Investigating the Link Between L2 WtC, Learner Engagement and Selected Aspects of the Classroom Context

Anna Mystkowska-Wiertelak and Jakub Bielak

Abstract From the point of view of language pedagogy, understanding what promotes learners' willingness to communicate (WtC) in the target language, as well as what enhances learner engagement (LE) in the learning process constitutes an important goal that could translate into learning outcomes. Both constructs, WtC and LE, appear mutually related, but the nature of their connections is not fully understood. Informed by the literature review and own research, the analysis reported in this chapter involved also a number of other variables that are believed to contribute to generating WtC in the classroom: Classroom Environment, Communication Confidence, Ought to L2 Self, and International Posture. To address the issue of the interplay of these factors, first, Principal Component Analysis was performed to establish the component structure of the constructs, and, second, regression analyses were employed to establish WtC antecedents in the context of learning English as a foreign language involving 262 secondary school students. The results show that *Agentic engagement*, *Behavioural engagement*, and *Ought to L2 self* significantly predict classroom WtC. It appears that allowing learners to have their voice in matters related to the process of learning might boost their engagement and increase their WtC.

Keywords Willingness to communicate · Learner engagement · Agentic engagement · Secondary school

A. Mystkowska-Wiertelak (✉)
University of Wrocław, Wrocław, Poland
e-mail: anna.mystkowska-wiertelak@uwr.edu.pl

J. Bielak
Adam Mickiewicz University, Poznań, Poland
e-mail: kubabogu@amu.edu.pl

M. Baran-Łucarz et al. (eds.), *Contemporary Issues in Foreign Language Education*, English Language Education 32,
https://doi.org/10.1007/978-3-031-28655-1_10

1 Introduction

The complexity of the processes leading to foreign/second language learners' willingness to communicate (WtC), backed up by the significance of communication in the target language for this language attainment, has inspired numerous research projects within the qualitative as well as quantitative paradigm. They aim at the identification of factors that hinder or boost learners' communicative behaviour in and out of the classroom, as well as at figuring out these factors' mutual relationships. To the best of our knowledge, however, none of the studies undertaken to date has considered learner engagement (LE) as a WtC antecedent. To bridge this gap the present study has been undertaken, including also other components of instructed second language acquisition. The study presented here is a partial replication of the investigation conducted by the author and her colleague (Mystkowska-Wiertelak & Pawlak, 2017). Hence the choice of the variables to be included in the procedure was informed by the results of the above mentioned study and included three facets of WtC: unplanned, planned and practice-seeking WtC, as well as other components emerging from the analysis, namely Communication Confidence, Classroom Environment, International Posture, Ideal L2 Self, and Ought-to L2 Self. As compared to the original study, a different sample was targeted: The participants of the 2017 study were English majors, whose goal-orientation and motivation, *per se*, make them unique, which precludes broader generalizations. That is why the decision was made to collect data from a different respondent group, secondary school students, to eliminate the tertiary education bias and enable the identification of WtC antecedents shaping learners' communicative behaviour in the context of learning English in a secondary school.

LE can be defined as a multifaceted construct that "concerns active participation and involvement in (…) school-related activities and academic tasks" (Dörnyei & Mercer, 2019, p. 2). The reason why the present study focuses on the link between WtC and LE, apart from the other components of instructed L2 acquisition, is the fact that LE has been associated with success, no matter which line of academic pursuit is followed, and, as has been uniformly stressed across disciplines: it is invariably positively correlated with academic achievement (Case, 2007). In language learning, learners' engagement seems critical for language development, given the role of active practice and language use in the development of communicative competence (cf. Philp & Duchesne, 2016; Mercer, 2019). In the field of second/foreign (L2) language acquisition, the topic of engagement in language learning has gained a wider recognition only recently, giving rise to a surge of publications, particularly, in the last few years (e.g., Hiver et al., 2020; Mercer, 2019; Mercer & Dörnyei, 2020; Mystkowska-Wiertelak, 2021; Philp & Duchesne, 2016). However, as argued in a recent meta-analysis of language learner engagement studies (Hiver et al., 2021), research into engagement in language learning started over 20 years ago with the publication of Dörnyei and Kormos' study (2000) on individual and social variables in oral production.

We believe that being able to better understand the connection between LE, WtC and a host of other classroom context components, many of which are shaped by teacher intervention, we shall be able to offer teaching recommendations that might enhance students' active involvement and communicative behaviour.

2 Willingness to Communicate

WtC, originally studied in the context of the native tongue, was at first defined as a personality trait, stable across contexts (McCroskey & Richmond, 1987). The study of WtC in a foreign/second language (L2) showed its greater dependence on external conditions and hence malleability contingent on the interlocutor and a whole host of variables, best identified in the pyramid model (MacIntyre et al., 1998). Defined as "a readiness to enter into discourse at a particular time with a specific person or persons, using a L2" (MacIntyre et al., 1998, p. 547), L2 WtC arises out of the interplay of numerous factors, some beyond the learner's control, including linguistic and communicative competence, personality, motivation, anxiety, attitudes, as well as relations between the learner and target language community, desire to communicate with a particular person and the feeling of self-confidence. In the pyramid model, the pinnacle belongs to communicative behaviour, an observable manifestation of a learner's intention (cf. Cao & Philp, 2006; Yashima et al., 2016). The desire to enter into discourse, WtC, occupies the space just underneath and, being a psychological entity, can be accessed with the use of questionnaires. To this end WtC surveys have been used alongside numerous scales to explore the relationship between the construct and such variables as motivation (Peng & Woodrow, 2010; Yashima, 2002), emotions (Khajavy et al., 2018; Lee & Hsieh, 2019), personality (Ghonsooly et al., 2012; MacIntyre & Charos, 1996), learner beliefs (Fushino, 2010; Peng & Woodrow, 2010), anxiety and self-perceived competence (Yan et al., 2018; Yashima, 2002), international posture (Yashima, 2002, 2009), and pronunciation anxiety (Baran-Łucarz, 2014).

Situating L2 WtC research in the language classroom along with laboratory idiodynamic studies (Ducker, 2022; MacIntyre & Legatto, 2011) enabled capturing dynamic shifts in its intensity, and identification of abundant influences shaping L2 learners' eagerness to contribute to task performance longitudinally or on the minute-by-minute basis. The range of variables causing WtC ebbs and flows comprises feeling excited, responsible, and secure (Kang, 2005), interlocutors and context (Cao, 2014; Cao & Philp, 2006; Mystkowska-Wiertelak, 2016; Mystkowska-Wiertelak & Pawlak, 2014, 2017), topic and time (Cao, 2014), culture (Peng, 2012) and multimodal affordances (Peng, 2019; Peng et al., 2017). There have also been a few attempts to prove that pedagogic intervention can enhance learners' WtC: Munezane (2015) and Al-Murtadha (2019) found the positive impact of visualization and goal-setting activities, and Mesgarshahr and Abdollahzadeh (2014) observed the influence of strategy training on the increase of students' eagerness to join into classroom interaction.

3 Learner Engagement

The operational definition of LE applied in the present study repeats after Reeve et al. (2004) that engagement is a complex meta-construct that refers to a person's active involvement in task performance. Its measure involves tapping into one's effort, positive emotions, or assuming responsibility for one's actions. Because of its much encompassing nature, engagement subsumes different correlative ways in which motivation can be manifested: intrinsically motivated behaviour, self-determined extrinsic motivation, work orientation, or mastery motivation (Reeve et al., 2004, p. 147). The significance of engagement in educational settings lies in the fact that it mediates the passage from motivation to learning and achievement (Wellborn, 1991). Numerous definitions of LE may choose different points of focus (e.g., Philp & Duchesne, 2016; Svalberg, 2009), but they uniformly stress the importance of what students do, how and what they think about, and how they collaborate with others to achieve their learning-related goals (cf. Oga-Baldwin, 2019). A number of theoretical traditions, including Self-Determination Theory (SDT) and Expectancy-Value Theory, have referred to the construct of engagement to account for learner success (e.g., Martin, 2010; Noels et al., 2019; Reeve, 2012; Svalberg, 2009; Wang & Eccles, 2011). Research on engagement has established links to desirable behaviours and attitudes such as goal-orientation (Anderman & Patrick, 2012), self-efficacy (Schunk & Mullen, 2012), interest (Ainley, 2012), or personal investment (King et al., 2019). As engagement denotes not only behaviour but also cognition and affect, not all of its operation may be evident to the onlooker. In the educational sciences, the model of engagement that has earned much popularity is the one developed by Lam et al. (2012), which perceives engagement as a mediator between the world outside, learners' experience, internal processes and, finally, achievement. Oga-Baldwin (2019) stresses the affinity of the model to Biggs and Telfer's (1987) process phase in the learning process or the actional phase of Dörnyei's (2000) process-oriented model of motivation.

In educational psychology, LE has been researched for many decades now (Christenson et al., 2012) and although some might think that considering this aspect in the domain of second language acquisition represents a new path of inquiry, it has been present in language acquisition research for quite some time, although various labels have been used to denote the construct (Svalberg, 2017). For example, Gardner (2010, p. 121) in his socio-educational model included *motivational intensity*: "the amount of work done, persistence, and consistency in focus" or *positive attitudes towards the language*. In Ellis's (2010) model for investigating corrective feedback, successful uptake was conditioned by the learner's cognitive, emotional and behavioural response – engagement with feedback. In the literature, there are other constructs corresponding to the notion of engagement, for example, "active learning" (Bonwell & Eison, 1991), "on-task behavior" (Butler & Lee, 2006), "motivated behavior" (Guilloteaux & Dörnyei, 2008; Nakata, 2006), "time on task" (Good & Brophy, 2008; Hattie, 2009), or "effort" (Mercer, 2011). Bygate and Samuda (2009) as well as Dörnyei and Kormos (2000) measured learner

engagement by the gross quantity of language produced in task performance. The quality of language which learners produce in interaction has also been interpreted as a manifestation of engagement. Fortune and Thorp (2001), for example, perceived it in sharing previous knowledge or explaining decisions in language related episodes. In the same vein, responsiveness and attentive listening, asking questions, negotiation of meaning, back channelling, commentary, and showing empathy (Baralt et al., 2016; Lambert & Philp, 2015; Storch, 2008), or vicarious responses, private speech and attentive listening (Snyder Ohta, 2001) have been interpreted as signs of learner engagement.

Despite intriguing affinity, LE should be distinguished from motivation. Although they both play a role in educational achievement and are undeniably related, they must be viewed as separate constructs that operate on different planes: mental and physical. Motivation functions as engagement precursor (Pekrun & Linnenbrink-Garcia, 2012), or antecedent (Christenson et al., 2012). Philp and Duchesne (2016, p. 52), while differentiating between LE and motivation, point out the physical dimension of LE, stating that it is "a visible manifestation or 'descriptor' of motivation." Mercer (2019), in turn, stresses observable participation and enjoyment, characteristic of engagement, as compared to motivation that constitutes part of mental reality inaccessible to external observation. Much in the same vein, Oga-Baldwin (2019, p. 3) contends that "[i]f motivation is will and intention, wanting and wishing, engagement is the moment when word turns into deed." Importantly, Mercer and Dörnyei (2020) recognise an important asset of engagement, as compared to motivation, that is, the fact that it automatically translates into suitable learner behaviour, whereas motivation, no matter how strong at the beginning, can subside due to competing external distractors and internal influences.

Engagement is also likened to the concept of flow (Csikszentmihalyi, 1990), which denotes a state of heightened enjoyment, increased focus while being engrossed in task performance. As Oga-Baldwin (2019) points out, flow might be viewed as the state of optimal engagement, however, learners can be engaged without experiencing flow. Moreover, flow does not have a negative counterpart as learners can be either *in flow* or *not in flow*, whereas lack of engagement takes the form of disengagement or disaffection and comprises a host of components that can vary in their presence and intensity.

Differing views on the component structure of LE have been presented in the literature. According to van Uden et al. (2013), the construct is composed of behavioral and emotional dimensions; Fredricks et al. (2004) identified its behavioral, emotional and cognitive facets: while the behavioural one refers to learners' qualitative behavioural choices, the affective facet involves emotional reactions and links to peers and teachers, and finally, the cognitive one denotes mental operations performed by learners. Reeve (2012) and Reeve and Tseng (2011) complemented the previous divisions with the dimension of agentic engagement that can be defined as "students' intentional, proactive, and constructive contribution into the flow of the instruction they receive" (Reeve, 2012, p. 161). Reeve and Tseng's (2011) model, comprising cognitive, behavioural, emotional and agentic engagement, has been

used in the inquiry presented below, whose only purpose, however, was testing the model's appropriateness in the learning context under study.

The theoretical basis for the consideration of the connection between engagement in language learning and L2 WtC is provided by SDT (Deci & Ryan, 1985; Ryan & Deci, 2000), which assumes that the intensity of engagement in the learning process largely depends on motivational orientations and needs satisfaction. In the model of the language learning motivational process, Noels (2001b) and Noels et al. (2016) summarise the operation of self-dynamics (i.e., needs satisfaction and orientations), their antecedents and outcomes in the form of engagement and achievement (Noels et al., 2019, p. 101). In short, if the context, including teachers, parents, and peers, supports the satisfaction of the fundamental need for autonomy, relatedness and competence, language learners' motivational orientations get enhanced, which, in turn, defines ways in which they engage in language learning. Their engagement produces linguistic and nonlinguistic outcomes (Noels, 2001a; Noels et al., 1999, 2000, 2001, 2019). The first group involves proficiency and communicative competence; the other encompasses psychological well-being and sociocultural knowledge, which result in increased contact with the target language group and willingness to communicate with it. The framework, however, does not fully explain the connection between WtC and engagement in language learning in the settings where contacts with the target language community are infrequent and target language use is largely limited to classroom interaction. To this end, the present research has been undertaken to address this gap, as well as to generate teaching recommendations aimed at increasing learners' participation in classroom activities and involvement with the target language out of class.

4 Purpose

The main objective of the study has been to explore the role of engagement in language learning in generating WtC in English among secondary school learners. As the investigation concerned the formal setting, it was assumed that the data would also allow identification of WtC correlates for this specific group of learners. That is why variables, previously identified as impinging on L2 learners' WtC (Mystkowska-Wiertelak & Pawlak, 2017), such as Classroom Environment, Communication Confidence, Ought to L2 Self, and International Posture have been considered. The underlying assumption has been that from among the above-mentioned components of the formal educational setting, LE, or rather its individual dimensions, will directly predict learners' WtC. More specifically, the following research questions were considered:

1. To what extent do different dimensions of LE correlate with learners' WtC in English and other aspects of the secondary school context, such as Classroom Environment, International Posture, Ought-to Self, Communicative Confidence?

2. What is the component structure of WtC and LE in the context under investigation?
3. Which variables from among the ones considered in the study are the strongest predictors of WtC in the foreign language classroom?

5 Method

5.1 Participants

The study was performed in the context of secondary education with teenage learners facing an obligatory school-leaving examination in English. The exam should be considered high-stakes because its results are taken into account in admittance procedures for university courses. The cohort consisted of 262 students (174 female and 88 male), who, at the time of the research, were on average 17.5 years of age. They attended three lessons of English a week and their average end-of-the semester grade was 3.9 on a scale from 1 (fail) to 6 (excellent). Their expected proficiency level was B1/B2 according to the *Common European Framework of Reference for Languages*; however, variation in this respect should be expected.

5.2 Procedure, Instrumentation and Analysis

The participants took the anonymous survey online on a voluntary basis and were informed they could withdraw from the procedure at any moment without any consequences whatsoever. It needs to be noted here that the self-selection principle applying in the study might have affected the results since volunteering students might have had a generally more favourable disposition towards learning and communication. Once the approval from the school headmasters was obtained, the questionnaire was posted online via Googledocs. It consisted of 77 5-point Likert-type items (from 1 – *strongly disagree* to 5 – *strongly agree*). The survey was presented in the respondents' mother tongue to avoid misunderstanding and possible confusion, and prior to completing it, the students were informed about study aims and the procedure. Clear indications were included in the introduction and individual items to inform the respondents that the survey concerned learning English, not learning in general. The items intended to tap into the learners' WtC were derived from the instrument that was the outcome of the research conducted by Mystkowska-Wiertelak and Pawlak (2017), who, in the course of Exploratory Factor Analysis performed on data gleaned from 614 participants, identified three facets of WtC: *Unplanned in-class WtC*, e.g., I am willing to ask my group mates about forms/words related to the topic (6 items – $\alpha = 0.84$); *Planned in-class WtC*, e.g., I am willing to give a presentation in front of the class. (3 items – $\alpha = 0.79$);

Practice-seeking WtC, e.g., I am willing to use English to speak to/text my Polish peers out of class. (3 items – α = 0.79). Apart from different WtC dimensions, the following subscales for factors identified in the above mentioned analysis were used: *Communication confidence* (12 items – α = 0.89), *Ought to self* (9 items – α = 0.86), *Classroom environment* (7 items – α = 0.73), *International posture – openness to experience* (9 items – α = 0.77), *International posture – interest in international affairs* (6 items – α = 0.80). The inquiry that the above-mentioned variables originated from concerned students majoring in English who had a specific and unique orientation and well-defined goals related to using English in their future. The present study involved a sample consisting of younger learners whose future plans may not have been specified yet and who were likely to pursue many different walks of life and careers which might not entail speaking English. Thus the study represents an attempt at exploring the variables identified earlier in a different context to confirm their applicability to larger populations.

LE was measured with the use of the survey developed by Reeve and Tseng (2011), which differentiated between *Agentic engagement*, e.g., During class, I ask questions (5 items – α = 0.82), *Behavioural engagement*, e.g., I listen carefully in class, *Emotional engagement* (4 items – α = 0.78), e.g., I enjoy learning new things in class, and *Cognitive engagement*, e.g., I make up my own examples to help me understand the important concepts I study (8 items – α = 0.88). Alpha values for all of the subscales indicated that they have high reliability and could be used for further investigation of the concepts in question.

First, Principal Component Analysis (PCA) was performed to determine a minimum number of factors accounting for the maximum variance in the data, followed by calculating descriptive statistics and Pearson correlations to establish the nature and strength of relationships between the variables. Additionally, internal consistency of the instrument was established by calculating Cronbach α for each of the subscales. This was followed by two rounds of regression analysis: linear multiple regression and linear hierarchical regression to explain the relationship between WtC and predictor variables.

6 Results

6.1 Principal Component Analysis (PCA)

The first step of the procedure was performing principal axis factoring with oblique rotation (direct oblimin). The Keyser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = 0.898 (“meritorious” according to Hutcheson & Sofroniou, 1999), which is well above the acceptable limit of 0.5 (Field, 2013). In order to establish the number of factors, a scree-plot criterion was used. It was unambiguous and showed an inflection justifying the retention of 8 components, which explain 60% of the total variance. Appendix One shows factor loadings after

rotation. PCA enabled the identification of 8 separate components. The first, labelled *Positive cognitive engagement* (PCE; 8 items – α = 0.89), contains items related to cognition involved in language development tinted with positive feelings of enjoyment, interest and fun. *Behavioural engagement* (BE; 5 items – α = 0.89), the second component, contains 5 items that reflect diligence, effort, hard work, and concentration. Component 3, comprising as many as 9 items, pertains to *Ought to self* (OUT; 9 items – α = 0.88) and echoes external pressures as perceived by learners. The fourth of the components, labelled *WtC* (5 items – α = 0.93), shows willingness to interact with other students on issues related to topics and ideas, and with the teacher with reference to words and structures. Component 5, *International posture – interest in the world* (IPIW; 6 items – α = 0.83), consists of 6 items and mirrors the importance students attach to learning and discussing issues related to culture, sport, politics and economy, which helps them create the feeling of belonging to an international community of speakers of English. Component 6 contains items labelled as *Agentic engagement* (AE; 5 items – α = 0.86), which express learners' active involvement in shaping classroom procedures in the form of expressing opinions and preferences, making suggestions, asking questions. Component 7, *Classroom environment* (CLE; 5 items – α = 0.89), concerns the teacher's favourable disposition, manifested in a smile and patience, but also clarity of instructions and careful planning of tasks and procedures. The final component is *International posture – openness to experience* (IPO; 4 items – α = 0.83), and it denotes learners' readiness to accept frequent travel, and work or living in a foreign country.

6.2 Descriptive Statistics

Means and standard deviations were calculated for the components generated in the course of PCA (see Table 1). Standard deviation values below 1.00 in most of the cases, with the exception of WtC and *Agentic engagement*, 1.13 and 1.04

Table 1 Means and standard deviations for the 8 components identified in PCA

Variable	Mean	*SD*
PCE	3.73	0.91
BE	3.94	0.92
OUT	2.82	0.98
WTC	2.85	1.13
IPIW	3.82	0.85
AE	2.74	1.04
CLE	4.10	0.92
IPO	3.88	0.98

Notes: *AE* agentic engagement, *BE* behavioural engagement, *CLE* classroom environment, *IPIW* international posture – interest in the world, *IPO* international posture – openness to experience, *OUT* ought to self, *PCE* positive cognitive engagement, *WTC* willingness to communicate

respectively, testify to relative uniformity of the sample with respect to the measured constructs. The highest mean noted for *Classroom environment* ($M = 4.10$; $SD = 0.92$) reflects the characteristics of the setting such as the teacher's positive disposition and behaviour, quality instructions, awareness of lesson aims and opportunities for self-correction. Much in the same vein, the mean nearing 4.0 ($M = 3.94$; $SD = 0.92$) for *Behavioural Engagement* proves the relative frequency of a behavioural response to what is happening in the classroom. Two facets of *International Posture* – IPO – *Openness to Experience* and IPIW – *Interest in the World* – produced means slightly lower than the previous subscale: 3.88 ($SD = 0.98$) and 3.82 ($SD = 0.85$) respectively, showing the respondents' positive disposition towards and interest in international matters, as well as readiness to take up travel and jobs abroad. The mean for the newly created component, labelled PCE, that resulted from a merger of *Positive and Cognitive engagement*, amounted to 3.73 ($SD = 0.91$), which allows us to believe that the learning process happens in a friendly atmosphere and generates the feeling of enjoyment and interest. The mean score for WtC at 2.85 ($SD = 1.13$), slightly above the mid-point of the scale, shows a moderate degree of learners' eagerness to talk about lesson-related issues. Similarly, the level of OUT turned out to be close to the mid-point of the scale ($M = 2.82$, $SD = 0.98$), as did AE at the level of $M = 2.74$ ($SD = 1.04$).

6.3 Correlations

As can be seen in Table 2, a preliminary Pearson correlation analysis revealed that all of the independent variables were significantly positively linked to WtC ($p < 0.01$). Most of the intercorrelations between independent variables turned out statistically significant at the level of 0.01, with the exception of the link between OUT and IPO, significant at 0.05 and the relationship between CLE and OUT that appeared insignificant (see Table 3). Effect sizes were compared to the benchmark put forward by Plonsky and Oswald (2014). Only in one case did the effect size

Table 2 Pearson correlation analyses between independent variables and WtC

Independent variable	Pearson r ($p < 0.01$)
AE	0.420
PCE	0.365
OUT	0.301
BE	0.271
IPIW	0.247
CLE	0.211
IPO	0.201

Notes: *AE* agentic engagement, *BE* behavioural engagement, *CLE* classroom environment, *IPIW* international posture – interest in the world, *IPO* international posture – openness to experience, *OUT* ought to self, *PCE* positive cognitive engagement, *WTC* willingness to communicate

Table 3 Intercorrelations among independent variables (Pearson *r*)

	BE	OUT	IPIW	AE	CLE	IPO
PCE	0.632**	0.180**	0.438**	0.476**	0.536**	0.391**
BE		0.202**	0.185**	0.225**	0.564**	0.130*
OUT			0.193**	0.238**	0.095	0.125*
IPIW				0.351**	0.226**	0.386**
AE					0.247**	0.255**
CLE						0.191**

Notes: *AE* agentic engagement, *BE* behavioural engagement, *CLE* classroom environment, *IPIW* international posture – interest in the world, *IPO* international posture – openness to experience, *OUT* ought to self, *PCE* positive cognitive engagement, *WTC* willingness to communicate
** significant at 0.01
* significant at 0.05

exceed the level of 0.60 (large), showing the large magnitude of the relationship between PCE and BE (r = .632). Values above the medium level were noted for the link CLE and PCE (r = 0.536) and CLE and BE (r = 0.564). Slightly lower values, oscillating around 0.40 were noted for the connection between IPIW and PCE (r = 0.438), AE and PCE (r = 0.476), AE and WtC (r = 0.420). Below the 0.40 threshold but still nearing this level were connections between PCE and IPO (r = 0.391), as well as between the two types of International posture (r = 0.386). The other effect sizes should be considered as low.

6.4 Regression Analysis

Linear Multiple Regression

With the adequate sample size (Green, 1991), the multiple regression analysis could be performed to see if the independent variables significantly predicted WtC. Univariate and multivariate data screening resulted in the removal of outliers, which was followed by checking for multilinearity and homoscedasticity. A significant regression equation was found indicating that the variables predicted 28.4% of the variance (R^2 = 0.284, F(7, 239) = 13.55, p < 0.001). The strongest predictors were OUT, AE and BE (see Table 4). The remaining four variables: PCE, CLE and the two facets of IP did not prove to be significant predictors of WtC (see Table 4).

Hierarchical Multiple Regression

To further examine research question 3 asking about the variables that contribute to learners' WtC in the secondary school setting, a hierarchical multiple regression (HMR) was run. With WtC as a dependent variable, we entered the strongest and significant predictors identified in the linear multiple analysis described above: AE,

Table 4 Multiple regression analysis with WTC as dependent variable (sorted according to beta value)

	B	*SE*	Beta	*t*	*p*	*CI* 95.0%	
AE	0.390	0.072	0.357	5.391	0.000	0.247	0.532
BE	0.269	0.108	0.185	2.497	0.013	0.057	0.480
OUT	0.192	0.068	0.163	2.831	0.005	0.059	0.326
IPO	0.091	0.074	0.076	1.224	0.222	−0.055	0.237
IPIW	−0.051	0.091	−0.036	−0.558	0.577	−0.230	0.128
CLE	0.030	0.096	0.021	0.313	0.755	−0.159	0.220
PCE	0.017	0.115	0.013	0.0151	0.880	−0.208	0.243

Notes: *AE* agentic engagement, *BE* behavioural engagement, *CLE* classroom environment, *IPIW* international posture – interest in the world, *IPO* international posture – openness to experience, *OUT* ought to self, *PCE* positive cognitive engagement, *WTC* willingness to communicate

Table 5 Hierarchical multiple regression coefficients

	b	*SE b*	*ß*	*p*	*CI* 95%	
Step 1						
Constant	1.49	0.18		0.000		
AE	0.50	0.06	0.46	0.000	0.381	0.624
Step 2						
Constant	0.39	0.34		0.256		
AE	0.45	0.06	0.41	0.000	0.329	0.573
BE	0.31	0.08	0.21	0.000	0.144	0.468
Step 3						
Constant	0.04	0.36		0.918		
AE	0.41	0.06	0.37	0.000	0.286	0.533
BE	0.29	0.08	0.20	0.000	0.127	0.447
OUT	0.19	0.07	0.16	0.005	0.060	0.322

Notes: $R^2 = 0.21$ for Step 1, $\Delta R^2 = 0.04$; $R^2 = 0.25$ for Step 2, $\Delta R^2 = 0.02$
AE agentic engagement, *BE* behavioural engagement, *OUT* ought to self

BE, and OUT in three steps. In Model 1 (see Table 5) we entered AE as a predictor variable and it showed to have significantly contributed to WtC, accounting for 21% of the variance ($R = 0.46$, $F(1, 245) = 65.91$, $p < 0.001$). AE and BE were predictor variables in Model 2 ($R = 0.50$, $F(2, 244) = 41.62$, $p < 0.001$). Model 2 approximately accounts for 25% of the variance in the data. In Model 3, AE, BE, and OUT significantly contributed to the regression ($R = 53$, $F(3, 243) = 31.30$, $p < 001$), accounting for approximately 28% of the variance. The 95% Confidence intervals for the three Models did not include 0, which indicated reliability associated with regression weights. The addition of variables in Model 2 and Model 3 resulted each time in a significant change of 4% (Step 2) and 2% (Step 3). Although the additions explain a small amount of variance, they can be considered helpful in pursuing a parsimonious model.

7 Discussion

PCA performed on the data collected by means of 12 subscales tapping into various aspects of language learning in the formal setting lead to the identification of 8 factors (see Appendix One). Cronbach α values for each of the subscales reached or exceeded 0.8, which attests to high internal consistency of each of the components. WtC antecedent structure resulting from Principal Component Analysis reflects the characteristics of the secondary school context with the dominant role of the teacher as an organizer, tutor and feedback provider, and the power of external motivations in the form of Ought to self. It appears that learners associate language learning with good atmosphere that generates positive affect, which promotes effective learning, as items originally belonging to the subscales of cognitive engagement and emotional engagement loaded on the same component, creating the new, Positive Cognitive Engagement, factor that explains 26% of the variance. Language learning seems unique in that it cannot be understood as a purely cognitive endeavour. Numerous studies have identified a link between positive emotions and better learning outcomes (e.g., Dewaele & MacIntyre, 2014, 2016; Ryan et al., 1990, p. 14). Enjoyment is said to emerge in the presence of challenge, concentration, clear goals, and immediate feedback, as well and a sense of progress towards their achievement (Csikszentmihalyi, 1990). Dewaele and MacIntyre (2014, p. 242) observe that "on daily basis, the process of language learning will implicate the two key sources of enjoyment: developing interpersonal relationships and making progress toward a goal." However, emotions and cognition seem to influence each other reciprocally. On the one hand, secondary school language learners seem to be willing to engage cognitively to enhance their understanding of the target language if the process is at least to some degree enjoyable and sparks their interest, and on the other hand their sense of progress and improved understanding generates positive emotions. This mutually supportive relationship has been reflected in the merger of these two dimensions of language learning. Interestingly, however, the regression analysis did not prove the strength of Positive Cognitive Engagement in predicting WtC, despite a relatively high level of correlation between the constructs. This comes as a surprise, since as shown in previous research (e.g., Khajavy et al., 2018), emotions, including enjoyment, strongly predict WtC. The situation described here could be attributed to the fact that the new factor, Positive Cognitive Engagement, is a combination of emotions and cognition and these two aspects in conjunction do not exert such influence as operating separately.

The items that loaded on the Classroom environment factor are mainly related to the supportive behaviour of the teacher and their expertise in teaching. The importance of the characteristics of the classroom environment for learner engagement has been stressed by Noels et al. (2018), who showed how teachers' support promotes learners' needs satisfaction and translates into greater engagement in language courses. This position, consistent with the provisions of SDT (Deci & Ryan, 1985; Ryan & Deci, 2000), posits that engagement stems from satisfying basic psychological needs of an individual. Among those needs there is autonomy, the

construct that denotes the learner's need to exercise agency while shaping their own learning in accordance with their beliefs, values and interests (Ryan & Deci, 2000). This might be the reason why Behavioural engagement (8% of the variance) and Agentic engagement (3% of the variance) emerged as separate components. Not all of the conceptualisations of LE differentiate between behavioural and agentic dimensions (cf. Fredricks et al., 2004; Svalberg (2009, 2017). The component structure derived from the present analysis confirms the assumption promoted by Reeve (2013) and Reeve and Tseng (2011) that the LE model should also contain the agentic dimension as a distinct facet of the construct.

The components initially representing three facets of WtC (Unplanned in-class WtC, Practice-seeking WtC, Planned in-class WtC) were not retained in the new structure, although their utility was proved in the study by Fang et al. (2020), who used these WtC scales to look into the link between intercultural attitudes and WtC of Chinese students. In the present study only 5 items originally belonging to the three categories loaded on one component, representing learners' willingness to talk to classmates on topics referring to the flow of the lesson and to asking the teacher about issues concerning vocabulary or grammar. As many as 7 items representing the three WtC facets were eliminated. They denoted using English to speak to or text friends during breaks or after school, most likely because in a monolingual group at an intermediate proficiency level, the learners are unlikely to communicate in a foreign tongue. Another WtC item that was eliminated concerned self-correction in response to an indication of an error, which may not be a very common error correction technique in the context under investigation. A WtC item: *I am willing to ask the teacher in English what he or she has said* was also eliminated most likely because the target language may not be used in the classroom for purposes other than language practice and learners, not being highly proficient, might choose Polish instead. Finally, another batch of items that were eliminated were those linked to certain types of activities (*I am willing to give a presentation in front of the class; I am willing to do a role-play in a small group; I am willing to do a role-play in pairs*), which might have happened because the learners were not familiar with those ways of language practice.

Two separate components representing International Posture were identified: *Interest in the World*, which comprises all of the 6 original items, and *Openness to Experience*, bearing some characteristics of an imagined future self – involving job or study abroad opportunities, which seems natural in the context of teenage learners preparing for school-leaving examinations and deciding on their future careers. The 5 items of the IP *Openness to experience* scale that were dropped involved interaction with foreigners or exchange students (I am willing to initiate communication with a foreigner met in the street; I am willing to use English to speak to exchange students; I want to make friends with people from abroad; I would talk to an international student if there was one at school; I would like to take part in a volunteer activity to help foreigners living in my country). The main reason for this being the case seems a relative scarcity of contact with English language users, as also indicated in the report on learning English in Poland (cf. Ellis, 2015).

The whole scale related to *Communication confidence* (12 items) was not retained, which most likely happened because, in the course of the lesson, learners perform actions that are required by the teacher and their own conviction concerning their ability to perform particular actions and tasks does not play a significant role in the context under discussion. Among the items eliminated in the course of the procedure were also four, belonging originally to the scale aimed at tapping into Cognitive Engagement: Before I begin to study, I think about what I want to get; When I am learning English, I stop once in a while and go over what I have been doing; As I study, I keep track of how much I understand, not just if I am getting the right answers; If what I am working on is difficult to understand, I change the way I learn the material, all of which denote specific ways of dealing with the material. First, it appears that the participants might not have been familiar with such tactics or did not feel the need to decide independently about effective ways of learning. Since the degree of their autonomy was never assessed, it can only be assumed that being part of the educational setting that did not encourage independence, they did not develop proper cognitive strategies nor reflection concerning the topic.

The results of the correlation analysis confirm the initial assumption that WtC and LE components are significantly related. The positive link between WtC and Agentic engagement, explaining approximately 16% of the variance, testifies to the importance of empowering learners to actively shape instruction. Reeve (2012) defines Agentic engagement as "students' intentional, proactive, and constructive contribution into the flow of the instruction they receive" (p. 161). Most likely, a context that encourages learners to proactively influence learning increases their need to communicate with others, the teacher, and peers as well. Out of the 8 components denoting the characteristics of the formal setting taken into account in the present study only the correlation between L2 Ought to self and Classroom environment did not turn out significant. The concept of L2 Ought to self reflects learners' appraisal of other people's (parents', peers', society') demands or expectations of them concerning their command of English in general. Classroom environment, in turn, as operationalized on the subscale, appears beyond learners' control, as it denotes teachers' tactics and their disposition. It rather reflects the expectations learners have towards their teachers, which is not linked to what others expect from them.

To address RQ3 and because of the fact that correlational analyses do not answer the question of directionality of the impact of the variables, linear multiple regression analysis was performed to identify variables that significantly predict WtC. These predictors are Agentic engagement, Behavioural engagement, and L2 Ought to self. An increase in the magnitude of each of them predicts learners' willingness to interact with others in the target language. If Agentic engagement and Behavioural engagement are viewed as relatively stable predispositions, then their impact on learners' WtC should be perceived as similar to that of personality. However, as the survey items were formulated in such a way as to denote respondents' language learning experience, it cannot be excluded that these two engagement types occur in response to the characteristics of their particular contexts and thus resemble a component of layer three of the pyramid model (MacIntyre et al.,

1998), where situated antecedents can be found. Learners who have a strong desire to influence the course of the lesson need to accomplish this aim by communicating with their teacher and peers. The fact that this predicts target language WtC shows that they intend to or are obliged to use the studied language for that purpose. It may also be the case that, in the learners' view and practice, behavioural involvement in the lesson requires, in addition to focused attention, numerous instances of speaking. The third of the positive significant predictors of WtC identified in the course of PCA is L2 ought to self, a component that grasps the pressure teenage learners perceive from parents, teachers and important others, including the peer group.

In pursuit of parsimony, HMR was conducted and three models were produced. Although AE alone turned out to account for as much as 21% of the variance, we opt for Model 3, where Agentic engagement, Behavioural engagement, and L2 Ought to self jointly explain almost 28% of the change in WtC. Agentically engaged learners who, as explained by Reeve (2012, p. 161), "proactively try to create, enhance and personalize the conditions and circumstances under which they learn," are more likely to feel a stronger drive to contribute to the flow of the lesson but also express their opinions and negotiate options. The fact that Agentic engagement itself turned out to be the strongest predictor of WtC suggests that target language communication in the secondary school classroom involves, apart from participation in tasks and activities, also discussing matters related to lesson aims and ways of pursuing them. It seems that Agentic engagement and Behavioural engagement coincide to produce a learner who is focused on lesson objectives, carefully follows instructions, and works very hard. Such a person must feel responsible for what is happening in the classroom and how the language is taught. This corresponds to the claim by de Saint Léger and Storch (2009) that students who felt responsible for the course of the lesson were also more willing to speak. It also stands to reason that L2 Ought to self, one of the facets of Dörnyei's (2005, 2009) L2 Motivational Self System Model, exerts considerable influence on the thoughts and behaviour of secondary school students who face high-stakes examinations and strive for good grades on a daily basis, trying to satisfy their parents' and teachers' expectations.

We are aware the study is not free from limitations, the first of which is self-selection. The online survey was completed by volunteers, who may display higher levels of engagement in school life in general and LE in particular. Although such respondents are likely to provide data of a better quality (Wilson & Dewaele, 2010), they are not representative of the population. Moreover, the participants came from high-profile schools whose graduates tend to pursue education at the tertiary level. English examination grades are considered in the university entrance procedures; that is why many pupils may have put a premium on developing their command of English, and hence their engagement and motivation may have been higher than that of other teenagers.

The present research into the complexity of language learners' WtC has been undertaken with a view to understanding its complex nature in order to offer ways in which teachers could increase its levels. The pedagogical implication of the present study is that encouraging students to shape language instruction, increasing their active involvement is likely to translate in greater willingness to contribute to

classroom interaction. Taking into account learners' point of view and creating a safe environment in which they can freely express their opinions and preferences and feel respected and valued enhances their engagement and, in turn, their WtC.

8 Conclusion

The main goal of the present study was to explore the link between two multifaceted concepts: WtC and learner engagement, both of which coincide with learning outcomes. The analysis proved the existence of significant correlations between all of the dimensions of the constructs in the context of formal instruction at the secondary level. Learner engagement in the form of Agentic engagement and Behavioural engagement together with L2 Ought to self appear potent variables capable of explaining varying levels of learners' WtC, the construct that considerably shapes outcomes of the learning process. An additional aim pursued here was testing the component structure of WtC as comprising three dimensions (Unplanned in-class WtC, Practice-seeking WtC, Planned in-class WtC) as well as that of learner engagement that in the literature has been conceptualized as a two-, three-, or four-dimensional construct. PCA confirmed the significance of Agentic engagement in classroom language learning. Thus, we extended Reeve and Tseng's (2011) work by offering a proof for the role of agency in classroom language development and the existence of Agentic engagement as a separate facet of learner engagement. The merger of emotional and cognitive engagement into one component proves the strong link between learners' cognition and emotionality, which is congruent with research stressing the inseparability of cognition and affect in language learning in the form of "perezhivanie" (e.g., Pavlenko, 2014; Lantolf & Swain, 2020). Separate WtC subscales merged into one scale whose items made direct reference to the classroom use of English. It seems that the characteristics of the context, learning English at a secondary school, has impacted the components in such a way that the items describe the behaviours, procedures and techniques learners know from their every-day experience. Moreover, the elimination of items tapping into the use of English out of class clearly shows how scarce the opportunities for authentic language use in this age group are, contrary to expectations concerning young people in the digitalized world. The significant role of Agentic engagement in generating WtC shows how important is empowering learners to enrich learning opportunities, improve teaching practices and tailor them to learners' needs, as well as allow them to have their voice in the process as well.

Appendix: Factor Loadings from PCA

Questionnaire items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Positive cognitive engagement items								
Learning English is fun	0.511							
I enjoy learning new things in English	0.506							
When learning English. I try to relate what I am learning to what I already know	0.476							
I try to make all the different ideas fit together and make sense when I am learning English	0.465							
When I am in class. I feel curious about what we are learning	0.441	0.378						
When we work on something in class. I feel interested	0.425	0.405						
When I am learning English. I try to connect what I am learning with my own experience	0.398							
I make up my own examples to help me understand what I am learning in English	0.303							
Behavioural engagement items								
I listen to my English teacher carefully		0.838						
I try very hard in my English class		0.791						

(continued)

Questionnaire items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
I pay attention in class		0.755						
I work hard when we start something new in class		0.746						
The first time the teacher talks about a new topic. I listen very carefully		0.662						
Ought to self items								
If I fail to learn English. I'll be letting other people down			0.783					
Learning English is important to me because people surrounding me expect me to learn to speak in English			0.744					
I have to study English because. If I do not study it. I think my parents will be disappointed with me			0.718					
Learning English is important to me in order to gain the approval of my peers/ teachers/family/ boss			0.715					
I consider learning English important because the people I respect think I should do it			0.659					
Learning English is important to me because other people will respect me more if I have a knowledge of English			0.652					

(continued)

Questionnaire items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
My parents believe that I must study English to be an educated person			0.651					
I learn English because my friends think it is important			0.538					
Learning English is important to me because an educated person is supposed to be able to speak English			0.407					
WtC items								
I am willing to ask my group mates in English about forms/ words related to the topic				−0.897				
I am willing to ask my class mates in English about forms/ words related to the topic				−0.895				
I am willing to ask my group mates in English about ideas/ arguments related to the topic				−0.866				
I am willing to ask my class mates in English about ideas/ arguments related to the topic				−0.854				
I am willing to ask the teacher in English about words or structures she has just used				−0.595				

(continued)

Questionnaire items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
International posture – Interest in the world items								
I have a strong interest in what happens in other countries					0.820			
On the internet. Tv or newspapers I don't look for information concerning only my hometown or country					0.635			
I often talk about situations or events (sport events. Concerts. Festivals. Etc.) in foreign countires with my family and friends					0.617			
I sometimes feel like a member of an international community of people who want to share ideas and opinions					0.571			
I have ideas about international issues such as sports. Cultural. Social. Political. Or economic events or phenomena					0.544			
I often read or watch the news, short films, memes about life/ events in foreign countries					0.486			
Agentic engagement items								
I tell the teacher what I like and what I don't like						−0.821		

(continued)

Questionnaire items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
I let my teacher know what I'm interested in						−0.762		
During class. I express my preferences and opinions						−0.601		
I offer suggestions about how to make the English class better						−0.550		
During an English class. I ask questions						−0.443		
Classroom environment items								
The teacher provides a timely response to students' concerns							0.840	
Class assignments are clear so everyone knows what to do							0.752	
Activities in class are clearly and carefully planned							0.730	
The teacher is patient							0.720	
The teacher smiles while talking							0.630	
International posture – Openness to experience items								
I want to work in a foreign country								−0.792
I am interested in an international career								−0.783
I wouldn't avoid work that requires frequent travelling abroad								−0.655
I can imagine myself living abroad and having a discussion in English								−0.588

References

Ainley, M. (2012). Students' interest an engagement in classroom activities. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 283–302). Springer US.

Al-Murtadha, M. (2019). Enhancing EFL learners' willingness to communicate with visualization and goal-setting activities. *TESOL Quarterly, 53*(1), 133–157.

Anderman, E. M., & Patrick, H. (2012). Achievement goal theory, conceptualization of ability/intelligence, and classroom climate. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149–172). Springer US.

Baralt, M., Gurzynski-Weiss, L., & Kim, Y. (2016). Engagement with language: How examining learners' affective and social engagement explains successful learner-generated attention to form. In M. Sato & S. Ballinger (Eds.), *Peer interaction and second LE. Pedagogical potential and research agenda* (pp. 209–240). John Benjamins.

Baran-Łucarz, M. (2014). The link between pronunciation anxiety and willingness to communicate in the foreign-language classroom: The polish EFL context. *Canadian Modern Language Review, 70*(4), 445–473. https://doi.org/10.3138/cmlr.2666.2014

Biggs, J. B., & Telfer, R. (1987). *The process of learning* (2nd ed.). Prentice-Hall.

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom*. School of Education and Human Development, George Washington University.

Butler, Y. G., & Lee, J. (2006). On-task versus off-task self-assessments among Korean elementary school students studying English. *The Modern Language Journal, 90*(4), 506–518.

Bygate, M., & Samuda, V. (2009). Creating pressure in task pedagogy: The joint roles of field, purpose, and engagement within the interaction approach. In A. Mackey & C. Polio (Eds.), *Multiple perspectives on interaction* (pp. 90–116). Taylor & Francis/Routledge.

Cao, Y. (2014). A sociocognitive perspective on second language classroom willing-ness to communicate. *TESOL Quarterly, 48*(4), 789–814.

Cao, Y., & Philp, J. (2006). Interactional context and willingness to communicate: A comparison of behavior in whole class, group and dyadic interaction. *System, 34*(4), 480–493.

Case, J. (2007). Alienation and engagement: Exploring students' experiences of studying engineering. *Teaching in Higher Education, 12*(1), 119–133. https://doi.org/10.1080/13562510601102354

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper Collins.

Christenson, S. L., Reschly, A. L., & Wylie, C. (Eds.). (2012). *Handbook of research on student engagement*. Springer.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.

de Saint Léger, D., & Storch, N. (2009). Learners' perceptions and attitudes: Implications for willingness to communicate in an L2 classroom. *System, 37*(2), 269–285.

Dewaele, J.-M., & MacIntyre, P. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second LE and Teaching, 4*(2), 237–274. https://doi.org/10.14746/ssllt.2014.4.2.5

Dewaele, J. M., & MacIntyre, P. D. (2016). 9 Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of the language learner. In *Positive psychology in SLA* (pp. 215–236). Multilingual Matters.

Dörnyei, Z. (2000). Motivation in action: Towards a process-oriented conceptualization of student motivation. *British Journal of Educational Psychology, 70*(4), 519–538. https://doi.org/10.1348/000709900158281

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

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9–42). Multilingual Matters.

Dörnyei, Z., & Kormos, J. (2000). The role of individual and social variables in oral task performance. *Language Teaching Research, 4*, 275–300.

Ducker, N. T. (2022). Bridging the gap between willingness to communicate and learner talk. *The Modern Language Journal, 106*(1), 216–244.

Ellis, M. (2015). Findings form "learning and teaching foreign languages in lower secondary school", (BUNJO 2012): Implications for the education of teachers of English. *Neofilolog, 44*(2), 171–182.

Ellis, R. (2010). A framework for investigating oral and written corrective feedback. *Studies in Second Language Acquisition, 32*, 335–349.

Fang, F., Chen, R., & Elyas, T. (2020). An investigation of the relationship between global perspective and willingness to communicate in English in a Chinese university context. *Journal of Language and Education, 6*(1), 39–54. https://doi.org/10.17323/jle.2020.10175

Field, A. P. (2013). *Discovering statistics using IBM SPSS statistics: And sex and drugs and rock'n'roll* (4th ed.). Sage.

Fortune, A., & Thorp, D. (2001). Knotted and entangled: New light on the identification, classification and value of language related episodes in collaborative output tasks. *Language Awareness, 10*, 143–160.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: potential of the concept, state of the evidence. *Review of Educational Research, 74*, 59–109.

Fushino, K. (2010). Causal relationships between communication confidence, beliefs about group work, and willingness to communicate in foreign language group work. *TESOL Quarterly, 44*, 700–724.

Gardner, R. C. (2010). *Motivation and second language acquisition: The socio-educational model*. Peter Lang.

Ghonsooly, B., Khajavy, G. H., & Asadpour, S. F. (2012). Willingness to communicate in English among Iranian non-English major university students. *Journal of Language and Social Psychology, 31*(2), 197–211. https://doi.org/10.1177/0261927X12438538

Good, T., & Brophy, J. (2008). *Looking in classrooms* (10th ed.). Longman.

Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research, 26*, 499–510. https://doi.org/10.1207/s15327906mbr2603_7

Guilloteaux, M.-J., & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly, 42*(1), 55–77. https://doi.org/10.1002/j.1545-7249.2008.tb00207.x

Hattie, J. (2009). *Visible learning*. Routledge.

Hiver, P., Al-Hoorie, A., & Mercer, S. (2020). *Student engagement in the language classroom*. Multilingual Matters.

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

Hutcheson, G., & Sofroniou, N. (1999). *The multivariate social scientist*. Sage.

Kang, S. J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System, 33*(2), 277–292.

Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2018). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition, 40*, 605–624. https://doi.org/10.1017/S0272263117000304

King, R. B., Sze Yeung, S. S., & Cai, Y. (2019). Personal investment theory: A multi-faceted framework to understand second and foreign language motivation. *System, 86*, 102–123.

Lam, S. F., Wong, B. P., Yang, H., & Liu, Y. (2012). Understanding student engagement with a contextual model. In *Handbook of research on student engagement* (pp. 403–419). Springer.

Lambert, C., & Philp, J. (2015). *Learner-generated content and learner engagement in L2 performance*. Symposium paper presented at the sixth international task-based language teaching conference, Leuven, Belgium.

Lantolf, J. P., & Swain, M. (2020). Perezhivanie: The cognitive-emotional dialectic within the social situation of development. In A. Al-Hoorie & P. MacIntyre (Eds.), *Contemporary language motivation theory* (pp. 80–105). Multilingual Matters.

Lee, J. S., & Hsieh, J. C. (2019). Affective variables and willingness to communicate of EFL learners in in-class, out-of-class, and digital contexts. *System, 82*, 63–73. https://doi.org/10.1016/j.system.2019.03.002

McCroskey, J. C., & Richmond, V. P. (1987). Willingness to communicate. In J. C. McCroskey & J. A. Daly (Eds.), *Personality and interpersonal communication* (pp. 129–156). Sage.

MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in L2: A situational model of L2 confidence and affiliation. *Modern Language Journal, 82*, 545–562.

MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and Social Psychology, 15*(1), 3–26. https://doi.org/10.1177/0261927X960151001

MacIntyre, P. D., & Legatto, J. J. (2011). A dynamic system approach to willingness to communicate: Developing an idiodynamic method to capture rapidly changing affect. *Applied Linguistics, 32*(2), 149–171.

Martin, A. J. (2010). Should students have a gap year? Motivation and performance factors relevant to time out after completing school. *Journal of Educational Psychology, 102*, 561–576.

Mercer, S. (2011). Dispelling the myth of the natural-born linguist. *ELT Journal, 66*(1), 22–29. https://doi.org/10.1093/elt/ccr022

Mercer, S. (2019). Language learner engagement: Setting the scene. In X. Gao (Ed.), *Second handbook of English language teaching* (pp. 643–660). Springer.

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

Mesgarshahr, A., & Abdollahzadeh, E. (2014). The impact of teaching communication strategies on EFL learners' willingness to communicate. *Studies in Second LE and Teaching, 4*(1), 51–76.

Munezane, Y. (2015). Enhancing willingness to communicate: Relative effects of visualization and goal setting. *The Modern Language Journal, 99*(1), 175–191.

Mystkowska-Wiertelak, A. (2016). Dynamics of classroom WtC: Results of a semester study. *Studies in LE and Teaching, 6*(4), 651–676.

Mystkowska-Wiertelak, A. (2021). The link between different facets of willingness to communicate, engagement and communicative behaviour in task performance. In K. Burzyńska & O. Majchrzak (Eds.), *Positive psychology in second and foreign language education* (pp. 95–113). Springer.

Mystkowska-Wiertelak, A., & Pawlak, M. (2014). Fluctuations in learners' willingness to communicate during communicative task performance: Conditions and tendencies. *Research in Language, 12*(3), 245–260.

Mystkowska-Wiertelak, A., & Pawlak, M. (2017). *Willingness to communicate in instructed second language acquisition: Combining a macro- and micro-perspective*. Multilingual Matters.

Nakata, Y. (2006). *Motivation and experience in foreign LE*. Peter Lang.

Noels, K. A. (2001a). New orientations in language learning motivation: Towards a model of intrinsic, extrinsic and integrative orientations. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 43–68). University of Hawai'i Second Language Teaching and Curriculum Centre.

Noels, K. A. (2001b). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. *Language Learning, 51*(1), 107–144.

Noels, K. A., Chaffee, K. E., Lou, N. M., & Dincer, A. (2016). Self-determination, engagement, and identity in learning German: Some directions in the psychology of language learning motivation. *Fremdsprachen Lehren und Lernen, 45*(2), 12–29.

Noels, K. A., Clément, R., & Pelletier, L. G. (1999). Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. *The Modern Language Journal, 83*(1), 23–34.

Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning, 50*(1), 57–85.

Noels, K. A., Clément, R., & Pelletier, L. G. (2001). Intrinsic, extrinsic, and integrative orientations of French Canadian learners of English. *Canadian Modern Language Review, 57*(3), 424–442.

Noels, K. A., Vargas Lascano, D. I., & Saumure, K. (2018). The development of self-determination across the language course. *Studies in Second Language Acquisition, 41*, 1–31. https://doi.org/10.1017/s0272263118000189

Noels, K., Lou, N. M., Vargas Lascano, D. I., Chaffee, K. E., Dincer, A., Zhang, Y. S. D., & Zhang, X. (2019). Self-determination and motivated engagement in LE. In M. Lamb, K. Csizér, A. Henry, & S. Ryan (Eds.), *The Pelgrave handbook of motivation for LE* (pp. 95–116). Palgrave Macmillan.

Oga-Baldwin, Q. W. L. (2019). Acting, thinking, feeling, making, collaborating: The engagement process in foreign LE. *System, 86*, 102–128.

Pavlenko, A. (2014). *The bilingual mind and what it tells us about language and thought*. Cambridge University Press.

Peng, J. E. (2012). Towards an ecological understanding of willingness to communicate in EFL classrooms in China. *System, 40*(2), 203–213.

Peng, J.-E. (2019). Understanding willingness to communicate as embedded in classroom multimodal affordances: Evidence from interdisciplinary perspectives. *Linguistics and Education, 1*, 59–68.

Peng, J.-E., & Woodrow, L. (2010). Willingness to communicate in English a model in the Chinese EFL classroom context. *LE, 60*, 834–876.

Peng, J., Zhang, L., & Chen, Y. (2017). The mediation of multimodal affordances onwillingness to communicate in the English as a foreign language classroom. *TESOL Quarterly, 51*(2), 302–331.

Pekrun, R., & Linnenbrink-Garcia, L. (2012). Academic emotions and student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 259–282). Springer.

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

Plonsky, L., & Oswald, F. L. (2014). How big is "big"? Interpreting effect sizes in L2 research. *LE, 64*(4), 878–912. https://doi.org/10.1111/lang.12079

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

Reeve, J. (2013). How students create motivationally supportive learning environments for themselves: The concept of agentic engagement. *Journal of Educational Psychology, 105*, 579–595. https://doi.org/10.1037/a0032690

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

Reeve, J., Jang, H., Carrell, D., Carrel, D., Jeon, S., & Barch, J. (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and Emotion, 28*, 147–169. https://doi.org/10.1023/B:MOEM.0000032312.95499.6f

Ryan, R. M., Connell, J. P., & Plant, R. W. (1990). Emotions in non-directed text learning. *Learning and Individual Differences, 2*(1), 1–17.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and Well-being. *American Psychologist, 55*, 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Schunk, D. H., & Mullen, C. A. (2012). Self-efficacy as an engaged learner. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 219–236). Springer.

Snyder Ohta, A. (2001). *Second language acquisition processes in the classroom: Learning Japanese*. Routledge.

Storch, N. (2008). Metatalk in a pair work activity: Level of engagement and implications for language development. *Language Awareness, 17*, 95–114.

Svalberg, A. M.-L. (2009). Engagement with language: Interrogating a construct. *Language Awareness, 18*(3–4), 242–258. https://doi.org/10.1080/09658410903197264

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

van Uden, J. M., Ritzen, H., & Pieters, J. M. (2013). I think I can engage my students. Teachers' perceptions of student engagement and their beliefs about being a teacher. *Teaching and Teacher Education, 32*, 43–54. https://doi.org/10.1016/j.tate.2013.01.004

Wang, M.-T., & Eccles, J. S. (2011). Adolescent behavioral, emotional, and cognitive engagement trajectories in school and their differential relations to educational success. *Journal of Research on Adolescence, 22*(1), 31–39. https://doi.org/10.1111/j.1532-7795.2011.00753.x

Wellborn, J. G. (1991). *Engaged and disaffected action: The conceptualization and measurement of motivation in the academic domain* (Unpublished doctoral dissertation). University of Rochester, Rochester, NY.

Wilson, R., & Dewaele, J.-M. (2010). The use of web questionnaires in second language acquisition and bilingualism research. *Second Language Research, 26*, 103–123. https://doi.org/10.1177/0267658309337640

Yan, J. X., Pan, J., & Wang, H. (2018). *Research on translator and interpreter train-ing: A collective volume of bibliometric reviews and empirical studies on learners*. Springer.

Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal, 86*(1), 54–66.

Yashima, T. (2009). International posture and the ideal L2 self in the Japanese EFL context. *Motivation, Language Identity and the L2 Self, 86*(1), 144–163.

Yashima, T., MacIntyre, P. D., & Ikeda, M. (2016). Situated willingness to communicate in an L2: Interplay of individual characteristics and context. *Language Teaching Research, 22*(1), 115–137. https://doi.org/10.1177/1362168816657851