), and creative thinking (Zhang et al., 2020b). When learners receive sufficient support from their teachers, they would be more motivated (Chen, 2016) and willing to cooperate in learning activities (Ghaith, 2002), and their negative emotions such as anxiety would be decreased (Jin et al., 2017), which can enhance their concentration on learning activities (Boulton et al., 2012). Finally, to satisfy learners' autonomy need, teachers can act as a facilitator to support learners to have control and direction on their learning by "building in an element of choice where possible, sharing decision-making to include learners as democratic partners, and giving students positions of genuine responsibility" (Mercer & Dörnyei, 2020, p. 82).

Furthermore, the SEM results showed that L2 learning experience and L2 motivated learning behaviour serially mediated the association between teacher support and academic engagement. Teachers can provide learners with substantial support and encouragement so as to enhance their L2 learning experience. L2 learning experience has a significant contribution to motivation since it is known as the most influential aspect of L2MSS in predicting motivation (Lamb, 2012; Teimouri, 2017), which could in tun considerably affect learners' L2 motivated learning behaviour (Arslan, & Çiftçi, 2021; Papi, 2010; Sato, 2021). When learners are motivated and willing to exert effort in learning and classroom activities, they would be more engaged in their learning process.

Given the fact that L2 learning experience is related to several important situated motives in the immediate learning situation (e.g., teaching methodology, syllabus, peer/learner group dynamics, instructional materials, classroom setting) (Dörnyei & Ryan, 2015), attempts for its improvement will result in increasing learners' enjoyment of learning and motivating them to exert considerable effort in their learning. In fact, when students feel satisfied with and enjoy the learning process and classroom atmosphere, they would become highly motivated and willing to devote the required effort to classroom and learning activities, which can consequently enhance their engagement and learning efficiency.

Teachers, as an essential element of any language learning situation and an important aspect of the L2 learning experience, play a highly important role by providing learners with substantial support, which can in turn improve

other dimensions of L2 learning experience (e.g., classroom atmosphere). For example, they can incorporate learners' favourite topics in their classes, implement effective instructional techniques, and use stimulating activities to motivate learners (Oga-Baldwin & Fryer, 2018) and enhance their learning experience. In addition, they can create "a space where learners can act and interact" (Oga-Baldwin, 2019, p. 8) by building positive rapport with students and establish a highly supportive atmosphere in which learners can develop positive attitudes towards the subject matter and gain a sense of belonging to the class (Rice et al., 2013). Under such circumstances, students would feel more encouraged, enthusiastic, motivated, and willing to devote considerable effort to their learning (Hughes & Chen, 2011; Lamb, 2012; Roorda et al., 2011) and become highly engaged in classroom and learning processes.

To sum up, teachers play a highly important role by supporting their learners to enhance their L2 learning experience. Improved L2 learning experience can make learners more motivated and willing to expend considerable and sustained effort in learning. Consequently, their engagement in learning activities and processes would be significantly increased.

Conclusions and Implications

Teachers are a crucial part of teaching and learning situations as well as an important determinant of L2 learning experience. Therefore, considering the malleability of teacher support and engagement (Mercer & Dörnyei, 2020) and the utmost importance of fulfilling learners' basic psychological needs for promoting engagement and achievement in L2 learning (Alamer, 2021; Davis, 2022; Karbakhsh & Ahmadi Safa, 2020), EFL teachers could employ effective measures to support students, which can in turn help increase learners' engagement in learning processes. For example, they can create a secure and supportive classroom setting by establishing friendly and positive rapport with students so that they can adopt and maintain positive attitudes to and enjoy learning English. In addition, teachers can promote pair and group work, employ highly engaging communicative learning activities (Zare-ee & Hejazi, 2018), and use humour (Senior, 2011) for motivating learners to enthusiastically participate in and devote substantial effort to classroom and learning processes. Additionally, teachers can supplement their support with conscious 'scaffolding' efforts by "breaking down tasks into more manageable sub-segments, providing structure which is gradually removed, demonstrating ways of completing tasks, offering detailed instructions and guidance, getting learners to work together in collaborative support groups" and being accessible and

available whenever learners need guidance and encouragement (Mercer & Dörnyei, 2020, p. 49). Considering the recent definition of L2 learning experience as "the perceived quality of the learners' engagement with *various* [emphasis added] aspects of the language learning process" (Dörnyei, 2019, p. 20), it is necessary that in-depth research be conducted to not only meticulously explore and describe different aspects of L2 learning process but also shed light on teachers' crucial role in enhancing them.

This study has a few limitations. For example, since a cross-sectional research design was adopted and the data were gathered by self-report questionnaires, it is suggested that further research be performed by collecting data using other techniques (e.g., observation) and adopting a longitudinal design. Additionally, considering that the participants' proficiency level was intermediate, it is recommended that further research be conducted on students with other proficiency levels (e.g., elementary and advanced). Given the domain and contextual differences relating to engagement levels (Sinatra et al., 2015), care must be exercised in generalizing the findings of the present study to other subject areas such as mathematics and science as well as other contexts such as university and high school.

Data Availability Data and materials could be made available upon reasonable request.

Declarations

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures implemented in studies involving human participants were in line with the ethical standards of the 1964 Helsinki declaration and its later amendments.

Informed Consent Participants' informed consent was gained.

References

Ajzen, I. (1988). *Attitudes, Personality, and Behavior*. Dorsey Press.

Alamer, A. (2021). Basic psychological needs, motivational orientations, effort, and vocabulary knowledge: A comprehensive model. *Studies in Second Language Acquisition, 1–21,*. https://doi.org/10.1017/S027226312100005X

Al-Hoorie, A. H. (2018). The L2 motivational self-system: A meta-analysis. *Studies in Second Language Learning and Teaching*, *8*(4), 721–754. https://doi.org/10.14746/SSLLT.2018.8.4.2

Alrajeh, T. S., & Shindel, B. W. (2020). Student Engagement and Math Teachers Support. *Journal on Mathematics Education*, *11*(2), 167–180. https://doi.org/10.22342/jme.11.2.10282.167-180

Ansong, D., Okumu, M., Bowen, G. L., Walker, A. M., & Eisensmith, S. R. (2017). The role of parent, classmate, and teacher support in student engagement: Evidence from Ghana. *International Journal of Educational Development, 54*, 51–58. https://doi.org/10.1016/j.ijedudev.2017.03.010

Aomr, J. A. W., Seng, G. H., & Kapol, N. (2020). Relationship between willingness to communicate in English and classroom environment among Libyan EFL learners. *Universal Journal of Educational Research*, *8*(2), 605–610. https://doi.org/10.13189/ujer.2020.080232

Archambault, I., Janosz, M., Goulet, M., Dupéré, V., & Gilbert-Blanchard, O. (2019). Promoting student engagement from childhood to adolescence as a way to improve positive youth development and school completion. In J. A. Fredricks, A. L. Reschly, & S. L. Christenson (Eds.), *Handbook of student engagement interventions* (pp. 13–29). Academic Press.

Arslan, T., & Çiftçi, H. (2021). Second language motivational self-system of sixth graders in Turkey: A correlational study. *TESOL Journal, 12*(1), 1–15. https://doi.org/10.1002/tesj.518

Aubrey, S., King, J., & Almukhaild, H. (2020). Language Learner Engagement During Speaking Tasks: A Longitudinal Study. *RELC Journal*. https://doi.org/10.1177/0033688220945418

Bagheri, M., & Zenouzagh, Z. M. (2021). Comparative study of the effect of face-to-face and computer mediated conversation modalities on student engagement: Speaking skill in focus. *Asian-Pacific Journal of Second and Foreign Language Education, 6*(1), 1–23. https://doi.org/10.1186/s40862-020-00103-0

Boulton, M., Lloyd, J., Down, J., & Marx, H. (2012). Predicting undergraduates' self-reported engagement in traditional and cyberbullying from attitudes. *Cyberpsychology, Behavior, and Social Networking, 15*(3), 141–147. https://doi.org/10.1089/cyber.2011.0369

Chen, Y. L. (2016). How teachers support student autonomy in EFL context. *Asian EFL Journal, 91*, 63–89.

ChengChiang Chen, J., & Kent, S. (2020). Task engagement, learner motivation and avatar identities of struggling English language learners in the 3D virtual world. *System, 88*, 102168. https://doi.org/10.1016/j.system.2019.102168

Csizér, K. (2019). The L2 Motivational Self System. In M. Lamb, K. Csizér, A. Henry, & S. Ryan (Eds.), *The Palgrave handbook of motivation for language learning* (pp. 71–94). Palgrave Macmillan.

Csizér, K., & Kálmán, C. (2019). A study of retrospective and concurrent foreign language learning experiences: A comparative interview study in Hungary. *Studies in Second Language Learning and Teaching*, *9*(1), 225–246. https://doi.org/10.14746/ssllt.2019.9.1.10

Csizér, K., & Kormos, J. (2009). Learning experiences, selves and motivated learning behaviour: A comparative analysis of structural models for Hungarian secondary and university learners of English. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 98–119). Multilingual Matters.

Davis, W. S. (2022). Encouraging continued university foreign language study: A self-determination theory perspective on programme growth. *The Language Learning Journal, 50*(1), 29–44. https://doi.org/10.1080/09571736.2020.1740768

De Bot, K., Lowie, W., & Verspoor, M. (2007). A dynamic systems theory approach to second language acquisition. *Bilingualism: Language and Cognition, 10*(1), 7–21. https://doi.org/10.1017/S1366728906002732

Dincer, A., Yeşilyurt, S., Noels, K. A., & Vargas Lascano, D. I. (2019). Self-Determination and Classroom Engagement of EFL Learners: A Mixed-Methods Study of the Self-System Model of Motivational Development. *SAGE Open, 1–15*,. https://doi.org/10.1177/2158244019853913

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum.

Dörnyei, Z. (2019). Towards a better understanding of the L2 Learning Experience, the Cinderella of the L2 Motivational Self System. *Studies in Second Language Learning and Teaching*, *9*(1), 19–30. https://doi.org/10.14746/ssllt.2019.9.1.2

Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. Routledge.

Dörnyei, Z., & Ushioda, E. (2010). *Teaching and researching motivation*. Longman Pearson.

Edstrom, A. (2015). Triads in the L2 classroom: Interaction patterns and engagement during a collaborative task. *System, 52*, 26–37. https://doi.org/10.1016/j.system.2015.04.014

Eren, A., & Rakıcıoğlu-Söylemez, A. (2020). Language mindsets, perceived instrumentality, engagement and graded performance in English as a foreign language students. *Language Teaching Research*. https://doi.org/10.1177/1362168820958400

Fan, Y., & Xu, J. (2020). Exploring student engagement with peer feedback on L2 writing. *Journal of Second Language Writing, 50*, 100775. https://doi.org/10.1016/j.jslw.2020.100775

Fredricks, J. A. (2015). Academic Engagement. In J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences* (Vol. 2, pp. 31–36). Routledge.

Fryer, L. K., & Bovee, H. N. (2016). Supporting students' motivation for e-learning: Teachers matter on and offline. *The Internet and Higher Education, 30*, 21–29. https://doi.org/10.1016/j.iheduc.2016.03.003

Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*(1), 148–162. https://doi.org/10.1037/0022-0663.95.1.148

Ghaith, G. M. (2002). The relationship between cooperative learning, perception of social support, and academic achievement. *System, 30*(3), 263–273. https://doi.org/10.1016/S0346-251X(02)00014-3

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs, 76*(4), 408–420. https://doi.org/10.1080/03637750903310360

Helgeson, V. S., & Lopez, L. (2010). Social support and growth following adversity. In J. W. Reich, A. J. Zautra, & J. S. Hall (Eds.), *Handbook of adult resilience* (pp. 309–330). Guilford Press.

Hiver, P., Al-Hoorie, A. H., Vitta, J. P., & Wu, J. (2021a). Engagement in language learning: A systematic review of 20 years of research methods and definitions. *Language Teaching Research*. https://doi.org/10.1177/13621688211001289

Hiver, P., Al-Hoorie, A., & Mercer, S. (2021b). *Engagement in the Language Classroom*. Multilingual Matters.

Hiver, P., Obando, G., Sang, Y., Tahmouresi, S., Zhou, A., & Zhou, Y. (2019). Reframing the L2 learning experience as narrative reconstructions of classroom learning. *Studies in Second Language Learning and Teaching*, *9*(1), 83–116. https://doi.org/10.14746/ssllt.2019.9.1.5

Huang, S. C. (2019). Learning experience reigns–Taiwanese learners' motivation in learning eight additional languages as compared to English. *Journal of Multilingual and Multicultural Development, 40*(7), 576–589. https://doi.org/10.1080/01434632.2019.1571069

Hughes, J. N., & Chen, Q. (2011). Reciprocal effects of student–teacher and student–peer relatedness: Effects on academic self efficacy. *Journal of Applied Developmental Psychology, 32*, 278–287. https://doi.org/10.1016/j.appdev.2010.03.005

Iwaniec, J. (2014). Self constructs in language learning: What is their role in self-regulation? In K. Csizér & M. Magid (Eds.), *The

impact of self-concept on language learning (pp. 189–205). Multilingual Matters.

Jin, Y., De Bot, K., & Keijzer, M. (2017). Affective and situational correlates of foreign language proficiency: A study of Chinese university learners of English and Japanese. *Studies in Second Language Learning and Teaching*, 7(1), 105–125. https://doi.org/10.14746/ssllt.2017.7.1.6

Karbakhsh, R., & Ahmadi Safa, M. (2020). Basic psychological needs satisfaction, goal orientation, willingness to communicate, self-efficacy, and learning strategy use as predictors of second language achievement: A structural equation modeling approach. *Journal of Psycholinguistic Research, 49*(5), 803–822. https://doi.org/10.1007/s10936-020-09714-7

Khajavy, G. H. (2021). Modeling the relations between foreign language engagement, emotions, grit and reading achievement. In P. Hiver, A. H. Al-Hoorie, & S. Mercer (Eds.), *Student Engagement in the Language Classroom* (pp. 224–240). Multilingual Matters.

Khany, R., & Amiri, M. (2018). Action control, L2 motivational self system, and motivated learning behavior in a foreign language learning context. *European Journal of Psychology of Education, 33*(2), 337–353. https://doi.org/10.1007/s10212-016-0325-6

Koltovskaia, S. (2020). Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. *Assessing Writing, 44*, 100450. https://doi.org/10.1016/j.asw.2020.100450

Kunnan, A. J. (1998). An introduction to structural equation modelling for language assessment research. *Language Testing, 15*(3), 295–332. https://doi.org/10.1177/026553229801500302

Lamb, M. (2012). A self-system perspective on young adolescents' motivation to learn English in urban and rural settings. *Language Learning, 62*, 997–1023. https://doi.org/10.1111/j.1467-9922.2012.00719.x

Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International Journal, 46*(3), 517–528. https://doi.org/10.2224/sbp.7054

Li, W., Gao, W., & Sha, J. (2020). Perceived teacher autonomy support and school engagement of Tibetan students in elementary and middle schools: Mediating effect of self-efficacy and academic emotions. *Frontiers in Psychology, 11*, 1–9. https://doi.org/10.3389/fpsyg.2020.00050

Little, R. J., & Rubin, D. B. (2019). *Statistical analysis with missing data*. John Wiley & Sons.

Liu, R.-D., Zhen, R., Ding, Y., Liu, Y., Wang, J., Jiang, R., & Xu, L. (2018). Teacher support and math engagement: Roles of academic self-efficacy and positive emotions. *Educational Psychology, 38*(1), 3–16. https://doi.org/10.1080/01443410.2017.1359238

MacIntyre, P. D., & Serroul, A. (2015). Motivation on a per-second timescale: Examining approach-avoidance motivation during L2 task performance. In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 109–138). Multilingual Matters.

Mahmoodi, M. H., & Yousefi, M. (2021). Second language motivation research 2010–2019: A synthetic exploration. *The Language Learning Journal, 1–24*,. https://doi.org/10.1080/09571736.2020.1869809

Malecki, C. K., & Demaray, M. K. (2003). What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly, 18*(3), 231–252. https://doi.org/10.1521/scpq.18.3.231.22576

McEown, K., & Sugita-McEown, M. (2019). Individual, parental and teacher support factors of self-regulation in Japanese students. *Innovation in Language Learning and Teaching, 13*(4), 389–401. https://doi.org/10.1080/17501229.2018.1468761

Mercer, S. (2019). Language learner engagement: Setting the scene. In X. Gao (Ed.), *Second Handbook of English Language Teaching* (pp. 643–660). Springer. https://doi.org/10.1007/978-3-030-02899-2_40

Mercer, S., & Dörnyei, Z. (2020). *Engaging language learners in contemporary classrooms*. Cambridge University Press.

Meyers, L. S., Gamst, G., & Guarino, A. J. (2016). *Applied multivariate research: Design and interpretation*. Sage publications.

Mohamadi, Z. (2017). Task engagement: A potential criterion for quality assessment of language learning tasks. *Asian-Pacific Journal of Second and Foreign Language Education, 2*(1), 1–25. https://doi.org/10.1186/s40862-017-0025-z

Moskovsky, C., Assulaimani, T., Racheva, S., & Harkins, J. (2016). The L2 motivational self system and L2 achievement: A study of Saudi EFL learners. *The Modern Language Journal, 100*(3), 641–654. https://doi.org/10.1111/modl.12340

Munezane, Y. (2013). Attitudes, affect and ideal L2 self as predictors of willingness to communicate. In L. Roberts, A. Ewert, M. Pawlak, & M. Wrembel (Eds.), *EUROSLA yearbook* (pp. 176–198). John Benjamins Publishing Company.

Oga-Baldwin, W. L. Q., & Fryer, L. K. (2018). Schools can improve motivational quality: Profile transitions across early foreign language learning experiences. *Motivation and Emotion, 42*(4), 527–545. https://doi.org/10.1007/s11031-018-9681-7

Oga-Baldwin, W. Q. (2019). Acting, thinking, feeling, making, collaborating: The engagement process in foreign language learning. *System, 86*, 102128. https://doi.org/10.1016/j.system.2019.102128

Oga-Baldwin, W. Q., & Nakata, Y. (2017). Engagement, gender, and motivation: A predictive model for Japanese young language learners. *System, 65*, 151–163. https://doi.org/10.1016/j.system.2017.01.011

Olsen, M. (2017). *Motivation, learner attrition, and the L2 motivational self system: A New Zealand study of heritage and non-heritage university language learners*. PhD dissertation, Otago University, New Zealand.

Papi, M. (2010). The L2 motivational self-system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System, 38*(3), 467–479. https://doi.org/10.1016/j.system.2010.06.011

Papi, M., & Teimouri, Y. (2012). Dynamics of selves and motivation: A cross-sectional study in the EFL context of Iran. *International Journal of Applied Linguistics, 22*(3), 287–309. https://doi.org/10.1111/j.1473-4192.2012.00312.x

Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of Educational Psychology, 99*(1), 83–98. https://doi.org/10.1037/0022-0663.99.1.83

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics, 36*, 50–72. https://doi.org/10.1017/S0267190515000094

Phung, L. (2017). Task preference, affective response, and engagement in L2 use in a US university context. *Language Teaching Research, 21*(6), 751–766. https://doi.org/10.1177/1362168816683561

Piechurska-Kuciel, E. (2011). Perceived teacher support and language anxiety in Polish secondary school EFL learners. *Studies in Second Language Learning and Teaching*, 1(1), 83–100. https://doi.org/10.14746/ssllt.2011.1.1.5

Piechurska-Kuciel, E. (2015). Correlates and predictors of L2 Willingness to Communicate in Polish adolescents. In M. Pawlak & E. Waniek-Klimczak (Eds.), *Issues in Teaching, Learning and Testing Speaking in a Second Language* (pp. 85–102). Springer.

Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. L. Christenson, A. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149–172). Springer.

Reeve, J., & Tseng, C.-M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology, 36*(4), 257–267. https://doi.org/10.1016/j.cedpsych.2011.05.002

Reinders, H., & Nakamura, S. (2022). Engagement. In T. Gregersen & S. Mercer (Eds.), *The Routledge Handbook of the Psychology of Language Learning and Teaching* (pp. 137–148). Routledge.

Rice, L., Barth, J. M., Guadagno, R. E., Smith, G. P., & McCallum, D. M. (2013). The role of social support in students' perceived abilities and attitudes toward math and science. *Journal of Youth and Adolescence, 42*(7), 1028–1040. https://doi.org/10.1007/s10964-012-9801-8

Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology, 88*(3), 408–422. https://doi.org/10.1037/0022-0663.88.3.408

Roorda, D. L., Koomen, H. M., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher–student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research, 81*(4), 493–529. https://doi.org/10.3102/0034654311421793

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.

Sadoughi, M., & Hejazi, S. Y. (2021). Teacher support and academic engagement among EFL learners: The role of positive academic emotions. *Studies in Educational Evaluation, 70*, 101060. https://doi.org/10.1016/j.stueduc.2021.101060

Sakiz, G., Pape, S. J., & Hoy, A. W. (2012). Does perceived teacher affective support matter for middle school students in mathematics classrooms? *Journal of School Psychology, 50*(2), 235–255. https://doi.org/10.1016/j.jsp.2011.10.005

Salmela-Aro, K., Upadyaya, K., Cumsille, P., Lavonen, J., Avalos, B., & Eccles, J. (2021). Momentary task-values and expectations predict engagement in science among Finnish and Chilean secondary school students. *International Journal of Psychology, 56*(3), 415–424. https://doi.org/10.1002/ijop.12719

Sato, M. (2021). Generating a roadmap for possible selves via a vision intervention: Alignment of second language motivation and classroom behavior. *TESOL Quarterly, 55*(2), 427–457. https://doi.org/10.1002/tesq.611

Schmidt, J. A., Rosenberg, J. M., & Beymer, P. N. (2018). A person-in-context approach to student engagement in science: Examining learning activities and choice. *Journal of Research in Science Teaching, 55*(1), 19–43. https://doi.org/10.1002/tea.21409

Senior, R. (2011). The role of humour in the development and maintenance of class cohesion. *Prospect, 16*(2), 45–54.

Sinatra, G. M., Heddy, B. C., & Lombardi, D. (2015). The challenges of defining and measuring student engagement in science. *Educational Psychologist, 50*(1), 1–13. https://doi.org/10.1080/00461520.2014.1002924

Skaalvik, E. M., Federici, R. A., & Klassen, R. M. (2015). Mathematics achievement and self-efficacy: Relations with motivation for mathematics. *International Journal of Educational Research, 72*, 129–136. https://doi.org/10.1016/j.ijer.2015.06.008

Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology, 100*(4), 765–781. https://doi.org/10.1037/a0012840

Svalberg, A. M. L. (2017). Researching language engagement: Current trends and future directions. *Language Awareness, 27*, 21–39. https://doi.org/10.1080/09658416.2017.1406490

Svalberg, A. M. L., & Askham, J. (2020). Teacher and learner perceptions of adult foreign language learners' engagement with consciousness-raising tasks in four languages. *Language Awareness, 29*(3–4), 236–254. https://doi.org/10.1080/09658416.2020.1785483

Taguchi, T., Magid, M., & Papi, M. (2009). The L2 motivational self system amongst Chinese, Japanese, and Iranian learners of English: A comparative study. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 66–97). Multilingual Matters.

Tas, Y., Subaşı, M., & Yerdelen, S. (2019). The role of motivation between perceived teacher support and student engagement in science class. *Educational Studies, 45*(5), 582–592. https://doi.org/10.1080/03055698.2018.1509778

Taylor, F. (2013). *Self and identity in adolescent foreign language learning*. Multilingual Matters.

Teimouri, Y. (2017). L2 selves, emotions, and motivated behaviors. *Studies in Second Language Acquisition, 39*(4), 681–709. https://doi.org/10.1017/S0272263116000243

Tennant, J. E., Demaray, M. K., Malecki, C. K., Terry, M. N., Clary, M., & Elzinga, N. (2015). Students' ratings of teacher support and academic and social-emotional wellbeing. *School Psychology Quarterly, 30*(4), 494–512. https://doi.org/10.1037/spq0000106

Ucar, F. M., & Sungur, S. (2017). The role of perceived classroom goal structures, self-efficacy, and engagement in student science achievement. *Research in Science & Technological Education, 35*(2), 149–168. https://doi.org/10.1080/02635143.2017.1278684

Ushioda, E. (2009). A person-in-context relational view of emergent motivation, self and identity. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 215–228). Multilingual Matters.

Wang, M. T., Hofkens, T., & Ye, F. (2020). Classroom quality and adolescent student engagement and performance in mathematics: A multi-method and multi-informant approach. *Journal of Youth and Adolescence, 49*(10), 1987–2002. https://doi.org/10.1007/s10964-020-01195-0

Wang, X., Liu, Y. L., Ying, B., & Lin, J. (2021). The effect of learning adaptability on Chinese middle school students' English academic engagement: The chain mediating roles of foreign language anxiety and English learning self-efficacy. *Current Psychology, 1–11*,. https://doi.org/10.1007/s12144-021-02008-8

Wen, X., & Piao, M. (2020). Motivational profiles and learning experience across Chinese language proficiency levels. *System, 90*, 102216. https://doi.org/10.1016/j.system.2020.102216

Wong, T. K., Tao, X., & Konishi, C. (2018). Teacher support in learning: Instrumental and appraisal support in relation to math achievement. *Issues in Educational Research, 28*(1), 202–219.

Yetkin, R., & Ekin, S. (2018). Motivational orientations of secondary school EFL learners toward language learning. *Eurasian Journal of Applied Linguistics*, *4*(2), 375–388. https://doi.org/10.32601/ejal.464202

Yu, S., Jiang, L., & Zhou, N. (2020). The impact of L2 writing instructional approaches on student writing motivation and engagement. *Language Teaching Research., 1–16*,. https://doi.org/10.1177/1362168820957024

Yulia, M. F., Sulistyo, G. H., & Cahyono, B. Y. (2020). Affective Engagement in Academic Reading: What EFL Student Teachers Reveal. *International Journal of Evaluation and Research in Education*, *9*(3), 791–798. https://doi.org/10.11591/ijere.v9i3.20635

Zare-ee, A., & Hejazi, S. Y. (2018). Iranian University Learners' and Teachers' Views on Adopted and Locally-Developed English Language Teaching Textbooks. *International Journal of Instruction*, *11*(3), 291–308. https://doi.org/10.12973/iji.2018.11321a

Zhang, X., Dai, S., & Ardasheva, Y. (2020a). Contributions of (de) motivation, engagement, and anxiety to English listening and speaking. *Learning and Individual Differences, 79*, 101856. https://doi.org/10.1016/j.lindif.2020.101856

Zhang, H., Sun, C., Liu, X., Gong, S., Yu, Q., & Zhou, Z. (2020b). Boys benefit more from teacher support: Effects of perceived teacher support on primary students' creative thinking. *Thinking Skills and Creativity, 37*, 100680. https://doi.org/10.1016/j.tsc.2020.100680