

Second Language Learning and Teaching

Mirosław Pawlak *Editor*

Investigating Individual Learner Differences in Second Language Learning

 Springer

Second Language Learning and Teaching

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Investigating Individual Learner Differences in Second Language Learning

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Preface

Individual differences (IDs) have been consistently shown to affect both the process and product of second and foreign language (L2) learning and teaching (cf. Cohen & Henry, 2020; Dörnyei, 2005; Dörnyei & Ryan, 2015; Pawlak, 2017, 2020; Williams et al., 2015). It therefore should come as no surprise that research in this domain remains extremely robust. In fact, in addition to examining what can be regarded as traditional IDs, such as motivation, language aptitude, or language learning strategies (e.g., Lamb et al., 2020; Pawlak, 2019; Wen et al., 2017), specialists have also set their sights on a number of new factors, at least in the domain of L2 education, such as boredom, enjoyment, curiosity, or grit (e.g., Dewaele & MacIntyre, 2014; Mahmoodzadeh & Khajavy, 2019; Pawlak et al., 2020; Teimouri et al., 2020). Moreover, new theoretical perspectives have been proposed. Some of them concern the ways in which particular IDs are conceptualized, a good case in point being motivation which is now mainly investigated within the framework of the L2 motivational self system (cf. Csizér, 2020). Others pertain to the way in which ID factors are explored, which is perhaps best visible in the growing influence of complex dynamic systems theories (cf. Hiver & Al-Hoorie, 2019; Larsen-Freeman & Cameron, 2008). There have also been more and more attempts to explore interrelationships among ID factors in different contexts (e.g., Pawlak et al., 2020).

This edited collection represents yet another contribution to the burgeoning literature on the role that ID factors play in the learning and teaching of additional languages. It brings together 11 chapters reporting empirical studies conducted by scholars from different parts of the globe. Because of the diversity of the topics touched upon, the book is not divided into parts but an attempt has been made to group together chapters focusing on similar themes. The volume opens with Chapter One “[The Interrelationship of Language Learning Autonomy, Self-Efficacy, Motivation and Emotions: The Investigation of Hungarian Secondary School Students](#)” by Kata Csizér, Ágnes Albert, and Katalin Piniel, who examine the relationships among language learning autonomy, motivation, emotions, and self-efficacy in the case of secondary school students in Hungary, demonstrating that such variables are indeed related to one another. In Chapter Two “[Psychological Aspects of Self Across Contexts: A Comparison of China, Saudi Arabia, Sweden, Turkey, and the United States,](#)” Amy S. Thompson, Liss Kerstin Sylvén, Yao Liu, and Fahad

Alharbi compare the psychological aspects of self in five countries, that is, China, Saudi Arabia, Sweden, Turkey, and the United States, demonstrating that the strength of specific selves is subject to contextual variation. The next two chapters focus on the negative emotion of foreign language anxiety. First, in Chapter Three “[The Changing Nature of Foreign Language Anxiety: The Case of Individual Learners](#),” Mariusz Kruk and Joanna Zawodniak report a study which investigated changes in the levels of anxiety reported by seven Polish secondary school students over the period of 24 regularly scheduled classes. It was found that this negative emotion is characterized by temporal variation, especially in the case of learners who are generally more prone to it. Then, in Chapter Four “[Investigating Second Language Pronunciation Anxiety in the Japanese Context](#),” Harumi Kimura shifts the focus to pronunciation anxiety experienced by Japanese university students and shows on the basis of focused essays and interviews that the occurrence of this emotion is mainly driven by self-presentational concerns. In Chapter Five “[In-Class Willingness to Communicate in English Among Third Agers: Results of a Questionnaire Study](#),” Anna Borkowska examines classroom willingness to communicate among third-age language learners. Using the tool developed by Peng and Woodrow (2010), she identifies factors that enhance and hinder readiness to speak. The following two chapters are devoted to language learning strategies. In Chapter Six “[Vocabulary Learning Strategies and the Representation of L2 and L3 Words in the Mental Lexicon](#),” Teresa Maria Włosowicz explores the use of vocabulary learning strategies by multilingual university students as a function of language combination, and uses the results to shed light on the mental representation of words in a second and third language. In Chapter Seven “[Pronunciation Learning Strategies Used by EFL University Students: A Classroom-Based Investigation](#),” Sharif Alghazo investigates the employment of pronunciation learning strategies inside and outside the classroom by Jordanian university-level learners of English, showing the most frequent reliance on cognitive strategies in both contexts. The common thread running through the next three chapters are learners’ beliefs. In Chapter Eight “[Beliefs About Grammar Instruction and the Mastery of the English Passive Voice](#),” Mirosław Pawlak looks into the relationship between beliefs about different aspects of grammar instruction held by English majors in Poland and the productive and receptive facets of explicit and implicit knowledge of the English passive, offering evidence for a number of positive links between these constructs. In Chapter Nine “[Foreign Language Learners’ Pronunciation Learning Beliefs and Strategies](#),” Magdalena Szyszka also focuses on Polish university students majoring in English and explores the interface between their beliefs about pronunciation learning and the strategies they use for this purpose. Quantitative analysis showed that the relationships were positive in most cases, such as the belief concerning the value of theoretical knowledge and the use of cognitive and metacognitive strategies. In Chapter Ten “[Oral Corrective Feedback in University EFL Contexts: The Interplay Between Students’ and Teacher’s Beliefs](#),” Adelina Sánchez Centeno and María Celina Barbeito investigate the relationship between beliefs about oral corrective feedback manifested by a group of Argentinian university students and their teacher. They found that the two sets of beliefs overlapped and that the teacher was aware of the students’ emotional responses. Finally, in Chapter Eleven

“Teacher Learning in Action: Reflection on Responses to an Evidence-Based Task on Teaching English to Young Learners,” Melanie Ellis reports an action research study which was intended to raise future teachers’ awareness of how to teach reading in English as a foreign language to young learners. I am convinced that the papers included in the volume will be of interest to other researchers and provide an impetus for further research into the complex role of ID factors in L2 learning and teaching.

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The Interrelationship of Language Learning Autonomy, Self-Efficacy, Motivation and Emotions: The Investigation of Hungarian Secondary School Students



Kata Csizér, Ágnes Albert, and Katalin Piniel

Abstract It has been long acknowledged that learners' individual characteristics play decisive roles in shaping the learning process (Dörnyei & Ryan, 2015). Still, there are relatively few studies tapping into the roles of various individual difference (ID) variables in concert. Hence, the aim of the present study was to explore the relationships of secondary school students' ID variables, namely, language learning autonomy, motivation, emotions, and self-efficacy. In order to fulfill this aim, self-reported questionnaire data were collected from secondary school students in Budapest, Hungary. In the present investigation, two different data sets were analyzed and compared. In each study both learner-based and technology-based autonomy (Benson, 2011) and a number of motivational variables including contact with the English language, emotions and self-efficacy beliefs were measured. As sample sizes were small ($N = 53$ for both datasets), correlational analyses were employed to map the interrelationships among the scales. Our results indicate a higher number of strong correlations among the scales. For example, both learner-based and technology-based autonomy are strongly related to the amount of effort students invest in language learning, their selves, their self-efficacy beliefs, cultural interests, as well as a number of positive emotions pertaining to classroom learning. Based on our results, we conclude that the individual investigation of these variables in the future cannot be justified.

Keywords L2 motivation · Language learning autonomy · Positive and negative emotions

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1 Introduction

The present research study has been motivated by two main considerations, one stemming from contextual deficiencies and the other based on theoretical considerations. Despite the fact that individual difference research has been an established part of applied linguistics, and a great number of studies have been carried out tapping into the role of various ID variables in the learning process, the call for investigating these variables in concert has appeared relatively late and is still often neglected in the field (Ryan, 2020). Therefore, in the present investigation, we set out to map the interrelationships of four important individual differences variables: motivation, autonomy, self-efficacy and emotions. In terms of the contextual importance of our study, it is situated in a European context, Hungary, where despite continuous effort pertaining to language policy issues, the population is still lagging behind in foreign language knowledge in the European Union (Eurobarometer, 2012). As studies targeting language policy considerations have identified no obvious problems (Óveges & Csizér, 2018; Óveges & Kuti, 2016), more student-focused research is necessary to tackle possible issues. Our results are thought to be relevant for similar contexts, as the constellation of these variables has not been researched earlier. In addition, the multidimensional approach to operationalizing these constructs has led to a nuanced understanding of the internal structure of these learner characteristics. In this article, we will summarize the most important theoretical and empirical findings pertaining to the research of these ID variables. In the methods section, we detail the steps of the two studies presented here. As for the results, after the presentation of the descriptive analyses, detailed correlational data are presented and analyzed. Based on our results, both pedagogical and research-related implications are offered.

2 Background to the Study

2.1 *Autonomy*

The broad definition of learner autonomy provided by Holec (1981) as “the ability to take charge of one’s learning” (p. 3) was reiterated by both Little (1999) including the responsibility for students’ own learning processes and Benson (2006), referring to autonomy as learners’ ability to take charge of their own learning. As learning processes involve steps from planning the content of learning to execution, more detailed definitions take into account the various stages of these processes (Cotterall, 2000). It is usually recognized by researchers that students possess a capacity to take responsibility for their learning, and this capacity can be shaped throughout the learning process (Benson, 2011; Illés, 2012; Little et al., 2017). When classroom-learning is focused on, the responsibility of the instructors in developing and supporting autonomous language learning cannot be denied either (Benson,

2011; Everhard, 2016; Lamb, 2017; Little, 2007). In terms of teachers' responsibilities, Littlewood (1997) analyzed three types of autonomy: autonomy as a learner, autonomy as a communicator and autonomy as a person. In her critical appraisal of Littlewood's (1997) analysis, Illés (2019) pointed out that there were several issues pertaining to the universal definition and application of autonomy, such as the role of the teacher in various settings, the cultural and contextual differences as well as the expanding use of English as a lingua franca. She has concluded that "(i)ndividual autonomy in this sense should be the adaption, rather than adoption, of various conceptions of autonomy in a way which suits a particular learner at a particular stage of their language-learning process" (Illés, 2019, p. 47). One major contextual characteristic that motivated our study was the fact that in the Hungarian context learner autonomy has shown a decline in compulsory education (Albert et al., 2018a, 2018b; D. Molnár, 2014).

Empirical studies on learner autonomy usually map autonomy together with other different learner variables. For example, in the Hungarian context, autonomy was mapped in concert with L2 motivation for three age-groups (Csizér & Kormos, 2012, 2014; Kormos & Csizér, 2014). Kormos and Csizér's findings showed that there was strong correlation between L2 motivation and students' autonomous learning behavior. In terms of the direction of this relationship, structural equation modelling successfully tested the hypothesis that more motivated students would be more autonomous, too, by finding opportunities to use the language outside the classroom, managing their time better and overcoming boredom during the learning process. Researching autonomy with other ID variables, such as emotions, would be important as many students experience strong negative emotions, such as anxiety, during the learning processes (Óveges & Csizér, 2018), but there is no information how their emotions relate to autonomous learning behavior.

2.2 *Motivation*

Motivated learning behavior measures students' effort that they are willing to invest into foreign language learning. Based on Boo et al. (2015) study, we have decided to use the L2 Motivational Self System's (Dörnyei, 2005, 2009) components as the main antecedent variables impacting students' motivated learning behavior in the present study. This model includes two self-related concepts: the *ideal L2 Self* and the *ought-to L2 self*. The former subsumes students' views about themselves as competent users of the L2, while the latter measures the external pressures that students think they have to comply with. As language learning is a social enterprise, apart from self-related concepts, one cannot neglect the experience of learning the language. Hence, the third component of this model has been the *L2 learning experience*. Although the model is not without criticism (Csizér, 2020), a high number of empirical studies have proved its viability. The empirical work pertaining to this model has been detailed elsewhere (see Boo et al., 2015 and Csizér, 2020); suffice it to say at this point that its relevance has been proven in various contexts, with ideal L2 self and L2

learning experience being more prominent factors in predicting overall motivation or achievement (Al-Hoorie, 2018). This abundance of the research does not mean that there are no uncharted territories, as very little is known how the components of this model relate to other ID variables, such as emotions or self-efficacy.

Another important concept related to L2 motivation measured in the present study is students' contact experiences, that is access to the target language. Their importance is underpinned by three reasons. First, the ultimate aim of foreign language learning is communication with speakers of that language. Second, this communication can be part and parcel of the learning process. Third, learners' experience of these encounters could shape other relevant ID variables in the learning process. The investigation of contact-related issues in the L2 motivation field is rooted in the social psychological study of inter-cultural contact (Allport, 1954; Pettigrew, 1998; Pettigrew & Tropp, 2006) and has been introduced by Clément's (1980) into the field of L2 motivation. Clément and Kruidenier (1983) showed that frequent and pleasant contact experience resulted in increased linguistic self-confidence in L2 learners which, in turn, affected motivated learning behavior in a positive way. In another study, Clément et al. (2001) concluded that more frequent positive contact experiences not only led to more confident language use but also influenced the identification profiles of language learners. In the Hungarian context, Kormos and Csizér (2007) found that it is not only the amount of contact experiences that contributed to shaping students' motivation but the perceived importance attached to these contact experiences also had a direct, positive impact on motivation. The strengths of this impact for English and German measured separately with structural equation modelling almost paralleled the role of language learning attitudes (Csizér & Kormos, 2008a, 2008b, 2009).

2.3 *Emotions*

According to current views of emotions, they have an important role in helping the individual adapt to their environments (Reeve, 2009), and as such, they are instrumental for coping with fundamental life tasks such as protection, reproduction, or the exploration of the environment (Plutchik, 1980), a prerequisite for any learning. Moreover, as Izard argued (2010), emotions are considered multi-componential by many recent definitions: besides claiming that neurobiological processes play a role in forming emotions, they emphasize the role of perceptual-cognitive processes and the phenomenological aspect, the feeling itself. In line with the above, Keltner et al.'s (2014) definition was used in our study, which states that emotions are "multifaceted responses to events that we see as challenges or opportunities in our inner or outer world, events that are important to our goals" (p. 27).

There are two main approaches to categorize emotions: according to the dimensional view, all emotions can be placed along a small number of continua like arousal/activation and valence/pleasantness (Larsen & Fredrickson, 1999). Although this approach appears practical as it circumvents the problems posed by the numerous and often overlapping labels that are used for describing emotions, it also disregards

the fact that distinct emotions usually have their own predictors, lead to different behavioral outcomes, and probably serve different functions (Izard, 2007). Emotions are believed to result from a process called appraisal (Lazarus, 1991). During this two-phase process, events are evaluated according to the individual's own concerns. The first phase, primary appraisal, is an automatic, almost reflex-like process, while cognitions play an important role during the second phase, called secondary appraisal. According to Lazarus (1991), these cognitions, which are inherently attached to the feelings experienced, have a fundamental role in determining the quality of the emotions and the way they are labelled by the individual. This suggests that emotions and cognitions are interlinked; therefore, cognitions about the individual's abilities, that is, their self-efficacy beliefs, for example, might be linked to emotions.

Although in the past studying the role of emotions in language learning was mostly limited to investigating the effects of anxiety (Horwitz et al., 1991), recently researchers have started to turn their attention to positive experiences and affective states (MacIntyre & Gregersen, 2012; MacIntyre & Mercer, 2014; Oxford, 2015). Dewaele and MacIntyre (2014, 2016) were the first who highlighted the importance of the feeling of enjoyment and argued for its positive effects on language learning in line with Fredrickson's (2003) broaden and build theory. In Hungary, Piniel and Albert (2018) conducted an exploratory study attempting to map English major university students' emotions in connection with different language skills, where enjoyment and anxiety emerged as the two most frequently experienced affective states. Moreover, Albert et al. (2018a, 2018b) investigated students' feelings of enjoyment, anxiety, boredom and apathy in connection with their language classes using a representative national sample. Two age groups were compared, and the findings revealed that while 7th-graders seemed to enjoy language learning more than 11th-graders, anxiety and apathy characterized the older students more than their younger peers. Despite the growing number of investigations focusing on different emotions besides anxiety, studies covering a wider range of emotions and attempting to link them to other individual variables are still lacking; thus, our study attempts to fill this niche.

2.4 *Self-Efficacy*

Another, although less frequently investigated, yet seemingly key individual difference in terms of language learning success is learners' self-efficacy (Mills et al., 2007). According to Bandura's (1986) social cognitive theory, self-efficacy beliefs comprise "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). In the present study, these actions were related to the language learning process, and the judgements referred to generally how capable people thought they were to successfully learn a foreign language in the school context and to complete particular language-learning tasks.

It is important to note that self-efficacy beliefs constitute a cognitive construct (in contrast with, for example, self-confidence, a socially defined construct), since they

involve cognition about one's own abilities (Mills, 2014). Self-efficacy beliefs in the academic context are said to be strongly influenced by learning experiences, more precisely mastery experiences, which include perceptions of a person's own abilities based on their successes/failures; vicarious experiences, which build on perceptions of the learners' own abilities compared to the perceived abilities of peers; verbal persuasions, in the academic context usually appearing as praise primarily coming from the instructor; and the experience of physiological and emotional states (Mills, 2014). Thus, learners' thoughts about their ability to learn a foreign language can be attributed to their experiences of success, how their achievements compare to those of their peers, the feedback from their instructor, as well as the emotions they experience during the process of language learning.

As for the effect of self-efficacy on learning, Linnenbrink and Pintrich (2002), in line with Zimmerman (2000), posited that learners with higher levels of self-efficacy beliefs are more inclined to invest more effort into their own learning. This relationship between L2 motivation and self-efficacy beliefs was investigated among Hungarian foreign language learners by Piniel and Csizér (2013). The authors found that self-efficacy beliefs impacted motivated learning behavior as well as learners' level of language anxiety, while self-efficacy was influenced by language learning experiences. Because self-efficacy seldom appears in investigations on individual differences in language learning, in the present study, we not only wanted to gain insight into this construct, but also to explore its possible links with learner autonomy, motivation, including learners' contact with the English language, as well as learners' emotions.

3 Methods

3.1 *Research Questions and Design*

The following research questions were formulated to guide our investigation:

1. What characterizes secondary school students' autonomous learning behavior and autonomous use of technology, language learning motivation, emotions, and self-efficacy beliefs?
2. How can the relationships of the ID variables in the secondary school EFL context be described?

In order to answer these research questions, we designed and carried out a quantitative questionnaire study. Data was collected in the 2018–2019 academic year in two rounds from a secondary school in the capital city of Hungary, which resulted in two distinct data sets from two non-overlapping samples. The first set was gathered in January (Study 1) and the second set in May 2019 (Study 2). The two subsamples were analyzed separately due to technical reasons linked to the necessity of the

execution of the research plan submitted to the National Research, Development and Innovation Agency that provided the financial support for the study.

3.2 Participants

The sample in both Study 1 and Study 2 consisted of 53–53 learners, whose L1 was Hungarian. They all attended a secondary grammar school in Budapest, the capital city of Hungary and were students in Grade 10 and 11. The first set of data comprised 26 males and 27 females, while the second set included 31 male and 22 female learners' responses. The mean age in the first group was $M_{Sample1age} = 17.24$ years and in the second $M_{Sample2age} = 16.60$ years. The average time spent studying English as a Foreign Language was $M_{Sample1Englishlearning} = 9.2$ years in the first group and $M_{Sample2Englishlearning} = 8.8$ years in the second, which indicates that participants started learning English in primary schools. Participants in both samples can be characterized by comparable levels of English proficiency, from B1 to B2 according to the *Common European Framework of Reference* (Council of Europe, 2001). Around one third of the students in the samples had completed a complex B2-level exam at the time of the survey.

3.3 Questionnaires

Both studies utilized instruments with five-point Likert scales, where participants had to indicate the extent to which they agreed with particular statements (1 = *strongly disagree* to 5 = *strongly agree*). The questionnaire employed in Study 1 was slightly modified for Study 2 primarily in order to enhance the quality of the instrument and not all constructs were included in Study 2. As shown in this section, two scales were deleted from the second wave of data collection (*Direct contact* and *Perceived importance of contact*) due to questionnaire length considerations. In addition, items were added to some scales (*Autonomous learning behavior*, *Language learning experience*, *Cultural contact*), while for some scales, items with low item-level correlation were deleted from scales (*Autonomous use of technology*, *Hope*, *Pride*, *Anger*, *Shame* and *Apathy*). Apart from the scales, the final part of the instrument contained background questions concerning the participants' gender, age, and language learning history. The language of the questionnaire was Hungarian, the mother tongue of the participants. In what follows, we present the four groups of scales with their sources and definitions as well as sample items translated into English.

Two autonomy-related scales were used in the study that were based on Csizér and Kormos (2012):

1. *Autonomous learning behavior* (Study 1: 11 items; Study 2: 12 items): the extent to which participants are able to learn and practice English on their own

(example: “I spend more time practicing elements in English that I find difficult to understand”).

2. *Autonomous use of technology* (Study 1: 6 items; Study 2: 4 items; based on Csizér & Kormos, 2012): learners’ abilities to utilize the internet- and computer-based opportunities in order to improve their English knowledge (example: “I often use the Internet to improve my English”).

The following motivation-related scales were included in our study. They were based on Dörnyei (2005, 2009), Csizér and Kormos (2012), and Kormos and Csizér (2008):

3. *Motivated learning behavior* (Study 1: 5 items; Study 2: 5 items): the extent to which learners are ready to invest energy in their foreign language learning (example: “I can honestly say that I do everything I can to master the English language”).
4. *Ideal L2 self* (Study 1: 4 items; Study 2: 4 items): participants’ vision about their future language use (example: “When I think of my future life, I imagine myself using English regularly”).
5. *Ought-to L2 self* (Study 1: 5 items; Study 2: 5 items): what participants perceive as expectations in terms of their own language learning (example: “For all the people around me, English proficiency is an important part of general knowledge”).
6. *Language learning experiences* (Study 1: 4 items; Study 2: 5 items): participants’ experiences concerning learning English (example: “I like the activities that we do in English lessons”).
7. *Cultural contact* (Study 1: 4 items; Study 2: 5 items): learners’ perceived contact with English language cultural products (example: “I often watch films in English”).
8. *Direct contact* (Study 1: 6 items): the perceived frequency of learners’ direct contact with or use of the English language (example: “How often do you use English to speak with foreign friends?”).
9. *Perceived importance of contact* (Study 1: 6 items): the extent to which learners find it important to use English with native or non-native speakers outside the language classroom (example: “I believe it is good to speak to foreigners because I can get to know their ways of speaking, their accents and vocabulary”).

The concept of self-efficacy was measured by one scale. The selection of the items were guided by Albert et al. (2018b) and Piniel and Csizér (2013).

10. *Self-efficacy* (Study 1: 6 items; Study 2: 6 items): learners’ beliefs about their abilities to successfully learn a foreign language (example: “I believe that I can do the speaking tasks we are given during English lessons”).

A variety of positive and negative emotions related to the English lessons was assessed in our study. These scales were based on Pekrun (2014) and Pekrun et al. (2011) and were directly adopted from Albert et al. (2018a, 2018b) and Albert et al. (2020):

11. *Hope* (Study 1: 6 items; Study 2: 4 items): the extent to which learners feel hopeful about achieving success in learning English in the school context (example: “I feel hopeful about overcoming challenges in the process of learning English”).
12. *Pride* (Study 1: 6 items; Study 2: 5 items): how proud learners are of their achievements in language learning and their attained proficiency (example: “I am proud of my achievements in learning English”).
13. *Enjoyment* (Study 1: 4 items; Study 2: 4 items): the extent to which learners enjoy language learning in the school context (example: “I enjoy the topics that we discuss in English lessons”).
14. *Curiosity* (Study 1: 6 items; Study 2: 6 items): participants’ interest in learning English within the school context (example: “In English lessons, we deal with topics that arouse my curiosity”).
15. *Confusion* (Study 1: 5 items; Study 2: 5 items): the extent learners feel confused about language learning (example: “Sometimes I feel confused because I don’t understand what is happening in the English lesson”).
16. *Boredom* (Study 1: 4 items; Study 2: 4 items): the extent participants feel bored during school language lessons (example: “I get bored by the activities in English lessons”).
17. *Anger* (Study 1: 6 items; Study 2: 4 items): the extent participants feel angry related to English lessons at school (example: “It makes me angry if I can’t complete the activity that the teacher assigns”).
18. *Anxiety* (Study 1: 4 items; Study 2: 4 items): participants’ feelings of worry and frustration related to activities in English language lessons (example: “I get frustrated if I can’t understand an English-language text”).
19. *Shame* (Study 1: 6 items; Study 2: 5 items): participants’ feelings of shame related to their performance in English lessons (example: “I feel ashamed if I can’t answer a question during our English lesson”).
20. *Apathy* (Study 1: 5 items; Study 2: 4 items): learners’ feelings of hopelessness about successful language learning in the school context (example: “I feel hopeless about ever mastering English in the school”).

3.4 Data Collection Procedures and Analysis

After gaining the approval of the school principal, the questionnaires were administered in January (Study 1) and May (Study 2) 2019 respectively. The participants were ensured of the anonymity of their responses and their participation was voluntary. The data collected was recorded and subjected to analysis using IBM’s SPSS software version 20. The data was checked for normal distribution, then descriptive statistical analyses (means, standard deviations), reliability analysis using the Cronbach’s alpha coefficient and correlational analyses using Pearson correlations were conducted using parametric procedures.

4 Results and Discussion

4.1 Descriptive Analyses

First, we looked at the reliability of the scales by calculating Cronbach's alpha values, then we calculated the average scores and standard deviations for each of the scales. Concerning the individual variables in the focus of our study (i.e., autonomy, motivation, contact, self-efficacy, and emotions), all scales had an acceptable reliability coefficient of $\alpha = 0.61$ or higher (for details, see Tables 1 and 2).

Table 1 The reliability analysis and descriptive statistics of the autonomy, motivation, contact and self-efficacy scales

Scales	Study 1			Study 2		
	α	M	SD	α	M	SD
Autonomous learning behavior	0.81	3.10	0.64	0.80	3.18	0.61
Autonomous use of technology	0.82	3.84	0.71	0.63	3.60	0.83
Motivated learning behavior	0.83	3.87	0.74	0.79	3.77	0.79
Ideal L2 self	0.62	4.60	0.54	0.79	4.68	0.46
Ought-to L2 self	0.64	4.07	0.62	0.60	3.95	0.67
Language learning experiences	0.61	3.07	0.91	0.93	3.36	1.07
Perceived importance of contact	0.83	3.85	0.80	n.a	n.a	n.a
Direct contact	0.79	3.01	0.81	n.a	n.a	n.a
Cultural contact	0.66	4.63	0.65	0.64	4.67	0.51
Self-efficacy	0.94	4.04	0.78	0.92	4.07	0.81

Table 2 The reliability analysis and descriptive statistics of the emotion scales

Scales	Study 1			Study 2		
	α	M	SD	α	M	SD
Hope	0.87	4.10	0.84	0.74	4.21	0.66
Pride	0.83	3.60	0.91	0.88	3.72	0.92
Enjoyment	0.70	3.38	0.74	0.67	3.45	0.77
Curiosity	0.76	2.86	0.78	0.62	2.84	0.72
Confusion	0.84	2.67	0.66	0.70	2.29	0.75
Boredom	0.70	2.63	0.76	0.62	2.36	0.77
Anger	0.77	2.60	0.94	0.70	2.75	0.94
Anxiety	0.66	2.54	0.86	0.63	2.63	0.78
Shame	0.85	2.49	1.01	0.80	2.44	0.91
Apathy	0.84	2.23	1.00	0.78	2.22	0.95

In terms of autonomous language learning, in both samples the participants' mean scores were above 3 on a five-point Likert scale ($M_{Sample1} = 3.10$; $M_{Sample2} = 3.18$), which means that the learners in our study claimed to sometimes seek out opportunities on their own to expand their English language knowledge, but these average scores also suggest that there is still room for improvement in terms of increasing language learners' autonomy.

As regards language learning motivation, all three aspects resulted in relatively high average scores, with the ideal L2 self exhibiting the highest mean in both samples ($M_{Sample1} = 4.60$; $M_{Sample2} = 4.68$). Nonetheless, it must be noted that language learning experiences had the lowest mean in both of our studies among the motivational constructs ($M_{Sample1} = 3.07$; $M_{Sample2} = 3.36$) and the largest standard deviation ($SD_{Sample1} = 0.91$; $SD_{Sample2} = 1.07$). Among the motivational variables we measured, language learners' experiences are the most susceptible to everyday influences in and outside the classroom; therefore, the relatively low and wider spread of scores here deserve attention.

Based on the mean scores, we can say that our participants attributed high importance to contact with the cultural products related to the English language ($M_{Sample1} = 4.63$; $M_{Sample2} = 4.67$). Unfortunately, by looking at the data in the first sample, this result seems to be somewhat in contrast with the perceived direct contact that learners actually reported having with English. In fact, perceived direct contact had the lowest average among the variables measuring contact with the English language ($M_{Sample1} = 3.01$). Therefore, the notion that learners readily consume cultural products related to the English language should provide ample basis for the necessity of increasing their direct contact opportunities.

In connection with self-efficacy beliefs, participants' answers on the questionnaire showed that generally they believe they are able to complete language learning related tasks involving the different language skills ($M_{Sample1} = 4.04$; $M_{Sample2} = 4.07$). This is a promising result, as self-efficacy beliefs have been theorized to stem from language learning experiences (Mills, 2014) and have been shown to positively influence language learning motivation (Piniel & Csizér, 2013).

Concerning emotions related to learning English in the foreign language context, we found that the secondary school participants in our samples generally had stronger positive than negative emotional experiences (see Table 2). Among the positive emotions in our enquiry (hope, pride, enjoyment, curiosity), hope had the highest average score ($M_{Sample1} = 4.10$; $M_{Sample2} = 4.21$). This is an encouraging result because it further underpins the idea that the learners see knowing and using English as part of their future goals. Hope not only comprises the vision of a goal, but also a vision of the path that can lead towards reaching that goal (Snyder et al., 2002), which means that our participants are ready to take that path. Among the positive emotions, for both of our samples, curiosity seemed to have the lowest means ($M_{Sample1} = 2.86$; $M_{Sample2} = 2.84$).

As for the negative emotions that were measured (i.e., confusion, boredom, anger, anxiety, shame, and apathy), confusion appeared to have the highest average in the first sample ($M_{Sample1} = 2.67$), while the negative emotion with the highest mean in the second sample was anger ($M_{Sample2} = 2.75$). Apathy exhibited the lowest averages

in both studies ($M_{\text{Sample1}} = 2.23$; $M_{\text{Sample2}} = 2.22$), which is a logical outcome given the fact that hope (the opposite of apathy) had the highest mean score among the positive emotions.

4.2 Interrelationships of Language Learning Autonomy, Motivation, Self-Efficacy, and Emotions

Results of the Pearson correlational analyses of the two studies can be seen in Tables 3 and 4. Because of the high number of significant correlations, only those above $r = 0.50$, $p < 0.01$ are discussed here, which means the results from moderate to strong effect sizes are considered (Dörnyei, 2007). Correlations between the different scales revealed that in both of our samples, the two autonomy scales, namely autonomous use of technology, referring to the autonomous use of electronic devices and the Internet, and autonomous learning behavior, referring to students' ability to learn independently, correlated very strongly with motivated learning behavior ($r_{\text{study1}} = 0.608$, $r_{\text{study1}} = 0.709$, $r_{\text{study2}} = 0.563$, $r_{\text{study2}} = 0.776$ respectively). This finding supports the results of earlier studies which also found strong links between autonomy and language learning motivation (Kormos & Csizér, 2014). Although there were several significant correlations between components of the L2 motivational self-system, the only two correlations that reached the previously specified level were between autonomous use of technology and ideal L2 self in our first sample ($r_{\text{study1}} = 0.505$) and autonomous learning behavior and ought-to L2 self in our second sample ($r_{\text{study2}} = 0.522$). These findings might point to the importance of future self-images in promoting learner autonomy.

Having direct contact with the English language outside the classroom or having indirect contact with it through culture were strongly correlated with the autonomous use of technology ($r_{\text{study1}} = 0.686$ and $r_{\text{study1}} = 0.822$ respectively), while the perceived importance of contact was more highly correlated with autonomous learning behavior ($r_{\text{study1}} = 0.550$) in the case of our first sample (see Table 3). In our second study, we reduced the number of contact scales keeping only cultural contact, but a similarly high correlation between this scale and the autonomous use of technology could be seen there ($r_{\text{study2}} = 0.630$), as well. This might suggest that while having actual contact is related to the autonomous use of technology as technology can be used as an instrument for establishing contact, autonomous learning behavior is more strongly linked to the self-perceived importance attached to contact experiences, signifying the value assigned to those experiences by the learner.

Although correlations between both aspects of autonomy and self-efficacy were significant in our first sample, their magnitude only reached the previously specified level in the case of the autonomous use of technology ($r_{\text{study1}} = 0.633$). In our second study, this correlation was lower but still statistically significant, while the relationship between autonomous learning behavior and self-efficacy was no longer significant there. The trend identified here seems to support the existence of a link

Table 3 Correlations between language learning autonomy, motivation, self-efficacy, and emotions in Study 1

	1	2	3	4	5	6	7	8	9	10
1. Motivated learning behavior	1									
2. Ideal L2 self	0.671**	1								
3. Ought to L2 self	0.259	0.366**	1							
4. Learning experience	0.150	0.005	0.141	1						
5. Culture	0.574**	0.561**	0.212	0.058	1					
6. Perceived importance of contact	0.656**	0.514**	0.311*	0.189	0.505**	1				
7. Direct contact	0.563**	0.506**	0.226	0.232	0.643**	0.620**	1			
8. Autonomous use of technology	0.608**	0.505**	0.184	0.089	0.822**	0.482**	0.686**	1		
9. Autonomous learning	0.709**	0.379**	0.248	0.459**	0.393**	0.550**	0.454**	0.567**	1	
10. Self-efficacy	0.661**	0.508**	0.029	0.053	0.606**	0.509**	0.589**	0.633**	0.425**	1
11. Enjoyment	0.509**	0.418**	0.142	0.468**	0.297*	0.492**	0.479**	0.330*	0.590**	0.332*
12. Anxiety	-0.287*	-0.159	0.006	-0.153	-0.100	-0.157	-0.343*	-0.184	-0.081	-0.454**
13. Boredom	-0.280*	-0.208	-0.189	-0.663**	-0.167	-0.269	-0.234	-0.276*	-0.580**	-0.198
14. Apathy	-0.448**	-0.305*	-0.089	-0.608**	-0.386**	-0.475**	-0.435**	-0.445**	-0.438**	-0.525**
15. Hope	0.735**	0.662**	0.140	0.155	0.649**	0.558**	0.647**	0.696**	0.526**	0.731**
16. Pride	0.653**	0.548**	0.140	0.319*	0.543**	0.615**	0.613**	0.518**	0.566**	0.618**
17. Curiosity	0.326*	0.168	0.256	0.632**	0.165	0.299*	0.238	0.272*	0.720**	0.043
18. Confusion	-0.342*	-0.166	0.051	-0.001	-0.266	-0.150	-0.260	-0.241	-0.076	-0.533**
19. Anger	-0.143	-0.133	0.178	0.053	-0.071	-0.171	-0.281*	0.022	0.095	-0.391**
20. Shame	-0.143	-0.087	0.185	0.094	0.009	-0.161	-0.189	0.087	0.174	-0.310*

Note * $p < 0.05$, ** $p < 0.01$

Table 4 Correlations between language learning autonomy, motivation, self-efficacy, and emotions in Study 2

	1	2	3	4	5	6	7	8
1. Motivated learning behavior	1							
2. Ideal L2 self	0.362**	1						
3. Ought to L2 self	0.407**	0.380**	1					
4. Learning experience	0.041	0.124	0.115	1				
5. Culture	0.408**	0.465**	0.147	-0.104	1			
6. Autonomous use of technology	0.563**	0.379**	0.416**	-0.124	0.630**	1		
7. Autonomous learning	0.776**	0.366**	0.522**	0.030	0.338*	0.662**	1	
8. Self-efficacy	0.133	0.550**	-0.021	0.085	0.543**	0.359**	0.187	1
9. Enjoyment	0.331*	0.374**	0.441**	0.595**	0.018	0.117	0.454**	0.061
10. Anxiety	0.292*	0.061	0.365**	-0.363**	0.035	0.148	0.316*	-0.340*
11. Boredom	-0.138	-0.331*	-0.270	-0.524**	0.010	-0.041	-0.149	-0.111
12. Apathy	0.016	-0.294*	0.033	-0.657**	-0.119	0.099	0.070	-0.386**
13. Hope	0.506**	0.659**	0.202	0.168	0.560**	0.443**	0.361**	0.708**
14. Pride	0.287*	0.421**	0.089	0.144	0.387**	0.500**	0.358**	0.672**
15. Curiosity	0.115	0.258	0.269	0.671**	-0.097	-0.026	0.174	0.005
16. Confusion	-0.016	-0.303*	0.147	-0.016	-0.363**	-0.236	0.013	-0.680**
17. Anger	0.398**	0.104	0.404**	0.033	-0.004	0.077	0.390**	-0.354**
18. Shame	0.333*	0.030	0.443**	0.022	-0.208	0.108	0.315*	-0.429**

between autonomy and self-efficacy also found in other studies (Mahmoudi & Asadi, 2016; Tilfarlioglu & Ciftci, 2011); however, it suggests that the association between self-efficacy and the use of technology might be more prominent than with other aspects of autonomy.

Both aspects of autonomy were strongly associated with a number of emotions in the classroom in the case of our first sample. Hope and pride correlated very strongly with autonomous use of technology ($r_{study1} = 0.696$, $r_{study1} = 0.518$ respectively), while in the case of autonomous learning behavior, there were very strong positive links with enjoyment ($r_{study1} = 0.590$) and curiosity ($r_{study1} = 0.720$) besides hope and pride ($r_{study1} = 0.526$, $r_{study1} = 0.566$, respectively) and a very strong negative one with boredom ($r_{study1} = -0.580$). Although similar trends can be witnessed in our second sample (see Table 4), their magnitude only reached the previously specified level in the case of autonomous use of technology and pride ($r_{study2} = 0.500$). It seems that feelings of pride deriving from previous successes and feelings of hope pertaining to future achievements are especially important emotions that correlate with learner autonomy. However, since the relationships of autonomy and affect related to language learning are still an uncharted territory, further research is needed to lend support to our findings.

As regards motivated learning behavior, besides its links with autonomy, it was also strongly correlated with the ideal L2 self ($r_{study1} = 0.671$) from Dörnyei's L2 motivational self-system. These findings are not surprising in light of the fact that the ideal L2 self has often been found to be associated with L2 motivation (for an overview see Csizér, 2020). Similar trends can be observed in the case of our second study (see Table 4) although the correlations were more moderate there.

Contact also had strong links with motivated learning behavior in our first sample; this was true for direct contact ($r_{study1} = 0.563$) as well as indirect contact exemplified by culture ($r_{study1} = 0.574$). Nevertheless, the strongest correlation was detected in connection with the perceived importance of contact ($r_{study1} = 0.656$) which lends support to Kormos's and Csizér (2007) earlier claim that the perceived importance attached to the contact experiences might be just as important as the actual amount of contact experiences the students have. Cultural contact had a weaker but still significant correlation with motivated learning behavior in our second sample, as well (see Table 4).

Besides motivated learning behavior, contact scales were also very strongly associated with certain emotions: in the case of our first sample the feelings of both hope and pride correlated positively and above $r = 0.50$ with direct contact, culture, and the perceived importance of contact (for hope $r_{study1} = 0.647$, $r_{study1} = 0.649$, $r_{study1} = 0.558$, for pride $r_{study1} = 0.613$, $r_{study1} = 0.543$, $r_{study1} = 0.615$ respectively), while in the case of our second sample only hope had such strong positive correlations with culture ($r_{study2} = 0.560$). Quantity and even more so the quality of contact were found to be consistently positively related to positive emotions and negatively to negative ones in an earlier study by MacIntyre and Vincze (2017). Although they used different scales and the magnitudes of the associations found by them were more moderate, it suggests that the investigation of the relationship of contact experiences and emotions might be an area worthy of future research.

Self-efficacy was positively correlated with motivated learning behavior in the case of our first sample ($r_{study1} = 0.661$), lending support to earlier claims stating that learners with higher levels of self-efficacy beliefs are more likely to put more effort into their own learning (Linnenbrink & Pintrich, 2002; Piniel & Csizér, 2013; Zimmerman, 2000). Besides motivated learning behavior and the earlier discussed autonomy, self-efficacy also seemed to be linked with several other constructs of our questionnaire. For example, it was positively correlated with the ideal L2 self in both our samples ($r_{study1} = 0.508$, $r_{study2} = 0.550$), indicating that future self-images of success are probably rooted in cognitions about the individual's capability for language learning success in the present. Self-efficacy also had strong ties with all types of contact, for example direct contact ($r_{study1} = 0.589$), cultural contact ($r_{study1} = 0.606$) and the perceived importance of contact ($r_{study1} = 0.509$) in the case of our first sample, and with culture ($r_{study2} = 0.543$) in the case of our second. This might suggest either that self-efficacy beliefs are important prerequisites of establishing contact or that contact experiences are beneficial with regard to enhancing self-efficacy beliefs. These possibilities should be explored in further studies.

The idea that self-efficacy beliefs, which refer to cognitions regarding an individual's abilities, might be linked to emotions through the appraisal processes involved in both of them (Lazarus, 1991) seems to be supported by the fact that self-efficacy had strong correlations with several emotions tapped by our questionnaire. In the case of both of our samples, hope and pride correlated highly positively with self-efficacy ($r_{study1} = 0.731$, $r_{study2} = 0.708$; $r_{study1} = 0.618$, $r_{study2} = 0.672$ respectively), whereas it had strong negative relationships with confusion ($r_{study1} = -0.533$, $r_{study2} = -0.680$) in both cases. In our first sample, its relationship with apathy was also strongly negative ($r_{study1} = -0.525$). Although the positive relationships of self-efficacy with hope and pride and the negative ones with confusion and apathy seem intuitively appealing, these results should be confirmed via future research since this area is rather unexplored.

Emotions also need to be highlighted with regard to motivated learning behavior. Hope had very strong positive links with it in both of our samples ($r_{study1} = 0.735$, $r_{study2} = 0.506$) whereas in the case of our first sample, pride ($r_{study1} = 0.653$) and enjoyment ($r_{study1} = 0.509$) also reached our previously specified level. Emotions also had strong correlations with various components of the L2 Motivational Self System. Hope had high positive correlations with the ideal L2 self in both of our samples ($r_{study1} = 0.662$, $r_{study2} = 0.659$), while its relationship with pride only reached the previously specified level in the case of our first sample ($r_{study1} = 0.548$). As regards the ought-to L2 self, we found no significant correlations with emotions in our first sample, and although it had significant correlations in our second sample, they were all below $r = 0.50$, so they will not be discussed here. Perhaps it is not surprising that out of the three components of the L2 Motivational Self System, the learning experience seemed to be most strongly associated with emotions. The learning experience had strong positive correlations with curiosity in both of our samples ($r_{study1} = 0.632$, $r_{study2} = 0.671$) with enjoyment also reaching our previously specified level in our second ($r_{study2} = 0.595$), while boredom and apathy had strong negative links with it ($r_{study1} = -0.663$, $r_{study2} = -0.524$, $r_{study1} = -0.608$, $r_{study2} =$

–0.657 respectively). The fact that besides enjoyment so many other emotions had strong correlations with the ID constructs examined suggests that for a more refined understanding of classroom learning experiences probably a wider array of emotions should be investigated in the future, which is in line with the proposal put forward by MacIntyre and Vincze (2017) earlier.

5 Conclusion

Based on the above presented results and discussion, we can draw the conclusion that the ID scales investigated manifest intricate interrelationships and hence their isolated investigations cannot be justified in the future. It seems that when learning processes are to be investigated in the foreign language classroom, the traditional motivational and emotion-related scales should be complemented with other scales as well. Hope and pride, and in some cases curiosity, seem to be just as important if not more prominent than enjoyment. In addition, boredom, apathy and confusion had stronger links with ID variables than anxiety did in our samples. The role of both contact experiences and self-efficacy beliefs is important in shaping the positive language learning experiences and the effort students are willing to invest into foreign language learning.

As for pedagogical implications, we can say that our study has proven that the interconnected relationships of individual differences variables provide a more comprehensive picture in contrast with singling out one factor in particular. Our data and findings have led us to see that present experiences of success in language learning in the form of using technology and other resources autonomously, positive experiences with cultural contact, and associated positive emotions, especially pride, are strongly connected to language learners' future images, as embedded in motivation, in their sense of self-efficacy to be successful, and in their feelings of hopefulness. This suggests that the language learning experiences of the present are inherently tied to the future paths language learners take. The magnitude of this link should raise the awareness of language educators concerning the importance of providing learners with positive experiences, not in the mere sense of enjoyable activities, but in the sense of allowing for successes that learners can take pride in, where they can feel that they are equipped with the tools they need in order to become competent foreign language users. These experiences in the present are likely to feed into language learners' future by way of fostering feelings of hope, strengthening learners' motivation, and encouraging taking responsibility for their own learning.

No research is without limitations, and ours is no exception in this respect. The small sample sizes should remind us to be cautious when the generalizability of our results is discussed. As a follow-up, we are in the process of employing the questionnaire presented in Study 2 in a large-scale nationwide study in Hungary. In addition, we must also not forget that the above analyses were based on self-reported data that carry their own limitations. In order to counteract this problem, we are in the process of exploring the relationships described above by employing a more situated

and task-based research design in order to investigate how the abovementioned ID variables contribute to task execution in the foreign language classroom. Finally, further comparative studies between the roles of positive and negative emotions should also be welcome.

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Psychological Aspects of Self Across Contexts: A Comparison of China, Saudi Arabia, Sweden, Turkey, and the United States



Amy S. Thompson, Liss Kerstin Sylvén, Yao Liu, and Fahad Alharbi

Abstract This study reflects a culmination of survey-based data ($N = 1,177$) from 2012 to 2015 in China ($N = 468$), Saudi Arabia ($N = 149$), Sweden ($N = 206$), Turkey ($N = 191$), and the United States ($N = 195$), using the “self” components (ideal and ought-to selves) from Dörnyei’s (2009) L2 motivational self system (L2MSS). Also incorporated is an additional “self” dimension; the “anti-ought-to self,” which was first conceptualized in Thompson and Vásquez (2015) and influenced by psychological reactance (Brehm, 1966), is a self that strives for the opposite of external expectations. The study poses the following question: What is the relationship between the three psychological aspects of self and context? Using exploratory factor analyses (EFAs) to verify proposed constructs and one-way ANOVAs for group comparisons, results indicate contextual differences of selves (Thompson, 2021); as strong ideal and anti-ought-to selves have been linked to success in language learning in terms of predictive ability for proficiency (e.g., Lamb, 2012; Liu & Thompson, 2017), understanding the relative strength of these selves in a variety of contexts would help language instructors alter instructional activities accordingly. As the anti-ought-to self is a newer “self” (Thompson, 2017a, 2017b), understanding how the desire to go against social expectations varies from setting to setting (i.e., East versus West) is imperative to understanding language learning motivation.

Keywords L2MSS · Anti-ought-to self · Psychological reactance · China · Saudi Arabia · Sweden · U.S. · Exploratory factor analysis

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1 Introduction

Why do people learn languages? The reason for each individual undoubtedly depends on a number of complex personal and environmental factors. For some, language learning is done to satisfy a strong internal desire; for others, learning a language will earn them a higher salary at work. However, one aspect of language learning is common for all learners: Context affects the how and the why of the language learning process. Ushioda (2009) stated that “[c]ontext is generally defined as an independent background variable which is theorized to influence motivation, but over which learners have no control” (p. 216) and that “[t]he cross-cultural perspective is undoubtedly an interesting and valuable line of inquiry” (p. 218). Ushioda also discussed the fact that such comparative studies go for “broad brushstrokes only, so that the notion of ‘context’ is often isomorphic with national culture” (p. 218). As Ushioda discussed in relation to the person-in-context concept, it is important to realize that culture is a dynamic entity and that each person in a specific context will react to the interactions with the elements in the environment differently. Mercer (2016) discussed an idea similar to Ushioda’s by stating: “Culture is not monolithic.” Furthering this argument, Mercer explained how “[c]ontext is not an external monolithic variable” but instead is part of the system—a system that is dynamic. Regarding the oft-discussed participants in applied linguistics research, Mercer indicated that People are not situated in a context. Context is part of who they are. Given that context is an innate part of the language learner’s persona, the impetus of the current study is to address the question: “What is the relationship between the three psychological aspects of self in relation to the context?” We operationalized context as the country of origin; thus, to answer the research question, data were collected from participants learning languages in five different countries (i.e., China, Saudi Arabia, Sweden, Turkey, and the United States) to allow for a comparison of the roles of the psychological aspects of self across multiple contexts. The intent of this study was to look at the overall trends that exist when comparing the psychological aspects of self and the country of origin, while keeping in mind that each individual represents a distinct motivational profile and the fact that culture itself is continuously changing.

2 Literature Review

2.1 *The Ideal, Ought-To, and Anti-Ought-To Selves*

The motivational framework used in the current study is Dörnyei’s (2009) L2 motivational self system (L2MSS), which consists of two main aspects: (1) the psychological aspects of self (ideal and ought-to), inspired by self-discrepancy theory (Higgins, 1987) and possible selves (Markus & Nurius, 1986) and (2) the learning experience, which shapes individuals’ psychological aspects of self, based on the interactions

between individuals and the context. The ideal self has a strong imagery component, as well as a promotional aspect. Someone with a strong ideal self is motivated by an internal desire for language learning. The ought-to self has a preventional aspect, and someone with a strong ought-to self is motivated by external forces with regards to language learning.

Thompson and Vásquez (2015) proposed an additional component to the possible selves aspect of the L2MSS, the *anti-ought-to self*, which brings together both the “I” and “other” aspects of self-discrepancy theory. This dimension has characteristics of both the ideal and ought-to selves: like the ideal self, the anti-ought-to self has a promotional aspect, but like the ought-to self, external elements are the primary motivating forces. Although the anti-ought-to self is similar to the ought-to self in terms of the importance of the environment, the anti-ought-to self reacts in the opposite way in comparison to the ought-to self. Whereas someone with a strong ought-to self succumbs to the desires of external pressures (social, familiar, or others), someone with a strong anti-ought-to self is motivated to do the opposite of what these external pressures expect or demand, which is the premise of psychological reactance (Brehm, 1966). It should be noted, however, that there is not a one-to-one correlation between the anti-ought-to self and psychological reactance, particularly when reactance is being described in a clinical setting (e.g., De las Cuevas et al., 2014). One of the similarities between reactance and the anti-ought-to self is the goal-setting nature of the two. Dowd and Wallbrown (1993) state that those with high levels of psychological reactance “tend to have a great deal of confidence in their ideas and decisions and would not easily be turned from a goal they consider important” (p. 573). Similarly, those language learners with a strong anti-ought-to self would not be willing to deviate from their goal of learning a specific language, even if it seems like a challenging endeavor and/or is being implicitly or explicitly discouraged by a specific person or general negative attitudes found in a particular context. For example, someone who chooses to study Arabic in the US context (e.g., Thompson, 2017a) or Japanese in the Chinese context (e.g., Liu & Thompson,) might have a strong anti-ought-to self because of the negative connotations of these languages in these specific contexts and/or the perceived difficulty of the specific language. Another example would be for an administrative academic advisor at the university level discouraging a student from taking a language because of schedule constraints (e.g. Thompson 2017b). The student with a strong anti-ought-to self would choose to take the language anyway, even with discouragement from the advisor.

Related to the importance of context to language learning, Thompson (2017a) suggested that the environment may position the learner as submissive to external expectations (the ought-to self) or as dominant in determining what he or she should not do in response to external pressures (the anti-ought-to self). In other words, the anti-ought-to self incorporates the “I” dimension of self-discrepancy theory (much like the ideal self), as the individual pushes back against the expectations of the “other” (as opposed to being overly influenced by them, as in the ought-to self). For the language learner’s anti-ought-to self, thus, the learners themselves would

dominate over external pressures (individual = dominant). Understanding the relationship between learner and context is vital to understand language learning, as Ushioda (2009) stated: “We need to understand second language learners as people, and as people who are necessarily located in a particular cultural and historical context” (p. 216). Similarly, Thompson (2021) elaborates on the symbiotic relationship between self and context with concrete examples from language educators located in seven different countries.

2.2 *The Role of Language Learning and Motivation in a Variety of Contexts*

This study includes data from China, Saudi Arabia, Sweden, Turkey, and the United States, thus representing five distinct contexts with regards to language learning and language learning motivation. The following sections provide an overview of the language learning context in each country, the focus being on English in all countries except in the United States. Also included in these sections is a summary of language learning motivation studies carried out in the various contexts to provide background for the comparisons in each context.

2.2.1 **The Chinese Context**

In China, English is the most popular foreign language, is a mandatory subject from primary school to university and is regarded as a crucial foreign language (Hu, 2003). Its status burgeoned after the “reforms and opening-up” (改革开放) policy was implemented in 1978 and was accelerated by the designation of Beijing to be the host of the 2008 Olympic Games (Jin & Cortazzi, 2002). So important is English study that even university students majoring in subjects other than English are required to take minimally 10% of their coursework in English. Nonetheless, Cai (2010) reported that many Chinese college students are not motivated to learn English, in part because of boredom with the test-oriented EFL teaching method lacking in creativity, and the disconnect between the effort invested in learning English and the seemingly slow improvement and low achievement of their language proficiency.

Many motivation studies in the Chinese context used Gardner’s (1985) framework of integrative and instrumental motivation (e.g., Gao et al., 2007; Qin & Wen, 2002; Zhou, 1996). One work specifically relevant to the issue of context was the study by Chen et al. (2005), who found that integrativeness was not a significant motivator for Chinese learners (although it is oftentimes an important factor for studies in Western contexts). As such, Chen et al. (2005) proposed a new factor called *Chinese imperative*, referring to the “requirements that are internalized within the culturally specific context” (p. 623). Wei (2007) also indicated that Chinese English language learners’ (ELL) instrumental motivation is higher than integrative motivation, which

is different from their counterparts in western contexts. Liu (2007) indicated that 202 Chinese university ELL students had much higher instrumental motivation than intrinsic motivation. Similar results were also echoed in Yang et al.'s (2010) study.

More recent studies in China have used the L2MSS to investigate Chinese EFL motivation. For example, Magid (2012) did a comparative study between Chinese high school students and college students. He particularly emphasized that for the Chinese context researchers also need to consider cultural aspects such as familial and social obligations. A large-scale study by You and Dörnyei (2016) indicated that Chinese ELLs' motivational profiles are different from the established motivational models in Western contexts in terms of regional variations of the ideal self (not for the ought-to self); the authors concluded, however, that the L2MSS is nonetheless a relevant framework to use in the Chinese context. In the specific context of Beijing, Jiang and Dewaele (2015) longitudinally investigated 88 female learners' ideal and ought-to selves, finding that the ought-to selves fluctuated more than the ideal selves over time. Liu and Thompson (2018) with participants from three different universities in northern China found the anti-ought-to self to quantitatively emerge as a salient latent variable in an EFA, and it was (along with the ideal self), a significant distinguishing construct regarding a variety of learner variables, including the prediction of language proficiency. In the same context, Thompson and Liu (2018) examined how the three psychological aspects of self emerged differently in three different languages—English, French, and Japanese—pointing to the importance of context with regards to the psychological aspect of selves. Another L2MSS study (Zheng, 2013) highlights the importance of context in language learning. The findings indicated that the participants all created native speaker-based images for their ideal L2 selves in English, but they subsequently developed a sense of failure as non-native speakers. The findings suggest the possible conflicts between ideal selves and ought-to selves, which should be managed carefully.

2.2.2 The Saudi Context

Due to historical and geographical reasons, Saudi Arabia's linguistic landscape is dominated by Arabic (regional dialects), and English is typically the only foreign language offered in the public education system. It is offered in middle and high schools (grades 7 through 12), with students receiving four 45-min lessons a week focusing mostly on grammar and vocabulary (Moskovsky et al., 2016). Early attempts to introduce English to learners at a younger age (e.g., offering language classes to fifth and sixth graders) were blocked by the public fear that English in elementary school would affect the teaching of the Modern Standard Arabic (Al-Thubaiti, 2014). The Ministry of Education, however, started to introduce English gradually at earlier grades, first in the sixth grade, then the fifth, and finally the fourth grade in the academic year of 2013/2014. Beyond the K-12 context, Saudi universities have a mandatory one-year program (preparatory year program, PYP) for students majoring in medicine, engineering, and computer sciences. Half of the hours in these programs are dedicated to teaching English as a foreign language. For example,

preparatory year students at Qassim University have EFL instruction for 16 hours a week (for more information see PYP Study Plan, 2013). The program of study for other university majors has less focus on foreign language learning.

Several studies have examined the L2 motivation of English language learners in the Saudi context. Eusafzai (2013) conducted a study of EFL motivation among Saudi students in the PYP to account for the variability in learners' motivation. Results showed that the strongest predictors of motivation were attitudes towards learning English and instrumentality-promotion. Daif-Allah and Alsamani (2014) also studied the English learning motivation of PYP students and found that most demotivating factors were related to difficulties in coping with classroom environments and classroom assignments.

Regarding the L2MSS, Moskovsky et al. (2016) explored whether the components of the L2MSS would be good predictors of intended learning effort and actual linguistic gains with the findings showing that the L2MSS components were good predictors of the intended learning efforts but failed to predict actual gains. The authors suggested that possible extraneous factors were mediating the relationship between the L2MSS and the actual linguistic gains. In another recent study with Saudi ESL learners in the US context (Alharbi, 2017), the anti-ought-to self stood out as the main factor that accounted for most of the explained variance of the intended learning effort. Other factors, including the ideal self, were found to be less prominent. These findings suggest that ESL learners with a strong anti-ought-to self have a stronger intended learning effort and were consequently more likely to engage in learning activities. Also, in a study that examined the motivation of English language learners from Saudi Arabia, Al-shehri (2009) explored the relationship between the imagery capacity of the learners and their L2 future selves. The results confirmed the hypothesis that there is a positive relationship between these two constructs, meaning that L2 learners with stronger visual imagery and imagination had a stronger sense of EFL ideal selves.

2.2.3 The Swedish Context

Like China and Saudi Arabia, English is the most widely used foreign language in Sweden. Different from these other contexts, though, is the fact that there are ongoing heated debates as to whether it should be referred to as a second rather than a foreign language (Hyltenstam, 2004; Josephson, 2004). English is the only mandatory language to study at school and is often introduced as early as first grade. It is encountered on a daily basis in everyday life (Medierådet, 2010): English-medium TV-shows and films are subtitled, rather than dubbed, and English is used to a great extent in advertising. The level of English proficiency among Swedes is high (National Agency for Education, 2012). One factor to explain the high proficiency is the intensive exposure to English outside of the language classroom, so-called extramural English (Sundqvist & Sylvé, 2016; Sylvé & Sundqvist, 2012). This makes English relatively unique in the Swedish context, and English is more to be seen as a societal prerequisite rather than merely a foreign language, in line

with Ushioda's (2014) discussion about the emerging view on English as a twenty-first century basic skill (see also Graddol, 2006). Motivation to study English is, in general, very high among Swedes, so studies comparing the motivation of English compared to other languages are important. In an attempt to investigate possible effects of English studies on learners' motivation to study other foreign languages, Henry (2014) interviewed learners ($N = 21$) of L3 Spanish and German. The study clearly shows the need for L3 learning pedagogies to take into account the strong, and sometimes detrimental, influence L2 English may have on L3 studies because of strong preference given to English language learning.

In an effort to boost motivation for language learning of languages other than English among students in high school, in 2006 the Swedish government decided to reward studies of a third language (L3) with extra credit points, which in turn would have a positive effect on the possibilities of entering higher education. Henry (2017) investigated the effects of these extra credits on learners' ($N = 6$) motivation to study French. The results of this interview-based study indicated that for three of the students, whose basic motivation was intrinsic and/or self-determined extrinsic, the extra credits had little or no impact. For the other three, however, the extra credits were the sole source of motivation for their continued French studies. It was clear, though, for these three students, that upon graduation from high school, they would not continue their study of French.

In studies related to content and language integrated learning (CLIL) and motivation in the Swedish context, Sylvén and Thompson (2015) investigated the role of L2 English in CLIL and non-CLIL contexts. It was shown that the CLIL students were significantly more motivated than the non-CLIL students on a number of motivational factors, as measured by the *Motivational Factors Questionnaire* (MFQ; Ryan, 2009) before they started CLIL. A repeated administration of the MFQ almost three years later showed that the only significant interaction for group (CLIL) and time was with anxiety. As had been shown previously, CLIL students exhibited lower levels of anxiety already at the start of their CLIL experience (Thompson & Sylvén, 2015), and they continued to be so after their three years of CLIL. Furthermore, it was seen that CLIL students were less ethnocentric, and, interestingly, also less fond of English than they were at the beginning of CLIL. The fact that they liked English less at the end of high school is explained by the fact that it had become an everyday occurrence, and the novelty of using English had worn off.

2.2.4 The Turkish Context

Historically, what is now the country of Turkey has always been marked by cultural and linguistic diversity, and is part of what is known as “the cradle of civilization” and as a centralized part of the former Ottoman Empire. That being said, today, most people in Turkey speak Turkish as their mother tongue, and Turkish is the official language of the country (Topbaş, 2011). English is the most popular foreign language to study in the Turkish context, with German being a far second (Eskicumali & Türedi, 2010). As in China, English is used as a link to those outside of Turkey: “On

an interpersonal level, it is used as a link language for international business and for tourism while also providing a code that symbolizes modernization and elitism to the educated middle classes and those in the upper strata of the socioeconomic ladder” (Doğançay-Aktuna, 1998, p. 37). The increased focus on language education in recent years in Turkey is in part because of increased efforts to abide by the standards of the European Union and gain membership in the future (Alptekin & Tatar, 2011). Currently, compulsory English language instruction begins in the fourth grade, and there are several one-year preparatory intensive English instruction programs that are mandatory to gain admission to the competitive English-medium undergraduate programs. There are several highly-ranked English medium universities in Turkey (Selvi, 2011), but English is not used prevalently in society on a daily basis, as is the case in Sweden.

Regarding language learning motivation in the Turkish context, several studies have shown the relationship between motivation and Turkish EFL learners’ language learning achievement (e.g., Engin, 2009; Şakiroğlu & Dikilitaş, 2012). Engin (2009) found learners to have both instrumental and integrative motivation and stated that those with integrative motivation tended to put more effort into their coursework, concluding that this internal desire corresponds to the ideal self component of the L2MSS. Bektaş-Çetinkaya and Oruç (2010) made a similar comparison of Gardner’s model and the L2MSS: the reinterpretation of integrative motivation as the desire to “integrate into the international community” (ideal self) and instrumental motivation as an “investment in global market” (ought-to self) (p. 4664). The impact of various individual differences on motivation and achievement (Engin, 2009; Gömleksiz, 2010; Şakiroğlu & Dikilitaş, 2012; Şen & Şen, 2012; Üstünel & Samur, 2009) was previously a common theme of motivation studies in the Turkish context. Studies involving teachers’ perspectives of language learning motivation (Deniz, 2010; İnceçay, 2011) was also a common theme, the most recent study being Erdil-Moody (2016), who worked with English teachers in Turkey to teach motivational strategies to be implemented in the classroom by the teachers themselves. The teachers who took part in the project volunteered to participate in two workshops. The first was an overview of the theoretical aspects of the L2MSS and the second was an overview of Magid and Chan (2012), discussing the ideas of how activities formed from the tenets of the L2MSS can be successfully integrated into the language learning classroom. Her results indicated that the workshops increased the teachers’ motivational strategy use, and that the students in their English classes were overall more motivated and happier.

In a more recent study using the L2MSS, Thompson and Erdil-Moody (2016) collected data from 159 bilingual and multilingual L1 Turkish EFL learners, using two different operationalizations of multilingualism: (1) experience with more than one FL, irrespective of the amount (2) perceived positive language interaction (PPLI), an emic perspective of multilingualism, operationalized by the learner perception of the positive interactions between second or foreign languages (see Thompson, 2016a, for details). Both operationalizations of multilingualism resulted in significant group differences for the ideal self, but not for the ought-to self.

2.2.5 The US Context

Unlike the other contexts in this study, English is the primary language used on a daily basis in the US, although the 2011 Census Bureau survey indicated that about 21% of people in the US speak a language other than English at home. Whereas English is by far the most commonly studied foreign language in many countries around the world, the US does not have a default foreign language to study. Taking that into consideration, Spanish is currently by far the most commonly studied foreign language in this context, perhaps because of the large Spanish-speaking population in this context (about 62% of those who spoke a language other than English at home indicated that they were Spanish-speakers). According to the MLA database, 790,756 post-secondary students were studying Spanish in fall 2013, whereas 771,423 students were studying all other languages combined (Goldberg et al., 2015). However, there is a wide range of languages to choose from in terms of foreign language study, especially at the university level.

There are surprisingly few motivation studies carried out with learners of languages other than English (LOTEs) in the context of the US. Those studies that have been carried out oftentimes have a focus on heritage language learners (Oh & Nash, 2014; Xie, 2014), language learning technology (Cai & Zhu, 2012), or study abroad (Martinsen et al., 2014). The aforementioned Thompson and Vásquez (2015) study in which there was the inception of the anti-ought-to self, analyzed the motivation of adult learners of Chinese, German, and Italian in a US setting; however, these participants were not currently enrolled in language courses at the time of the study. Using the L2MSS framework, Thompson (2017b) investigated university language learners in the US context and found different motivational profiles for different languages studied. For example, students of Spanish had the lowest level of anti-ought-to self motivation; the explanation of the relatively prevalent nature of Spanish in this context was given for this finding. In this same context, Huensch and Thompson (2017) looked at the relationship of the psychological aspects of self and attitudes towards pronunciation. Among other findings, these authors found correlations between the ideal and anti-ought-to selves and the desire to improve pronunciation. Given that many universities in the United States require a minimum amount of language study, there are many opportunities for research in this context.

3 The Study

This study is an inquiry into a cultural comparison of the psychological aspects of self of the L2MSS, and the overarching research question is “What is the relationship between the three psychological aspects of self and context?” Data from participants from China, Saudi Arabia, Sweden, Turkey, and the United States were used for the ideal and ought-to self analyses, and data from the American and Chinese contexts were used in the anti-ought-to self analysis. The anti-ought-to self was first proposed by Thompson and Vásquez (2015), and later elaborated in several of Thompson’s

later works. As this newly proposed latent variable did not exist at the beginning of the data collection period of some of these contexts, there is only anti-ought-to self data from the participants in the Chinese and US contexts. As such, an additional and separate analysis of the Chinese and U.S. data were performed. These results are an overview (i.e., broad brushstrokes) of the different contexts, which is the first step to further comparative studies of the L2MSS from a cultural standpoint.

3.1 Participants, Data Collection, and Instruments

Data for the current study were collected from 2010 to 2016 and data collection in other contexts is ongoing. This manuscript is one of several as part of a larger research project on language learning motivation, classroom anxiety, attitudes towards pronunciation, multilingualism, and a variety of other learner variables. Thus, for each context, the overall data collection instrument varied somewhat; however, each instrument contained a motivation questionnaire component. For the current analysis, only the data from the motivation questionnaire (items regarding the ideal, ought-to, and anti-ought-to selves) were used. In most cases, the entire survey took about 30 min to complete via Survey Monkey (www.surveymonkey.com). In all cases other than for data collection in the US, the entire survey was translated into to the L1 of the context—Arabic, Chinese, Swedish, and Turkish—and was presented to the participants as a bilingual questionnaire (i.e., the items were presented in both English and the first language, and the participants could use either language for the open-ended items). The forced-choice motivation items were primarily 6-point Likert-scale items (1 = *strongly disagree*; 6 = *strongly agree*). There were also open-ended items at the end of the motivation questionnaire where the participants could further elaborate on their language learning motivation, although responses to the open-ended items were not analyzed for the current study. The ideal ($N = 10$) and ought-to self ($N = 10$) items are from Dörnyei and Taguchi (2010) and the anti-ought-to self items ($N = 11$) from Thompson and Liu (2018)/Liu and Thompson (2018). All participants responded to ideal and ought-to self items. Participants in the Chinese and US contexts additionally responded to the anti-ought-to self items. Table 1 provides samples of the questions used; all motivation questions can be found in the appendix. The italicized words in the items were not italicized in the original questionnaire but are here to emphasize the key components of the selves.

All participants were enrolled in university courses at the time of the study. The only requirements to participate were that the students had to be over 18 years old and had to have studied at least one foreign language before or during the data collection period. For all five contexts, there were two to three times more females than males who filled out the survey. Additionally, the majority of the participants in each context were in their late teens and early twenties; however, there were a few participants in each context who were 30 and older. The context with the lowest number of older participants was the Saudi context with only 2.5% of the participants 30 or over; the context with the highest number of participants 30 and over was the Swedish context

Table 1 Sample items from the motivation questionnaire

Self construct	Sample items
Ideal self	I can <i>imagine</i> a situation where I am speaking this language with foreigners I can <i>imagine</i> myself speaking this language with international colleagues
Ought-to self	I consider learning this language important because the <i>people I respect</i> think that I should do it If I fail to learn this language, I'll be <i>letting other people down</i>
Anti-ought-to self	I enjoy a <i>challenge</i> with regards to learning this language I am studying this language because it is something <i>different or unique</i>

Table 2 Summary of participant numbers

Country of origin	Number of participants
China	468
Saudi Arabia	149
Sweden	206
Turkey	191
United States	195
Total	1209

with 23.6%. The other three contexts had approximately 10% of the participants age 30 and older.¹ Table 2 summarizes the number of participants in each context.

Two separate groups of analyses were performed for the current study, both of which included exploratory factor analyses (EFAs) for factor determination and ANOVAs for the comparison of the context. The EFAs were performed using the maximum likelihood extraction method and the oblique direct oblimin rotation method. Because anti-ought-to self data were only collected in Chinese and US contexts, two separate analyses were necessary. The first EFA was performed with data from the ideal and ought-to self items from the 1209 participants from the five contexts and the second EFA was performed with ideal, ought-to, and anti-ought-to self data from the 663 participants from the Chinese and US contexts. The 20 ideal and ought-to self items were adopted from Dörnyei and Taguchi (2010), and have been used in a number of studies. The 11 anti-ought-to self items were written based on the concept psychological reactance (Brehm, 1966). Interview data from Thompson and Vásquez (2015), focus groups with students, and conversations/suggestions at conferences were all used to inform item creation. The items were piloted with small samples with discussions of the items afterwards, per the rigorous norm of questionnaire item development (Dörnyei & Taguchi, 2010). For both EFA analyses, the internal reliability of the factors (Cronbach’s alpha) were 0.8 or higher, indicating

¹ Readers interested in obtaining more detailed information about the participants may refer to the following works: China (Liu & Thompson, 2017); Saudi Arabia (Alharbi, 2017); Sweden (Thompson & Sylvén, 2016); Turkey (Thompson & Erdil-Moody, 2016); United States (Huensch & Thompson, 2017; Thompson, 2017b).

high internal reliability of the factors. The exact Cronbach's alpha values are indicated in the visual representations of the scree plots. The ANOVA for the five group comparison violated the assumption of homogeneity of variance for both the ideal and ought-to self (i.e., Levene's statistic was significant); thus, Dunnett T3 post-hoc tests were carried out. For the Chinese and US group comparison for the three selves (ideal, ought-to, and anti-ought-to), the assumption of homogeneity of variance was met.

4 Results

4.1 Comparison of Five Contexts

Before doing a context comparison, an EFA with ideal and ought-to self data from participants from China, Saudi Arabia, Sweden, Turkey, and the US was performed to investigate whether or not the motivational structure of foreign language students from five countries would result in two factors of the ideal and ought-to selves. The sample size was satisfactory, as demonstrated by the Kaiser–Meyer–Olkin (KMO) value of this EFA (0.930). The items included in the final factor solution had eigenvalues greater than one and loading values of 0.3 or greater, which are the desired values for EFA analyses. In the first EFA, two items, that is, “The things I want to do in the future require me to use English” (ideal self) and “My parents believe that I must study English to be an educated person” (ought-to self) did not load with a value of 0.3 or higher and were thus removed. During the second EFA, the ought-to self item, that is, “Studying English is important to me because an educated person is supposed to be able to speak English” did not load at a 0.3 value and was eliminated. The final factor solution resulted in 17 items, explaining 66.82% of the total variance. Percentage variance and Cronbach's alpha values are shown on the scree plot in Fig. 1. The final factor solution is in Table 3.

The items that loaded onto the ideal and ought-to self factors were averaged to obtain a factor score for each participant. Using nationality as the group variable, one-way ANOVAs were performed with the ideal and ought-to self factors, using Dunnett T3 post-hoc tests. The ANOVA results were significant for both self factors: ideal self ($F[4, 1204] = 46.44, p < 0.001$); ought-to self ($F[4, 1204] = 54.26, p < 0.001$). Table 4 provides the means and standard deviations to help with the interpretation of Fig. 2. Tables 5 and 6 provide the summary results of the post-hoc tests for the ideal self (Table 5) and the ought-to self (Table 6).

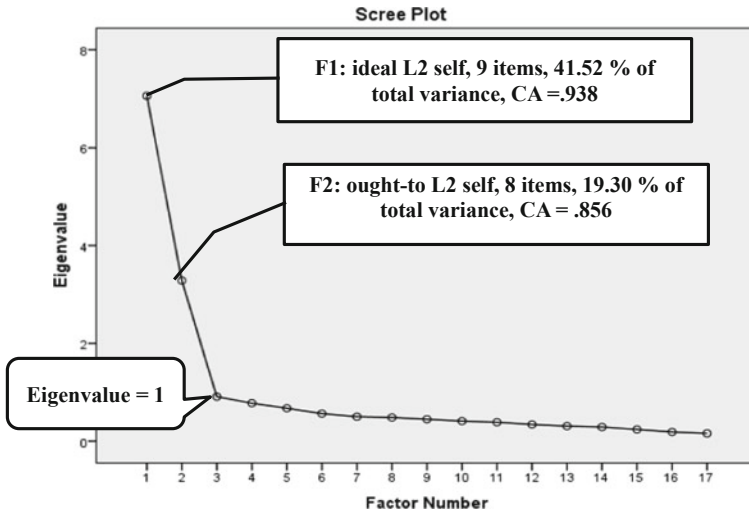


Fig. 1 Scree plot with factors, variance, and Cronbach’s alphas

4.2 Comparison of China and the US

Before doing a context comparison, an EFA with ideal, ought-to, and anti-ought-to self data from participants from China and the United States was performed to investigate the emergent factors. The KMO value of this EFA was 0.931, indicating a satisfactory sample size. The items included in the final factor solution had eigenvalues greater than one and loading values of 0.3 or greater. After the initial EFA five items were removed because of loading value and cross-loadings: three anti-ought-to self items, that is, “I want to prove others wrong by becoming good at English,” “I want to speak English because it is not something that most people can do,” and “I am studying English because I want to stand out amongst my peers and/or colleagues,” and two ought-to self items, that is, “I study this language because close friends of mine think it is important” and “Studying English is important to me because other people will respect me more if I have knowledge of English.” The ideal and ought-to self factor results were very similar to the five country comparisons. As can be seen in Table 7, there was also an emergent anti-ought-to self in this analysis. The final factor solution resulted in 26 items, explaining 53.53% of the total variance. Percentage variance for each factor and Cronbach’s alpha values are shown on the scree plot in Fig. 3. The final factor solution is in Table 7.

The items that loaded onto the ideal, ought-to, and anti-ought-to self factors were averaged to obtain a factor score for each participant. As the ANOVA results of the ideal and ought-to selves were discussed in the previous section, only the anti-ought-to self results are reported in this section. Using nationality as the group variable, a one-way ANOVA was performed. The ANOVA result was not significant for the anti-ought-to self when comparing language learners from China and the US: $F(1,$

Table 3 EFA for ideal and ought-to selves for China, Saudi Arabia, Sweden, Turkey, and the United States

	Factors		
	1	2	<i>h</i> ²
<i>Factor 1: ideal self</i>			
I can imagine myself speaking English ^a with international colleagues	0.903		0.795
I can imagine a situation where I am speaking English with foreigners	0.895		0.764
I can imagine myself living abroad and using English effectively for communicating with the locals	0.880		0.715
I can imagine myself living abroad and having a discussion in English	0.824		0.661
I imagine myself as someone who is able to speak English	0.819		0.669
I can imagine myself writing English emails/letters fluently	0.815		0.650
I can imagine speaking English as if I were a native speaker of English	0.740		0.569
I can imagine myself studying in a university where all my courses are taught in English	0.715		0.512
Whenever I think of my future career, I imagine myself using English	0.573		0.477
<i>Factor 2: ought-to self</i>			
I have to study English, because if I do not study it, I think my parents will be disappointed with me		0.830	0.631
If I fail to learn English, I'll be letting other people down		0.789	0.602
I consider learning English important because the people I respect think that I should do it		0.725	0.541
Studying English is important to me in order to gain the approval of my peers/teachers/family/boss		0.724	0.515
Learning English is necessary because people surrounding me expect me to do so		0.723	0.503
I study this language because close friends of mine think it is important		0.518	0.274
Studying Eng. is important to me because other people will respect me more if I have knowledge of Eng		0.489	0.356
It will have a negative impact on my life if I don't learn English		0.333	0.230

Note ^aIn the questionnaire for the US context, “English” was replaced with “this language” for all items

Table 4 Means and standard deviations of the ideal and ought-to selves

Country	Ideal self		Ought-to self	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
China	4.17	1.10	3.23	1.00
Saudi Arabia	5.25	0.70	4.19	1.10
Sweden	5.14	0.84	2.70	0.97
Turkey	4.23	1.51	3.13	1.18
United States	4.48	1.12	2.75	1.06

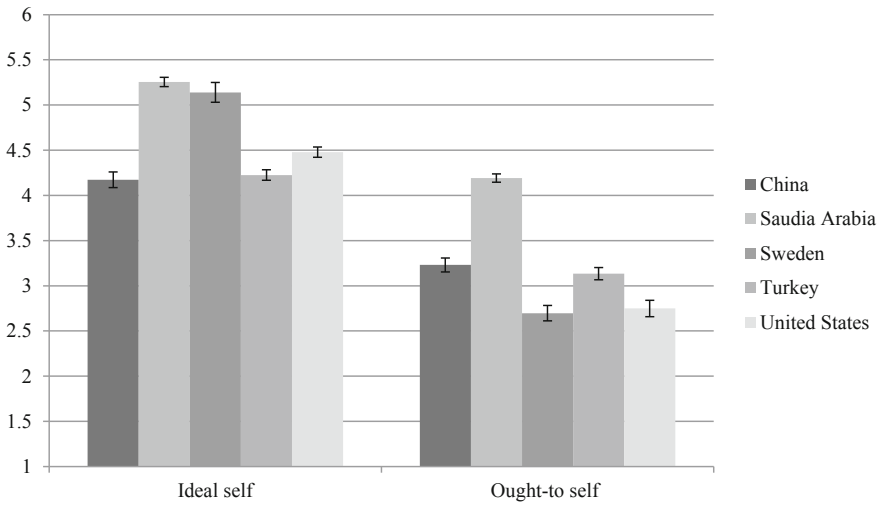


Fig. 2 Pictorial representation of the ideal and ought-to self means

Table 5 Summary post-hoc ANOVA results for ideal self

	China	Saudi Arabia	Sweden	Turkey	United States
China	—	$p < 0.001$	$p < 0.001$	$p = 1.00$	$p = 0.025$
Saudi Arabia		—	$p = 0.830$	$p < 0.001$	$p < 0.001$
Sweden			—	$p < 0.001$	$p < 0.001$
Turkey				—	$p = 0.512$
United States					—

Table 6 Summary post-hoc ANOVA results for ought-to self

	China	Saudi Arabia	Sweden	Turkey	United States
China	—	$p < 0.001$	$p < 0.001$	$p = 0.978$	$p < 0.001$
Saudi Arabia		—	$p < 0.001$	$p < 0.001$	$p < 0.001$
Sweden			—	$p < 0.001$	$p = 1.00$
Turkey				—	$p = 0.009$
United States					—

Table 7 EFA for ideal, ought-to, and anti-ought-to selves for China and the United States

	Factors			<i>h</i> ²
	1	2	3	
<i>Factor 1: ideal self</i>				
I can imagine myself speaking English ^a with international colleagues	0.905			0.776
I can imagine myself living abroad and using English effectively for communicating with the locals	0.905			0.731
I can imagine a situation where I am speaking English with foreigners	0.900			0.735
I can imagine myself living abroad and having a discussion in English	0.833			0.608
I can imagine speaking English as if I were a native speaker of English	0.650			0.583
I imagine myself as someone who is able to speak English	0.642			0.618
I can imagine myself writing English emails/letters fluently	0.602			0.614
I can imagine myself studying in a university where all my courses are taught in English	0.526			0.371
Whenever I think of my future career, I imagine myself using English	0.429			0.381
The things I want to do in the future require me to use English	0.391			0.445
<i>Factor 2: ought-to self</i>				
I have to study English, because if I do not study it, I think my parents will be disappointed with me		0.804		0.601
If I fail to learn English, I'll be letting other people down		0.760		0.560
Studying English is important to me in order to gain the approval of my peers/teachers/family/boss		0.669		0.475
Learning English is necessary because people surrounding me expect me to do so		0.649		0.391
My parents believe that I must study English to be an educated person		0.632		0.390
I consider learning English important because the people I respect think that I should do it		0.538		0.352
Studying English is important to me because an educated person is supposed to be able to speak English		0.513		0.390
It will have a negative impact on my life if I don't learn English		0.504		0.290
<i>Factor 3: anti-ought-to self</i>				
I want to study English, despite other(s) telling me to give up or to do something else with my time			0.681	0.473
I am studying English even though most of my friends and family members don't value foreign language learning			0.636	0.337

(continued)

Table 7 (continued)

	Factors			<i>h</i> ²
	1	2	3	
I chose to learn English despite others encouraging me to study something different (another language or a different subject entirely)			0.534	0.319
In my English classes, I prefer material that is difficult, even though it will require more effort on my part, as opposed to easier material	0.349		0.472	0.504
I would like to reach a high proficiency in, despite others telling me that it will be difficult or impossible	0.359		0.449	0.498
I am studying English because it is something different or unique			0.437	0.297
I enjoy a challenge with regards to English learning	0.398		0.410	0.453
I am studying English because it is a challenge			0.368	0.160

Note ^aIn the questionnaire for the American context, “English” was replaced with “this language” for all items

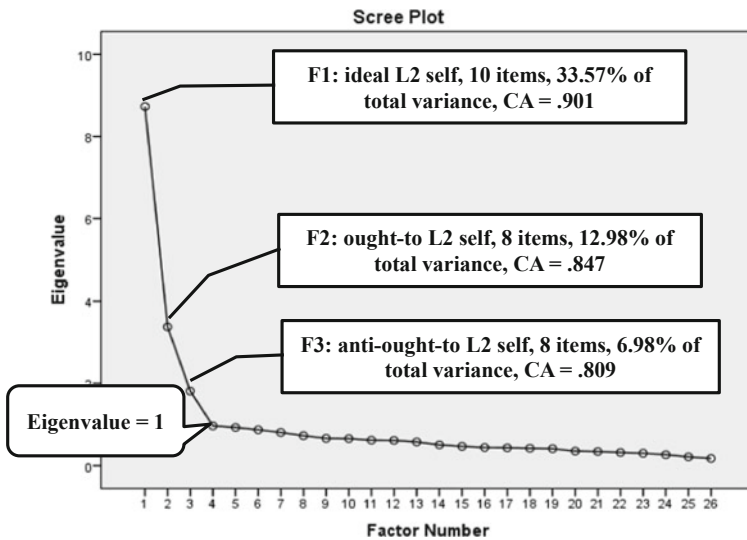


Fig. 3 Scree plot with factors, variance and Cronbach’s alphas

661) = 0.011, *p* = 0.981. Table 8 provides the means and standard deviations to help with the interpretation of Fig. 4. The ideal and ought-to selves are included in Fig. 4 to provide a more complete picture of the comparison between the sense of selves in these contexts.

Table 8 Means and standard deviations of the anti-ought-to self for the American and Chinese contexts

Country	Anti-ought-to self	
	<i>M</i>	<i>SD</i>
China	3.55	0.98
United States	3.54	1.08

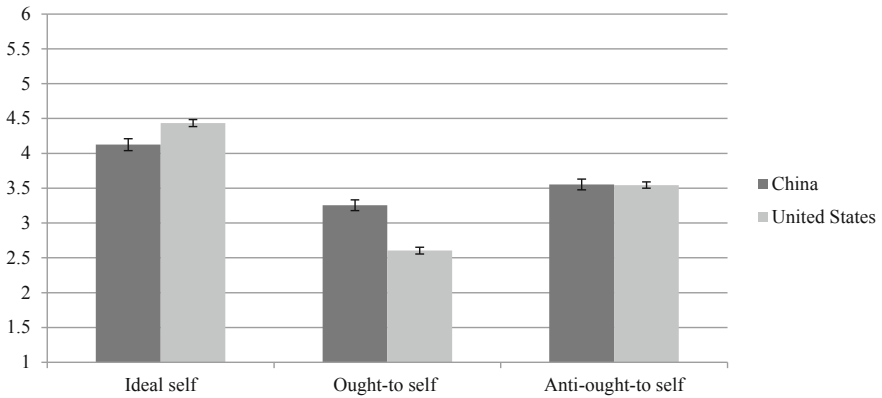


Fig. 4 Pictorial representation of the ideal, ought-to, and anti-ought-to self means

5 Discussion

5.1 Implications for the Ideal Self

When looking at the different results of the psychological aspects of self in the various contexts, a variety of cultural differences can help explain the group differences and non-differences. The ideal self of language learners in Turkey is similar (almost identical) to that of learners in China. This could be explained by the sharing of an Eastern culture, in which family responsibilities are similar (e.g., Hassan et al., 2010). At the same time, however, the ideal selves of the students in Turkey are similar to those of students in the United States. Although this result might seem contradictory, Turkey is commonly known as a place where “East meets West.” The similarity to the ideal selves of students in the US context could have to do with the “Western” thinking promulgated by Atatürk, which influences the ideals of most educated Turks. The difference between the ideal selves of the Turks and the Swedes could potentially be because of the overall lack of interaction with foreigners in the Turkish context. This rationale could also be used to explain the difference in the ideal selves of the students in the Swedish and US contexts.

Interestingly, the ideal selves of the Swedes and Saudis are similar but, ostensibly for different reasons. Swedish students have experienced many of the items firsthand because of the prevalence of English in society (“I imagine myself using English to

talk to foreigners”). The Saudi students in this participant pool were mostly English majors, which is different from the participants of other nationalities. Because of this, they could also perhaps imagine these situations. Additionally, Saudi society is characterized as having a collective culture, in which individuals are pressured to conform to social norms. As pointed out by Dwairy and Achoui (2006), “the collective and authoritarian (tight or uncertainty-avoidant) culture does not appreciate autonomy but rather considers it a threat to the harmony of the collective” (p. 223). According to these authors, Saudi Arabia “has remained more collective and authoritarian and seems to be discouraging Western influences on the people’s social and political life” (p. 224). Participants in this culture feel obliged to project a “sanctioned” self-image. In this mono-cultural conservative society (Al-Zahrani, 2016), where these projected self-images are orally circulated in the active Saudi social life, individuals tend to assign greater significance to their social images and create vivid and elaborate future selves, and as cited earlier, Al-Shehri (2009) found that individuals with stronger imagery capacity were likely to have stronger ideal selves. This relationship with imagery and culture in Saudi Arabia could explain the high ideal selves of the Saudi students.

Differences between the ideal selves of learners in the Chinese and US contexts might be explained by differences in language learning foci in the classroom. For example, Cai (2010) stated that many Chinese students are frustrated by a lack of creativity in the English classroom in which there is typically more a focus on grammar exercises. While the grammar knowledge obtained is useful, these types of activities do not allow for future-based imagery with regards to the target language. The Chinese students are different from Swedish students possibly because of the same reason as with the students in the Swedish versus Saudi contexts; similarly to the Saudi context, those in the Chinese context could lack firsthand experience with the questionnaire items in real life.

5.2 Implications for the Ought-To Self

Turkish and Chinese students have almost identical mean scores for the anti-ought-to self. This result is perhaps not surprising as both cultures have strong ties with those in the environment, especially with regard to family expectations. Both Turkey and China could be described as “We” (collective) cultures versus “I” (individualistic) cultures of the West. But why would the Chinese and Turkish ought-to selves be different from those of the Saudi students? Lamb (2012) stated that the ought-to self “might be more relevant in Asian or Arab cultures where young people have shown themselves to be more susceptible to the influence of significant others” (p. 1002), which is a sentiment also discussed in Kormos and Csizér (2008) when they did not find significant results for this construct with their learners in Hungary.

The students in Swedish and US contexts have a similar ought-to self, but likely for different reasons. Relatively speaking, when comparing the US and Swedish contexts, it is reasonable to say that whereas learners of English in Sweden are more

likely to need English to be successful in careers or to travel for work or pleasure, it is less likely that learners of foreign languages in the US would need those languages to be successful in those areas. The general sentiment in Sweden is often the idea that so few people speak Swedish; of course Swedes should speak other languages to communicate internationally, to work with international colleagues, or to travel to warmer climates during the long, dark winter. There is no sense of “obligation” (i.e., ought-to self) if learning English is a regular part of life.

The Saudi students’ ought-to self is significantly higher than those in all other contexts. The reason is likely multifaceted. There is a relatively new (and strong) governmental push for everyone to learn English (Al-Thubaiti, 2014). Also, many private sector jobs require their employees to speak both English and Arabic. This is similar to the situation in Sweden, but the English-learning tradition is older in Sweden than in Saudi Arabia. Perhaps in the future, English language learning will be as integrated into the Saudi culture as it is into the Swedish. Finally, enrollment in prestigious university programs in Saudi Arabia requires a functioning knowledge of English, which could also add to the pressure to learn.

5.3 Implications for the Anti-Ought-To Self

Quantitatively, there have only been two contexts investigated with regards to the anti-ought-to self: China and the US. A comparison of these contexts found no significant difference in the mean scores of the anti-ought-to self; further examining the contexts and the construct could provide some speculative answers. For example, it is possible that the anti-ought-to self exists in most, if not all, language learners because of the challenge involved in the language learning process. Further research in additional contexts is needed to test this idea, including incorporating more subtleties when looking at the data; for example, the anti-ought-to self acts differently in the models predicting proficiency for the learners in Chinese and US contexts. Liu and Thompson (2018) showed that both the ideal self and the anti-ought-to self positively predicted proficiency in language learners in China (the ought-to self has a significant inverse relationship). However, Thompson (2016b) found that only the ideal self predicts proficiency in foreign language learners in the US. These diverse results in terms of the predictive power of the anti-ought-to self illustrate the different roles it might have in these two contexts.

Alternatively, there could be a different explanation for the similar anti-ought-to self mean scores in both contexts. For example, Americans are known for operating with more of an individualistic mindset; thus, the existence of an anti-ought-to self (i.e., going against what is expected) is not surprising. In the Chinese context, one possibility is that the relatively strong ought-to self could have triggered the anti-ought-to self. In other words, Chinese students are expected to react in concordance with the expectations of family and society. In terms of language learning, it is possible that exposure to English-speaking cultures via the language could have awakened a sort of rebellious attitude in these Chinese language learners, although

further exploration of this idea is needed. That being said, the overall mean scores for learners in both contexts are relatively neutral, leaning towards positive. It is possible that it is not as useful to look at overall means for the anti-ought-to self construct, as it is more susceptible to subtle environmental interactions. The results do have a concrete conclusion: The similarity found with the anti-ought-to self in the Chinese and US contexts goes against the idea of psychological reactance existing primarily in Western societies (Laurin et al., 2013).

6 Conclusions

As in any study, there are limitations of the current work. In a large-scale quantitative study, such as this one, the broad strokes, or trends, are presented and discussed. A nuanced discussion of participant differences was not included, due to space limitations. More information on the qualitative short answer data is provided in context-specific publications using this data, and readers are encouraged to refer to those publications for more information on the specific contexts and other data collected and analyzed. Additionally, it is important to remember that generalizations made from the participant data in this study should not be assumed to account for all individuals who reside in the contexts in question. With a combination of smaller-scale qualitative research that provides details about contexts and participants and large-scale quantitative data that reports on trends, a more complete picture of motivational profiles in specific contexts can be realized.

These results are not meant to be the definite answers to the roles of the psychological aspects of self in these five contexts. Understanding the relative strength of these selves in a variety of contexts would help language instructors alter instructional activities accordingly. The results related to the anti-ought-to self only included two contexts; thus, this feature in particular requires further exploration. As the anti-ought-to self is a newer “self,” understanding how the desire to go against social expectations varies from setting to setting (i.e., East versus West) is an important aspect of language learning motivation. A variety of contexts need to be more thoroughly investigated in order to better understand the functionality of the L2MSS around the world. A specific focus on motivation to learn languages other than English (LOTEs), is an area ripe for exploration, as much of the current motivation literature focuses on English as the point of inquiry. Further exploration and development of the anti-ought-to self would particularly help to understand why speakers of English as a first language choose to study the LOTEs that they do (Dörnyei & Al-Hoorie, 2017). As Ushioda (2009) pointed out, the results of the current study give us “broad brushstrokes” in terms of the idiosyncratic nature of the different contexts, but broad brushstrokes are needed to first cover the canvas before filling in the details of the painting.

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The Changing Nature of Foreign Language Anxiety: The Case of Individual Learners



Mariusz Kruk and Joanna Zawodniak

Abstract The paper reports on the findings of a classroom-based study whose main purpose was to investigate changes in the levels of foreign language anxiety among individual language learners over the course of several weeks. The participants were seven senior high school learners. More precisely, there were four learners who tested high and three who tested low on language anxiety. The study encompassed 24 naturally occurring English lessons. The data were gathered by means of a background questionnaire, the *Foreign Language Classroom Anxiety Scale* (FLCAS; Horwitz et al., 1986), anxiety grids, evaluation sheets and lesson plans. The collected data were analyzed quantitatively. The results of the study provided evidence that levels of foreign language anxiety reported by the participants were subject to change during a single class and from one lesson to another, particularly in the case of the learners who tested high on anxiety. Also, possible reasons accountable for the changes in the levels of anxiety are discussed.

Keywords Foreign language anxiety · Changes in FLA · Individual learners

1 Introduction

Anxiety as one of the affective variables often referred to as an enormous barrier to L2 learning occupies a significant position in second language acquisition (SLA) research (Horwitz & Young, 1991; Horwitz et al., 1986; MacIntyre & Gardner, 1989, 1994; Ohata, 2005). Anxiety is one of the best documented and most widely examined phenomena in psychology and education (Horwitz, 2001; Riasati, 2011), which is by no means surprising, given that it affects at least one-third of all language students reporting that they have experienced it with different degrees of intensity at different points of the learning process (Horwitz et al., 1986; MacIntyre, 1995a;

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Horwitz, 2000; Price, 1991). Anxiety as a factor seriously hindering L2 learner performance cannot be, however, as easily eliminated from the language classroom as was proposed by the humanistic approaches of the 1970s, comprising Suggestopedia, Community Language Learning or the Natural Approach (Horwitz et al., 1986), which is due to its extremely dynamic, complex and multifaceted character (Pawlak, 2011). Various authors (e.g., Campbell & Oritz, 1991; Cope-Powell, 1991; Horwitz et al., 1986) tend to distinguish between the concepts of *anxiety* per se and *foreign language anxiety* (FLA), which, because of students' limited L2 competence entailing problems with speaking in front of others, is thought to be an exceptionally face-threatening experience (Gkonou, 2011). Different researchers reveal anxiety as interfering with various areas of SLA (MacIntyre & Gardner, 1991), including individual difference variables (self-esteem, self-confidence) (Gardner et al., 1997; Horwitz, 2001; Onwuegbuzie et al., 1999) and classroom-related factors, such as performance and achievement (Aida, 1994), not to mention teachers themselves (Briesmaster & Briesmaster-Paredes, 2015). The influence of anxiety may fluctuate depending on individual learners and learning environments (Gkonou, 2013), which is why it escapes unambiguous and unanimously confirmatory analyses. The present paper is an attempt to shed additional light on foreign language anxiety by reporting a quantitative study of seven senior high school students' perceptions of high vs. low anxiety situations.¹ The empirical part is preceded by literature review focused on the exceptional nature of FLA in SLA and selected studies.

2 Literature Review

2.1 On the Uniqueness of Anxiety in SLA

It was not until the mid-1960s that researchers began to pay attention to anxiety as interfering with L2 learning and L2 performance (Chastain, 1975; Kleinmann, 1977). Consequently, they began to refer to L2 students' feelings of uneasiness, fear, paralyzing shyness or frustration as language anxiety, which was conceptualized as a combination of three intertwined components, namely *communication apprehension*, which results from students' difficulty in expressing mature thoughts, *fear of negative evaluation*, which is connected with students' need to positively impress their interlocutors, and *test anxiety*, which arises from the apprehension about having to undergo academic evaluation (MacIntyre & Gardner, 1989, 1991). Of these three components, communication apprehension is the most frequently underlined, ego-threatening problem faced by L2 students who experience a mental block against speaking in pairs or groups (i.e., *oral communication anxiety*) or in front of a larger audience (i.e., *stage fright*), or against listening to spoken information (i.e., *receiver*

¹The analysis is part of a wider project exploring FLA changes reported by Polish senior high school students over the course of one semester with a view to investigating causes of such changes (Kruk, 2018).

anxiety) (Horwitz et al., 1986). Although Horwitz et al. (1986, p. 128) agree that communication apprehension, fear of negative evaluation and test anxiety conceptually contribute to a comprehensible description of foreign language anxiety, they go a step further defining it as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” compared to other academic anxieties. Correspondingly, the L2 learning environment appears to be particularly conducive to anxiety arousal (Price, 1991) as students find themselves in an inauthentic situation when they have to non-spontaneously produce utterances or sentences in the language that has not been mastered yet and when they realize that what they will say and how they will perform will be subject to others’ evaluation based on the unknown linguistic and socio-cultural criteria. This is what challenges their self-concept as communicative language users and what, therefore, increases their forgetfulness, reticence, distractibility and avoidance of complex structures or reluctance to volunteer answers and participate in oral activities. These psychological symptoms of anxiety, coupled with physiological reactions, such as sweating, freezing or palpitations (Crookall & Oxford, 1991; Horwitz et al., 1986; MacIntyre & Gardner, 1994), lead to L2 student inconvenience and bring about further feelings of dread and uncertainty (Gkonou, 2013).

Three major sources of FLA can be identified, relating to the learner (e.g., beliefs about language learning), the teacher (e.g., beliefs about language teaching) and the instructional practices (e.g., classroom procedures, language testing) (Young, 1994). For example, L2 students’ belief that they are expected to produce error-free utterances and sentences is very likely to enhance the state of tension and uneasiness which may, in turn, culminate in compulsive, L2 performance impairing behaviors like overstudying or class skipping (Horwitz et al., 1986). When discussing the cause-and-effect aspects of anxiety, attention needs to be paid to the *linguistic coding differences hypothesis* (Ganschow et al., 1994; Sparks & Ganschow, 1991), in light of which anxiety results from rather than causes poor achievement deriving from subtle L1 learning deficits. This stance was, however, firmly questioned in defense of a position that language anxiety can exist independently of language difficulties (Horwitz, 2000; MacIntyre, 1995a, 1995b).

2.2 Previous Research into Anxiety

Over the last three decades foreign language anxiety has attracted a lot of empirical attention, so it is hardly a surprise that there are quite a few lines of inquiry into this construct. They will be commented on below, with a special regard to the studies examining the dynamics of anxiety which is of crucial importance for the present paper.

Researchers (e.g., Woodrow, 2006) seek to investigate such issues as, for instance, the relationship between anxiety and language attainment (e.g., Woodrow, 2006), anxiety and enjoyment in the L2 classroom (e.g., Dewaele & MacIntyre, 2014),

anxiety and language learning strategy use (e.g., Pawlak, 2011), anxiety and learning deficits (e.g., Sparks & Ganschow, 1991) or the components of oral classroom anxiety and L2 speaking fluency (e.g., Gkonou, 2014). However, it would be an oversimplification to state that the impact of anxiety is limited to speaking activities (MacIntyre, 1995a; Onwuegbuzie et al., 1999). Different authors (e.g., Cheng et al., 1999; Kim, 2000; Sellers, 2000) regard foreign language reading, writing or listening anxiety as distinguishable from general foreign language classroom anxiety and as exerting a negative, both affectively (lowered self-concept) and cognitively (poor text recall) oriented, influence on L2 learner work.

Recently, the research into anxiety has taken a new direction, shifting its focus towards changes in the levels of FLA and thus highlighting it as a complex, dynamic construct. For example, Campbell's study (1999), involving students at the military language institute two weeks before the course and two weeks after it, revealed the relationship between the intensity of reading anxiety and gender. The results obtained from the study conducted by Chuo (2007) over the period of fourteen weeks, aimed at investigating the effect of the WebQuest Writing Instruction Program on the Taiwanese EFL students' writing production, showed their writing apprehension levels as significantly decreasing with time. The study conducted by Gregersen et al. (2014), with reliance on the physiological, idiodynamic interview and self-report survey data derived from three high and three low anxiety language students, revealed a connection between anxiety scores and variations in physiological responses. Mahmoodzadeh's study (2015), intended to examine temporal variations of the in-class anxiety and the dynamic peer orientation of foreign language classroom anxiety (FLCA) perceived by the Iranian students, uncovered a link between the dynamicity of FLCA and intra-individual/inter-individual variations. The study conducted by Kruk (2016) investigated fluctuations in the level of anxiety, alongside motivation and boredom, experienced by a group of English majors during their visits to the virtual world of *Second Life* over the period of one semester. The findings showed a successive increase in the levels of boredom and motivation, whereas those of anxiety remained stable over time. In his next study, Kruk (2018) explored the dynamics of FLA experienced by the senior high school students. Collected data uncovered fluctuations in the respondents' levels of FLA observed both during single lessons and from one lesson to another. The researcher also identified the most anxiety-provoking factors which included written tests and traditional, coursebook-based grammar exercises as opposed to Internet-supported grammar activities.

3 The Study

3.1 Aims and Research Questions

The general aim of the wider project was to investigate the changes in the levels of FLA reported by a group of Polish senior high school students over the course of

Table 1 Levels of foreign language anxiety reported by the individual learners and the whole group

	Level of foreign language anxiety	Standard deviation ^a	Range ^b
Student A	128	1.02	4
Student B	117	0.79	2
Student C	114	1.35	4
Student D	106	0.93	4
Student E	73	1.05	4
Student F	78	0.86	3
Student G	84	0.56	2
Class ($n = 20$)	93.9	14.69	58

^aThe range is the difference between the lowest and the highest score (Dörnyei, 2007, p. 214)

^bThe standard deviation is the measurement of the spread of the data (Larson-Hall, 2010, p. 66)

one semester with a view to understanding causes of such changes. The purpose of the current study was to investigate changes in levels of FLA as reported by seven individual students who tested high on language anxiety (i.e., they reported high levels of FLA on the *Foreign Language Classroom Anxiety Scale* (FLCAS)) and three participants who tested low on anxiety (i.e., they reported low levels of FLA on FLCAS) (for details see Section 3.2). In addition, the study investigated factors affecting FLA fluctuations. It was the belief of the present researchers that the focus on individual students would provide an in-depth description of the issues in question. More specifically, the study was guided by the following research questions:

1. What is the extent to which levels of FLA reported by individual students change during a single lesson and from one lesson to another?
2. Are there any differences in these levels between students who test high on anxiety and learners who test low on anxiety?
3. What factors are accountable for these changes between students who test high on anxiety and learners who test low on anxiety?

3.2 Participants

The participants of the study were seven pupils selected from a class of 20 senior high school learners enrolled in the second year of a 4-year program. Four of these pupils tested high and three tested low for language anxiety. The level of the participants' anxiety was measured by means of the FLCAS (Horwitz et al., 1986). The data included in Table 1 show each individual score and the whole group's total score on the FLCAS²:

²It has to be noted that one learner who tested low on anxiety had to be excluded from this analysis due to his absence from numerous lessons.

The participants (i.e., the seven students who tested high and low for anxiety) were 17-year-old male students. Their command of the English language and their own self-assessment of English proficiency were rather poor; however, the students who tested high for anxiety (i.e., Students A, B, C and D) proved to be even weaker in this respect. The same can be said about these learners' self-assessment of their motivation for learning English (see Table 2). In addition, the students pointed to the need to learn English in order to get a job in the future and they claimed that they had to learn it because it was a mandatory subject at school. Finally, it should be noted that all the participants of the study had two English lessons per week.

3.3 *Procedures, Data Collection Instruments and Analysis*

The study was conducted over a period of several weeks and it comprised 24 naturally occurring English lessons. The learners were taught by one of the authors who was their regular English teacher. They were taught by means of a coursebook and some of the language tasks were completed by the students online. The lessons were conducted in a similar manner. Thus, a typical English lesson began with checking a homework assignment and/or verifying the learners' knowledge by asking them questions with regard to the material covered in previous lessons. The students' homework and/or their answers were assessed by the teacher and the students received grades. Next, the teacher presented and explained a new topic. After that, the participants practiced the new material by performing a variety of language tasks. They usually worked individually, in pairs and in small groups. At the end of the lesson, the teacher summed up the most important points of the class and set a new homework assignment.

The following data collection tools were utilized in the course of the study: *a background questionnaire, the FLCAS, foreign language anxiety grids, evaluation sheets and lesson plans.*

- the background questionnaire—its main purpose was to obtain insights into the study participants' learning history, favorite language skills and subsystems, their motivation, etc.; it was completed by the learners at the beginning of the study;
- the FLCAS—the tool was developed by Horwitz et al. (1986); the scale was used to assess the degree to which the subjects felt anxious in a foreign language classroom; FLCAS is a well-known and frequently used instrument, the validity and reliability of which has long been recognized; the scale included 33 statements in the form of a Likert scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*); the students' responses on the FLCAS were scored in such a way that higher scores indicated higher anxiety (scores were added up); the original version of the instrument was translated into Polish (this was done in order to avoid potential misunderstandings due to the students' low level of proficiency); the Polish version of the tool was piloted with students who did not participate in

Table 2 The participants of the study

	Years of studying English	Mean semester grade in English	Self-assessment of English proficiency	Language skills/subsystems				Self-assessment of motivation
				Most favorite	Least favorite	Easy to study	Difficult to study	
Student A	10	3	3	speaking	grammar	speaking	grammar	4
Student B	7	2	1	writing	listening	writing	grammar	4
Student C	7	2	2	grammar	vocab	grammar	vocab	4
Student D	5	2	2	vocab	grammar	vocab	pronunc	4
Student E	7	3	4	speaking	writing	vocab	grammar	5
Student F	7	3	3	speaking	listening	writing	listening	6
Student G	11	3	3	pronunc	vocab	writing	vocab	5
Class (<i>n</i> = 20) Mean SD/Range	7.55 2.17/7	2.55 0.60/2	2.60 0.94/3	speaking	grammar	vocab	grammar	4.40 1.14/5

this study; the internal consistency of the tool was established for all the students by calculating Cronbach's alpha, which equaled 0.83;

- the foreign language anxiety grid—it was designed to measure the students' level of language anxiety during a single English lesson; the students were requested to self-rate their anxiety every ten minutes (i.e., four times) on a scale ranging from 1 (the lowest) to 7 (the highest) in response to a sound; the learners' responses were scored in such a way that higher scores showed higher anxiety; the value of Cronbach's alpha for the instrument amounted to 0.95;
- the evaluation sheet—its main aim was to provide data related to the study participants' evaluation of their feelings of anxiety in a particular lesson; the tool was completed by the learners at the end of each class; the learners were asked to respond to four items involving a semantic differential scale (*sure* vs. *unsure*, *relaxed* vs. *tense*, *stressed out* vs. *calm*; *confident* vs. *worried*); the participants' responses were scored in such a way that higher scores indicated higher anxiety; the instrument was similar to a seven-point Likert scale; the value of Cronbach's alpha was 0.95;
- the lesson plans—their purpose was to provide information concerning the lessons (e.g., stages, modes of work, tasks performed by the subjects).

The data collected by means of these instruments were mainly analyzed quantitatively. Descriptive statistics in the form of means, standard deviations and ranges were calculated for some of the items in the background questionnaire, the foreign language anxiety grid and the evaluation sheet. In the case of FLCAS, scores were added up, standard deviation and range values were computed. Shifts in FLA were juxtaposed with lesson plans to identify language activities, modes of work and phases of a lesson that generated different FLA levels.

4 Results

The description will first concentrate on students who tested high for anxiety, and then on learners who tested low for FLA. First, overall changes in the levels of FLA in all lessons will be offered for each individual. In view of the fact that the overall changes in each learner's levels of FLA may not always reflect those related to FLA trajectories of individual lessons, only the most pronounced fluctuations in the levels of FLA of one class will be presented.³ Finally, each student's evaluation of the classes will be given.

³It should be noted that due to space limitations this can only be done on the basis of one randomly selected lesson.

Table 3 Descriptive statistics for the changes in the levels of FLA during all lessons (overall)

	min10	min20	min30	min40
	Mean / Standard deviation / Range			
Student A	5.18 / 0.64 / 2	4.82 / 0.73 / 3	4.71 / 0.85 / 4	4.35 / 0.86 / 3
Student B	6.05 / 1.27 / 4	4.74 / 1.33 / 4	4.16 / 1.21 / 5	3.84 / 1.17 / 5
Student C	4.00 / 1.95 / 5	3.33 / 1.80 / 5	3.05 / 1.66 / 5	3.10 / 1.81 / 6
Student D	5.87 / 1.22 / 4	4.22 / 1.13 / 4	3.70 / 0.97 / 5	3.61 / 0.99 / 5

4.1 *Students Who Tested High for Anxiety*

4.1.1 Student A

In general, the mean values included in Table 3 show that Student A reported a steady decrease of anxiety from minute 10 to minute 40 (the difference in the mean scores equaled 0.83). The analysis of the data showed that the levels of anxiety varied during single classes. For example, Student A declared the highest levels of FLA in the first half of lesson 6 (i.e., minutes 10 and 20; 5 and 4 points on a 1–7 scale; students' questioning; description of a picture; pair work).⁴ Then a sudden decrease in the level of anxiety was observed in the second half of this lesson (i.e., minutes 30 and 40; 2 points; writing; pair work). The drop was quite substantial and equaled 3 points (on a scale of 1–7) when compared with the highest value (i.e., 5 in minute 10).

As can be seen in Table 4, the student's evaluation of the lessons varied. During lessons 16 (short test, vocabulary, grammar), 11 (test) and 21 (grammar) Student A experienced the most anxiety. Conversely, in lessons 10 and 14 the student felt quite relaxed. During these lessons the learners were requested to work with a dialog and perform a set of online grammar exercises (pronouns) respectively.

4.1.2 Student B

As can be seen in Table 3, the values of the mean demonstrate that, generally, Student B experienced the highest levels of anxiety at the beginning of the lessons and the lowest at the end of the classes (the difference in the mean amounted to 2.21). The analysis of all the lessons demonstrated that the most visible changes in the levels of FLA occurred in lesson 5 (revision of grammar) and lesson 13 (grammar). For example, the student experienced the highest levels of anxiety in the first 10 minutes of lesson 5 (7 points on a scale of 1–7; students' questioning) and then his level of FLA decreased suddenly in minute 20 (4 points; grammar activities; individual work). The participant reported a steady level of anxiety from minute 30 to minute 40 (3 points; grammar activities; individual work). The decrease in the level of FLA

⁴A short description of relevant lessons (e.g., the minutes, the levels of FLA in points on a scale of 1–7, the teacher's and students' actions, activities, etc.) are offered in parenthesis.

Table 4 Descriptive statistics for the students' overall evaluation of all lessons

Lesson	Student A	Student B	Student C	Student D
	Mean / Standard deviation / Range			
1	n/a*	3.14 / 0.38 / 1	5.86 / 0.69 / 2	3.86 / 0.38 / 1
2	4.29 / 0.49 / 1	3.14 / 0.38 / 1	4.57 / 0.53 / 1	3.86 / 0.69 / 2
3	n/a	n/a	3.14 / 0.38 / 1	4.29 / 0.49 / 1
4	3.57 / 0.53 / 1	5.00 / 1.41 / 3	3.00 / 0.00 / 0	3.43 / 0.53 / 1
5	4.57 / 0.53 / 1	4.71 / 0.49 / 1	3.00 / 0.00 / 0	3.57 / 0.53 / 1
6	4.29 / 0.49 / 1	3.14 / 0.38 / 1	4.29 / 0.76 / 2	3.71 / 0.49 / 1
7	3.29 / 1.11 / 3	3.14 / 0.90 / 3	6.00 / 0.00 / 0	3.14 / 0.90 / 3
8	n/a	3.57 / 1.13 / 3	2.14 / 0.38 / 1	3.86 / 1.07 / 2
9	4.00 / 0.58 / 2	n/a	2.00 / 0.00 / 0	3.57 / 0.79 / 2
10	2.86 / 0.69 / 2	3.29 / 1.70 / 4	2.86 / 0.69 / 2	4.43 / 0.53 / 1
11	5.29 / 0.49 / 1	4.00 / 0.00 / 0	4.43 / 0.53 / 1	4.29 / 0.95 / 2
12	n/a	5.86 / 0.38 / 1	n/a	4.57 / 0.79 / 2
13	3.86 / 0.69 / 2	2.00 / 1.83 / 5	2.00 / 0.00 / 0	4.29 / 0.76 / 2
14	2.57 / 1.27 / 3	3.29 / 0.76 / 2	1.29 / 0.76 / 2	3.57 / 0.53 / 1
15	3.57 / 0.53 / 1	3.71 / 0.95 / 2	2.71 / 0.76 / 2	4.00 / 1.00 / 2
16	6.14 / 2.27 / 6	n/a	6.14 / 0.38 / 1	5.43 / 0.53 / 1
17	n/a	n/a	n/a	n/a
18	n/a	4.71 / 0.49 / 1	4.29 / 0.76 / 2	3.86 / 0.38 / 1
19	n/a	1.86 / 0.69 / 2	n/a	3.71 / 0.76 / 2
20	4.14 / 0.38 / 1	n/a	2.00 / 0.00 / 0	3.29 / 0.76 / 2
21	5.00 / 1.53 / 4	3.86 / 0.90 / 2	5.86 / 0.90 / 3	3.86 / 0.90 / 2
22	4.14 / 0.69 / 2	3.71 / 1.11 / 3	1.71 / 0.49 / 1	3.71 / 0.76 / 2
23	3.71 / 0.76 / 2	3.43 / 0.53 / 1	2.00 / 0.00 / 0	3.00 / 0.00 / 0
24	4.00 / 0.00 / 0	2.71 / 0.76 / 2	4.57 / 0.53 / 1	3.57 / 0.53 / 1

* Indicates the student's absence

was considerable and amounted to 4 points when compared with the highest value (i.e., 7 in minute 10).

When it comes to the student's assessment of the lessons, it was also diverse (see Table 4). The learner was the most anxious in lessons 4 (listening, reading, vocabulary), 5 (revision of grammar), 12 (grammar) and 18 (revision of grammar). On the contrary, the student's evaluation of lessons 13 (grammar), 19 (reading, vocabulary, speaking) and 24 (grammar) showed that the he did not experience much anxiety.

4.1.3 Student C

As far as the changes in the levels of FLA during the lessons are concerned, on the whole, the participant experienced the most anxiety in minutes 10 and 30 and the least in minute 40 (see Table 3). The biggest difference in the mean (i.e., between minutes 10 and 30) is tantamount to 0.95. The detailed analysis of the data related to all the lessons showed that throughout lessons 1 (grammar), 15 (listening, grammar) and 21 (grammar) the student reported the largest changes in the levels of FLA. For example, the learner felt most anxious at the very start of lesson 15 (5 points on a scale of 1–7; students' questioning). Then his level of anxiety dropped by 3 points (minute 20; listening comprehension; individual work) and it increased a bit in minute 30 (3 points; online grammar activities; individual work) only to fall again in minute 40 (1 point; online grammar activities; individual work).

As can be inferred from Table 4, the student was rather diverse in his evaluation of the lessons. The participant felt very anxious during lessons 1 (grammar), 7 (grammar), 16 (short test, vocabulary, grammar) and 21 (grammar). In addition, the student felt quite comfortable in lessons 9 (revision of grammar), 20 (listening, speaking), 22 (dialog) and lesson 23 (grammar).

4.1.4 Student D

The values of the mean scores revealed that, in general, the learner reported the highest and the lowest levels of FLA in the first and second half of the lessons respectively (see Table 3). The difference in the mean between minutes 10 and 40 equaled 2.26. A closer investigation of the gathered data revealed that the most noticeable changes in the levels of FLA happened in as many as seven lessons, that is, lesson 6 (speaking and writing), 7 (grammar), 13(grammar), 16 (short test, vocabulary and grammar), 19 (reading, vocabulary, speaking), 21 (grammar) and 23 (grammar). An interesting pattern of the changes in the levels of FLA was observed in lesson 19. The highest level of anxiety was detected in minute 10 (7 points; checking homework). Then it fell suddenly in minute 20 (3 points; reading a text; individual work). Finally, the levels of FLA rose a bit in the last part of the lesson (i.e. minutes 30 and 40; reading and vocabulary activities; speaking).

When it comes to the learner's evaluation of the classes, it also varied (see Table 3). During lessons 3 (grammar), 10 (dialog), 12 (grammar), 13 (grammar) and 16 (short test, vocabulary, grammar) the subject experienced the most anxiety but he felt quite relaxed in lessons 7 (grammar), 20 (listening and speaking) and 23 (grammar).

It should also be noted that the learners were very dissimilar in reporting the levels of FLA they experienced during the lessons (although Student A was more uniform in that regard). This is indicated by high values of the standard deviation and the range (see Table 3). It is also interesting to observe that two students, that is, Student A and Student B, as opposed to Student C and Student D, displayed more diversity in their evaluations of the lessons as indicated by high values of the measures of dispersion (see Table 4).

Table 5 Descriptive statistics for the changes in the levels of FLA during all lessons (overall)

Student	min10	min20	min30	min40
	Mean / Standard deviation / Range			
Student E	2.10 / 1.09 / 4	1.48 / 0.68 / 2	1.10 / 0.30 / 1	1.19 / 0.40 / 1
Student F	1.35 / 0.61 / 2	2.47 / 0.72 / 2	1.18 / 0.39 / 1	1.65 / 0.49 / 1
Student G	1.52 / 0.67 / 2	1.13 / 0.34 / 1	1.13 / 0.63 / 3	1.00 / 0.00 / 0

4.2 Students Who Tested Low for Anxiety

4.2.1 Student E

The mean values included in Table 5 demonstrate that, on average, the student declared a relatively steady and low level of anxiety from minute 10 to minute 40 (the biggest difference in the mean scores between minutes 10 and 30 equaled 1 point). In addition, the analysis of all the lessons showed that the levels of anxiety reported by the learner were subject to some changes in lessons 19 (reading, vocabulary, speaking) and 24 (grammar). For example, the subject was the most anxious at the beginning of lesson 24 (minute 10; 4 points on a scale of 1–7; checking homework) and then the level of anxiety reported by the subject dropped quite suddenly and remained low until the end of this class (i.e., 2 points in minute 20; 1 point in minutes 30 and 40). The main part of lesson 24 focused on grammar activities related to comparing people and objects.

As far as the subject's evaluation of the lessons is concerned, he felt less comfortable during lessons 17 (listening and speaking) and 23 (grammar) (see Table 6).

4.2.2 Student F

According to the numerical data included in Table 5, overall, Student F reported the highest level of FLA in minute 20 and the lowest in minutes 30 and 10. The biggest difference in the mean scores was observed between minutes 20 and 30 and amounted to 1.29. The analysis of the data showed that in 11 lessons the levels of anxiety varied to some extent throughout the whole classes. It concerned lessons: 3 (grammar), 10 (dialog), 11 (grammar), 14 (grammar), 15 (listening and grammar), 17 (listening and speaking), 18 (grammar), 19 (reading, vocabulary, speaking), 20 (listening and speaking), 23 (grammar) and 24 (grammar). For example, the learner reported the lowest levels of FLA in lesson 14 in minutes 10 (1 point; checking homework) and 30 (1 point; online grammar activities; individual work) and the highest ones in minutes 20 (3 points; grammar: coursebook activities; individual work) and 40 (2 points; online grammar activities; individual work). It should be noted, however, that the difference between the highest and the lowest levels of FLA was small and equaled 2 points.

Table 6 Descriptive statistics for the students' overall evaluation of all lessons

Lesson	Student E	Student F	Student G
	Mean / Standard deviation / Range		
1	2.29 / 0.49 / 1	2.57 / 1.27 / 3	1.71 / 0.76 / 2
2	2.29 / 0.76 / 2	1.29 / 0.49 / 1	1.29 / 0.49 / 1
3	2.29 / 0.76 / 2	1.29 / 0.49 / 1	1.86 / 0.69 / 2
4	1.86 / 0.69 / 2	n/a*	1.71 / 0.49 / 1
5	1.43 / 0.53 / 1	n/a	1.29 / 0.49 / 1
6	1.57 / 0.53 / 1	2.00 / 0.82 / 2	1.43 / 0.79 / 2
7	1.14 / 0.38 / 1	1.00 / 0.00 / 0	1.43 / 0.53 / 1
8	1.29 / 0.49 / 1	1.29 / 0.49 / 1	1.43 / 0.53 / 1
9	1.71 / 0.49 / 1	3.00 / 2.77 / 6	1.29 / 0.49 / 1
10	1.71 / 0.49 / 1	1.86 / 0.90 / 2	1.14 / 0.38 / 1
11	2.00 / 0.00 / 0	3.57 / 1.40 / 4	1.14 / 0.38 / 1
12	1.00 / 0.00 / 0	n/a	1.14 / 0.38 / 1
13	n/a	n/a	1.14 / 0.38 / 1
14	1.43 / 0.53 / 1	2.00 / 1.91 / 5	1.14 / 0.38 / 1
15	1.71 / 0.49 / 1	1.71 / 0.95 / 2	1.14 / 0.38 / 1
16	1.14 / 0.38 / 1	n/a	1.14 / 0.38 / 1
17	3.29 / 1.25 / 4	1.71 / 0.49 / 1	2.71 / 2.93 / 6
18	n/a	2.14 / 1.57 / 4	1.00 / 0.00 / 0
19	2.29 / 0.49 / 1	1.86 / 0.69 / 2	1.86 / 2.27 / 6
20	1.71 / 0.76 / 2	2.43 / 1.27 / 4	n/a
21	n/a	n/a	1.00 / 0.00 / 0
22	1.43 / 0.53 / 1	n/a	1.00 / 0.00 / 0
23	3.43 / 2.23 / 6	1.86 / 0.90 / 2	1.00 / 0.00 / 0
24	1.86 / 0.38 / 1	2.14 / 1.57 / 4	1.00 / 0.00 / 0

* Indicates the student's absence

As can be seen in Table 6, the student's assessment of the lessons he attended showed that the learner had experienced a bit more anxiety in lessons 9 (grammar) and 17 (listening and speaking). However, the values of the mean scores were not large and they never exceeded 3.57 of a point.

4.2.3 Student G

On the whole, the learner showed the highest and lowest levels of anxiety at the beginning of the lessons and at the end of them, respectively (see Table 5). The largest difference in its mean equaled 0.52. Moreover, only during lesson 3 did the levels of anxiety change the most; however, the fluctuations were very small. In more

specific terms, the student was a bit anxious in the first 10 minutes of the lesson (3 points; students' questioning) and then he felt relaxed till the end of the class (2 points—minute 20 and 1 point—minutes 30 and 40; grammar activities concerning indefinite pronouns; individual work).

In addition, the subject's evaluation of all the lessons demonstrated that he experienced the most anxiety in lessons 17 (listening and speaking), 3 (grammar) and 19 (reading, vocabulary, speaking). It has to be noted, however, that the values of the mean were small (see Table 6).

Finally, it should also be noted that, generally, Students E, F and G were quite uniform in their assessment of the levels of FLA they experienced during the lessons. This is indicated by the low values of the standard deviation and the range (see Table 5). What is more, the students' evaluation of the classes demonstrated that, with the exception of Student F, the other two students were fairly unanimous in their evaluations of the lessons as indicated by low values of the measures of dispersion (see Table 6).

5 Discussion

The analysis of the foreign language anxiety grids showed that, on the whole, each student who tested high on anxiety displayed quite high levels of FLA during the lessons. In contrast, each learner who tested low on anxiety demonstrated low levels of FLA in the course of single lessons. Besides, the analysis of the foreign language anxiety grids provided some evidence for the changing character of the construct throughout single lessons as reported by individual students. More precisely, the participants who tested high on anxiety generally reported the highest and the lowest levels of anxiety at the beginning of the lessons and at the end of them, respectively (cf. Chuo, 2007). As regards the students who tested low on anxiety, two of them also showed more anxiety at the start of the lessons but the differences in its levels were rather small (cf. Kruk, 2016). Additionally, in the case of one of these learners the levels of anxiety kept changing from the start to the end of the classes. A plausible explanation of such findings is that the students (i.e., the ones who tested high on anxiety, in particular) may have feared to be quizzed and negatively evaluated by their teacher (cf. Kruk, 2018). This is because the beginning of each lesson was typically used by the teacher to check and grade the students' homework assignments and/or assess the learners' mastery of the material covered in the previous lessons. It should be remembered that the participants, especially those who tested high on anxiety, experienced problems with the English language, they were not very motivated to learn it and quite frequently they were not prepared for their English classes. Such issues may have led to a substantial increase in the level of anxiety in the first few minutes of each English lesson. Finally, it could also be argued that such factors may have contributed considerably to making these students (i.e., those who tested high on anxiety) simply more susceptible to experiencing different levels of FLA during a single language class.

Just as in the case of the foreign language anxiety grids, the analysis of the evaluation sheets revealed that on average the four participants who tested high on anxiety evaluated the English classes higher than the three learners who tested low on anxiety. At this point, it should be recalled from the section on procedures, data collection instruments and analysis that higher mean scores reflect more feelings of FLA. Additionally, the analysis of the evaluation sheets offered some evidence of the dynamic nature of FLA over time, that is, from one language class to another (cf. Kruk, 2018). It was revealed that both groups of students' evaluations of the classes varied to a greater or lesser extent. It is interesting to note, however, that the behaviors of the students who tested high on anxiety were more varied and dynamic in this respect, whereas the students who tested low on anxiety acted in a rather stable way. Although it is likely that the high levels of anxiety reported by the individual participants at the beginning of the lessons somehow translated into high mean values reported by them in their evaluations of the lessons, it is equally possible that, among other things, the content of the classes (i.e., the foci of the lessons, language activities), language material (i.e., the use of traditional coursebook or the Internet), modes of work (i.e., individual, pair or group work) as well as student–student and student–teacher relationships may have also played a role here.

As can be seen, the picture of FLA that emerged from the analysis of the data gathered by means of the foreign language anxiety grids and the evaluation sheets is quite complex and sometimes difficult to interpret. This is because even the same student may have experienced feelings of anxiety in similar contexts. For example, Student C reported different levels of FLA in the second half of a lesson (i.e., lesson 15) during which he individually performed a set of online grammar activities. Another student (i.e., Student D) evaluated two similar lessons (i.e., lessons 23 and 24) differently despite the fact that both classes were devoted to practicing grammar (i.e., comparative of adjectives). It should be recalled at this point that the evaluation of the lessons performed by the learners who scored high on anxiety was higher and more varied when compared with the one conducted by the subjects who scored low on anxiety. When it comes to some possible explanations of this state of affairs, it seems that students may have experienced different degrees of FLA not only from one lesson to another but also during a single lesson (or in a relatively short period of time, e.g., 20 min) when facing language activities of different levels of difficulty or feedback they received as it probably was the case with Student C during the second part of lesson 15 (cf. Kruk, 2018). Other plausible explanations may be related to, among other things, students' disposition during a particular lesson, the atmosphere in which English lessons are conducted, students' weekly workload, or a combination of these and other factors.

Despite the fact that the study offered some insights into the changing character of FLA, it suffers from a number of weaknesses. For one thing, the data collection instruments used in this study may have not been sensitive enough to detect all changes in the levels of FLA. For example, the participants may have been asked to indicate their level of anxiety more frequently during a single lesson or the number and adjectives used in the evaluation sheet could have been different. Secondly, the

number of students involved in this study could have been larger and have included both male and female students. It should be noted, however, that the number of students was thought to be sufficient since the purpose of the study was not to investigate group averages but rather to zero in on individual level analysis. Thirdly, difficult as it may be, given the specificity of the Polish educational setting, more than one teacher should have been involved and have conducted the English lesson. This is because the participants may have not been willing to disclose their feelings to the class regular teacher. Finally, more instruments of data collection could have been used (e.g., dairies, reports) and analyzed quantitatively and qualitatively.

6 Conclusions and Implications

Considering the research findings discussed above, a few possibilities of lowering anxiety levels in the L2 classroom can be indicated. In all likelihood, students' positive perception of teacher support plays a crucial role in alleviating their frustration and apprehension about having to face something they have almost no idea of. Since teacher-related factors are found among the most influential foreign language anxiety sources (Young, 1994), it seems reasonable to reflect on opportunities for reversing this tendency, which can be discussed in broader terms of encouraging adolescent students' stress-free as well as constructive engagement in L2 activities (Saito et al., 1999).

First of all, a rapport has to be mentioned as relying on the teacher's openness, trust and interest in their learners' ideas (Trickett & Moos, 1995). Another important aspect is lack of competition and clear task orientation allowing students to know what goals they are aiming at and what exactly they are supposed to do in order to accomplish them, and also raising their awareness of results they can expect (Saito et al., 1999). Due to the fact that one of FLA driving forces is the student's low self-esteem and anticipation of a failure as was shown in the present study, emphasis should be laid on the properly rendered assessment of their learning achievements. The most promising solution seems to be formative assessment with its focus on instructor ongoing and descriptive judgments as well as student self-evaluation (Zawodniak, 2005). Positive affective feedback and in some cases positive reinforcement showing the teacher's appreciation of students' effort and involvement might also contribute to improving their self-image and thus lowering anxiety levels. In light of the results obtained from this research, positive affective feedback and positive reinforcement seem to be of special importance at the beginning of classes when the previously covered material is usually recalled and when students' anxiety levels rise due to their uncertainty and fear of being negatively evaluated by the teacher. Last but not least, training students in various compensation strategies (e.g., non-linguistic signals, prefabricated patterns, circumlocution, code-switching) and language learning strategies (e.g., requests for clarification, positive thinking, positive self-talk, deep breathing, self-monitoring, imagery) is likely to feed into pupils' belief that they are in a position to overcome

temporary L2 learning problems and succeed in doing assigned tasks (Horwitz, 2001).

As has been repeatedly indicated above, anxiety is a complex, multidimensional variable and as such it can have a detrimental, interfering effect on L2 learning. Given that language classroom is the environment in which students are shown a tool that they know much worse than their mother tongue and that they are required to use to communicate, they begin to feel insecure, embarrassed and subjected to others' judgments (Hilleson, 1996; Tsui, 1996). This is why, it is difficult to overestimate the teacher's responsibility for creating a friendly, relaxed atmosphere and at the same time contribute to a challenging learning environment.

Appendix

Levels of FLA reported by each study participant during each lesson.

Lesson	Student A				Student B			
	10 min	20 min	30 min	40 min	10 min	20 min	30 min	40 min
1	--	--	--	--	5	4	3	3
2	5	5	5	4	6	4	4	3
3	--	--	--	--	--	--	--	--
4	5	5	5	4	4	3	3	3
5	5	5	5	5	7	4	3	3
6	5	4	2	2	7	4	4	4
7	4	4	4	4	7	4	4	4
8	--	--	--	--	7	3	3	3
9	5	5	5	5	--	--	--	--
10	4	3	4	4	3	3	2	2
11	6	5	6	5	7	7	7	5
12	--	--	--	--	7	5	4	4
13	6	6	5	4	5	4	3	2
14	5	5	5	5	6	4	4	4
15	5	4	4	4	7	5	5	5
16	5	5	5	5	--	--	--	--
17	--	--	--	--	--	--	--	--
18	--	--	--	--	7	5	4	4
19	--	--	--	--	4	5	5	5
20	6	5	5	5	--	--	--	--
21	6	6	5	5	7	7	5	4

(continued)

(continued)

Lesson	Student A				Student B			
	10 min	20 min	30 min	40 min	10 min	20 min	30 min	40 min
22		5	5	5	6	6	5	4
23		5	5	5	6	7	6	7
24		5	5	3	7	6	5	4
Lesson	Student C				Student D			
	10 min	20 min	30 min	40 min	10 min	20 min	30 min	40 min
1	7	6	5	5	4	3	3	4
2	4	3	4	3	5	3	3	4
3	2	2	2	2	6	4	3	3
4	4	4	4	4	4	3	3	3
5	2	2	2	2	6	3	3	3
6	2	3	2	2	7	4	4	2
7	7	7	7	7	7	4	2	2
8	2	2	2	2	7	4	3	3
9	2	2	2	2	7	3	3	3
10	2	3	2	2	5	5	4	4
11	5	5	5	5	7	7	7	7
12	--	--	--	--	4	4	4	4
13	7	7	7	7	6	5	4	3
14	5	2	2	2	6	5	4	4
15	5	2	3	1	7	4	4	4
16	6	6	2	2	7	7	5	4
17	--	--	--	--	--	--	--	--

(continued)

(continued)

	Student A					Student B				
	6	2	2	2	2	5	4	4	4	4
18										
19	--	--	--	--	--	7	3	4	4	4
20	5	2	2	2	2	7	4	3	3	3
21	5	4	3	3	3	6	5	4	4	4
22	2	2	2	2	2	6	4	4	4	4
23	2	2	2	2	6	6	5	3	3	3
24	2	2	2	2	2	3	4	4	4	4

Lesson	Student E				Student F			
	10 min	20 min	30 min	40 min	10 min	20 min	30 min	40 min
1	1	1	2	1	1	1	1	1
2	1	2	1	2	2	2	2	2
3	2	1	1	2	3	2	1	1
4	2	1	1	1	--	--	--	--
5	2	1	1	1	--	--	--	--
6	2	1	1	1	2	2	2	1
7	2	1	1	1	2	2	1	1
8	2	1	1	1	1	2	1	1
9	3	2	1	1	2	1	2	1
10	1	3	1	2	1	3	1	2
11	3	2	1	1	1	3	1	2
12	1	1	1	1	--	--	--	--
13	--	--	--	--	--	--	--	--
14	2	1	1	1	1	3	1	2
15	3	1	1	1	1	3	1	2
16	1	1	1	1	--	--	--	--
17	1	3	1	2	1	3	1	2
18	--	--	--	--	1	3	1	2
19	5	1	2	1	1	3	1	2
20	2	1	1	1	1	3	1	2
21	--	--	--	--	--	--	--	--
22	1	2	1	1	--	--	--	--
23	3	2	1	1	1	3	1	2
24	4	2	1	1	1	3	1	2

Lesson	Student G			
	10 min	20 min	30 min	40 min
1	1	1	1	1
2	2	1	1	1
3	3	2	1	1
4	2	2	1	1
5	2	2	1	1
6	2	1	1	1
7	2	1	1	1
8	1	1	1	1

(continued)

(continued)

Lesson	Student G			
	10 min	20 min	30 min	40 min
9	1	1	1	1
10	2	1	1	1
11	1	1	1	1
12	1	1	1	1
13	1	1	1	1
14	1	1	1	1
15	3	1	1	1
16	1	1	1	1
17	1	1	4	1
18	2	1	1	1
19	1	1	1	1
20	--	--	--	--
21	2	1	1	1
22	1	1	1	1
23	1	1	1	1
24	1	1	1	1

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Investigating Second Language Pronunciation Anxiety in the Japanese Context



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Abstract This study investigates L2 pronunciation anxiety in a specific EFL environment to demonstrate that such anxiety is partly context-dependent. L2 anxiety has been primarily studied as a negative affective reaction and L2 use can be an unsettling experience, as it could threaten learners' perception of themselves and the world. Past studies have been mostly quantitative, investigating the intensity, and have linked it to rather stable learner characteristics such as personality traits. As such, these studies have fallen short of exploring the ebbs and flows of the negative emotive reactions, which could be influenced by interpersonal and social factors in immediate contexts. The present chapter reports the findings of a study with 64 Japanese university students on their concerns over pronunciation learning. Their focused essays and subsequent interviews demonstrated that quite a few students became conscious about their pronunciation, wondering whether to speak with a "better" English accent or conform to the marked norm of the specific speech community. They prioritized social belonging over learning and the decision created self-doubt and anxiety. Thus, L2 pronunciation anxiety likely comes from self-presentational concerns. Some other sources of anxiety are also discussed and the need is highlighted for developing a comprehensive model of L2 pronunciation anxiety which would include both immediate and distant factors.

Keywords Pronunciation learning · Pronunciation anxiety · State anxiety · Self-presentation theory

1 Introduction

Ever since Dulay and Burt (1977) introduced the idea of affective filter and Krashen (1982) incorporated it into his theoretical framework called the "monitor model," second or foreign language (L2) learning anxiety has been rigorously studied by second language acquisition (SLA) researchers. Such anxiety is known to interfere

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with the process of language learning, use, performance, and achievement (Gkonou et al., 2017; Horwitz, 2010; Phillips, 1992). L2 learning/use can be stressful and provoke anxiety as L2 learners cannot express themselves as skillfully as they can in their L1 and become self-conscious about their ability in the L2 (Guiora, 1984). These concerns deplete their cognitive abilities (Eysenck & Derakshan, 2011) and prevent them from using their potential for L2 learning.

Researchers have been trying to link L2 anxiety to personality variables such as risk-taking (Ely, 1986), perfectionism (Gregersen & Horwitz, 2002), neuroticism (Dewaele, 2013), ambiguity tolerance (Dewaele & Ip, 2013; Kimura, 2016), introversion/extroversion (Dewaele, 2013; Dewaele & Furnham, 1999, 2000), and social anxiety (Kimura, 2017; MacIntyre, 1995). There is wide variation among L2 learners regarding their level of anxiety in L2 situations, and researchers have assumed and proven that personality variables, along with L2 proficiency and L2 self-confidence, explain this variation. However, some researchers have begun to doubt if individual learner characteristics such as personality “play a deciding role” (Brown & Larson-Hall, 2012, p. 129) in the ultimate attainment of L2 skills. Each supposedly influential characteristic may contribute to the success of L2 learning or lack thereof, but it is only “a small part of a complex picture” (Ellis & Larsen-Freeman, 2006, p. 559) and an array of different characteristics may well interact. Other researchers have pointed out that individual learner characteristics are not stable or indicative of situational and temporal variation (Dörnyei & Ryan, 2015). Thus, L2 anxiety may well fluctuate according to different situational factors that are embedded in contexts and therefore anxiety is dynamic, similar to L2 motivation, for example. In fact, anxiety has been studied both as a trait and a state (Spielberger, 1983), and L2 anxiety as a state has been understudied to say the least. Therefore, this study aims to investigate situational influences on L2 pronunciation anxiety and explore what makes L2 speakers anxious about their pronunciation.

2 Literature Review

2.1 L2 Pronunciation Anxiety as an Independent Construct

L2 anxiety literature has seen another line of conceptual development for the last several decades since the introduction of the concept by Dulay and Burt (1977). Researchers have begun to recognize the rationale and advantages of skill-based approaches to L2 anxiety. If language competence is conceptualized as being divisible into distinct skill areas, L2 anxiety can also be seen as differing based on different skills (i.e., Horwitz, 2010) and it makes sense to single out pronunciation anxiety (Szyszka, 2017).

However, L2 pronunciation anxiety has been poorly demarcated from L2 speaking anxiety (Woodrow, 2006) and rarely acknowledged or investigated as such. Horwitz et al. (1986) developed the *Foreign Language Classroom Anxiety Scale* (FLCAS),

the most widely used battery to measure L2 anxiety in SLA, but there is no scale item that specifically taps into apprehension over pronunciation. MacIntyre and Gardner (1994) created the *Output Anxiety Scale*, which covers a variety of skill areas such as speaking, writing, communication, and vocabulary, but not pronunciation. Gregersen and Horwitz (2002) used a research technique called stimulated recall with four high- and four low-anxiety Chilean learners of English and pointed out that learners with high performance standards tend to feel uneasy about the L2 speech production task. They quoted one participant who mentioned distress over correct pronunciation as a source of anxiety and lamented mistakes to a large extent, but the authors did not explore the issue further.

Baran-Łucarz (2011, 2013, 2014) paved the way for delimiting L2 pronunciation anxiety. In her first study involving 43 Polish secondary-school students learning English (2011), she demonstrated that learners' self-perception of their pronunciation levels had a more significant effect on anxiety over pronunciation than their actual proficiency levels. Later, Baran-Łucarz (2014) developed the *Measure of Willingness to Communicate in the Foreign Language Classroom* and the *Measure of Pronunciation Anxiety in the Foreign Language Classroom*, and related the concerns over less-than-perfect pronunciation with the (un)willingness to communicate using 151 Polish university students learning English. Results showed that regardless of proficiency levels, the more apprehensive the learners felt about English pronunciation, the less willing they were to communicate ($r = 0.60$). Thus, she demonstrated that learners' low self-perception of L2 pronunciation ability could generate apprehension, and as a consequence this apprehension could reduce or even diminish their willingness to communicate in English.

However, this causal relationship is preliminary since the past studies have only examined learner variables that can have some detrimental influence on learners' psychological well-being. They have not yet examined what it is about situations that make people more or less anxious about their L2 pronunciation. Learners who think rather highly of their pronunciation may occasionally feel more nervous and become more self-conscious in some situations than in others and this gap needs to be filled.

2.2 *Difficulties of L2 Pronunciation and Social Concerns*

Past studies on L2 pronunciation provides insights into the exploration of potential situational variables that could induce L2 pronunciation anxiety since some studies such as Derwing (2003) and Derwing and Rossiter (2002) have examined difficulties in learning L2 pronunciation, learners' concerns over pronunciation, and social implications of non-native speech, and have thus indirectly drawn attention to the negative psychological reactions.

Derwing (2003) conducted interviews with 100 immigrants to Canada of 19 different native languages and found that 55% of participants related their communication difficulties to pronunciation, although many of them could not identify

the specific problems. The majority thought people would respect them more if their English pronunciation were good. They were also likely to know that listeners tend to have primarily negative attitudes toward non-native speech. In fact, perceptions of non-native speech have been investigated extensively in sociolinguistics and social psychology. Accents have a powerful force and communicate much more than the referential meaning the speaker intends to convey. Generally speaking, listeners prefer language varieties spoken by historically powerful groups and consider them more prestigious. As such, speakers with non-native accents have faced prejudice and stereotyping and thus stigmatization (Edwards, 1999; Lippi-Green, 2012). For example, Disney movies are known to have depicted people with non-native accents in a stereotypical and often negative manner, as compared to people with standard accents. When listeners have negative attitudes toward a particular group of people with a non-native accent, that is, a stigmatized group of people, they tend to perceive a speaker from that group as less competent regardless of the speaker's actual competence and consider interaction as less successful regardless of what has actually been achieved (Lindemann, 2002).

Although stigma literature has mainly investigated non-native accents from listeners' rather than speakers' perspective (Gluszek & Dovidio, 2010), there are significant implications regarding investigation of L2 pronunciation anxiety, which corresponds to speakers' side of the story. Most important, accented speech reveals substantial information about a speaker's social identities, that is, her group membership. By extension, non-native accents provide "a powerful out-group cue" (Gluszek & Dovidio, 2010, p. 215) that can lead to negative evaluations on the listeners' side. Lippi-Green (2012) went one step further and wrote that "accent becomes a litmus test for exclusion" (p. 64). This is a fatal blow for non-native speakers, considering that people have a strong need to belong, which is a very basic human motivation (Baumeister & Leary, 1995). People's self-presentation likely evolved from social needs for inclusion in groups and the establishment of supportive relationships with others. People also exhibit "a strong need to belong and an even stronger aversion to being rejected" (Leary, 2001, p. 3). As people crave social attachments and depend upon good social relationships for their well-being, they attempt to manage impressions on others. L2 speakers with accents have difficulty in managing such impressions. L2 pronunciation anxiety must be at least partly rooted in speakers' self-presentational concerns over their imperfect speech and need to belong to a community. Therefore, it needs to be investigated in relation to their social concerns.

2.3 Social Concerns and Their Behavioral Consequences

To further investigate L2 pronunciation anxiety and its negative effects, it is meaningful to examine its behavioral consequences. Baran-Lucarz (2014) demonstrated that as learners feel more anxious about their pronunciation, they become less willing to communicate and past research has demonstrated other problematic behaviors. Lefkowitz and Hedgecock (2002) studied the psychological barriers that L2

learners experience in English as a foreign language (EFL) classroom contexts. The researchers reported that some secondary and post-secondary school students learning French and Spanish in the US felt inferior compared to more skilled classmates and became anxious. On the other hand, others prioritized solidarity with peers, opting to “underperform phonetically in the presence of classmates and teachers” (p. 240), and held mixed feelings about their own speech behaviors. Thus, peer pressure worked both ways: Less-skillful learners felt intimidated by more-skillful learners who exhibited more target-like pronunciation on the one hand, and more-skillful learners felt uncomfortable for fear of standing out and played down their skills to fit into the classroom community norms on the other. The former was intimidated by a target-like speech standard and the latter was threatened by the classroom standards while both sought belonging to an imagined community.

Self-presentational theory states that people are usually truthful in presenting themselves, but they can also pretend or deceive, overplay, or underplay (Goffman, 1959), which is why self-presentation is also called impression management. When they present themselves, they communicate what they think they are, but they are also able to manipulate the impressions others receive about them. In some cases, they act out their ideal values so that others have a high opinion of them, while at other times they play down their abilities, based on hidden motives such as modesty. They are able to purposefully convey particular impressions, for better or for worse.

In fact, underperformance in terms of L2 pronunciation was reported among young Japanese “returnees,” who spent a certain period of time in English-speaking countries and then resumed their education back in Japan (Kidder, 1992; Rose & Fujishima, 1994). Some returnees then consciously modified their accent to avoid standing out among heavily accented peers, as the latter speech pattern was the social, classroom norm. They reluctantly chose heavily accented speech, the majority language variety in the classroom, to participate in or belong to the mainstream community, sacrificing their bilingual, bicultural identity. However, not all returnees chose to do this, as others varied their accents depending on the particular situations. Each returnee “has a different way of dealing with” (Kanno, 2000, p. 361) their self-presentational concerns, but their ambivalent allegiance to their peers’ community provides an insight into the investigation of L2 pronunciation anxiety and should be investigated with more general EFL learners of English, who might have experienced similar peer pressure and have intentionally changed their speech pattern.

3 The Study

3.1 Rationale and Research Question

To recap, some of the past studies on L2 pronunciation anxiety have focused on learner variables to investigate causal relationships among them (Baran-Łuczars,

2011, 2013, 2014). Baran-Lucarz demonstrated learners' low perception of pronunciation skills fed into anxiety and made learners less willing to communicate. She considers L2 pronunciation anxiety as a trait, rather stable learner characteristic. Other studies investigated a situational variable, that is, peers' presence in the immediate contexts, to examine learners' distinct social motives and behavioral patterns (Kanno, 2000; Kidder, 1992; Lefkowitz & Hedgecock, 2002; Rose & Fujishima, 1994). They demonstrated that peer pressure is one of the influential situational variables and they view L2 pronunciation anxiety as a state that fluctuates from situation to situation. The former approach implies that some people have a tendency to be more prone to L2 pronunciation anxiety than others. The latter approach implies that L2 learners are under the influence of situational factors, and peer pressure is one of them, but there should be other factors, social and contextual, that can make learners more or less anxious about their L2 pronunciation, which have yet to be explored.

To further explore potential situational factors, however, it is necessary to delimit the scope of the study. Learners in different cultures likely experience L2 pronunciation anxiety in different ways since the distinct cognitive patterns of collectivism vs. individualism (Triandis, 1995), for example, exert a significant influence on people's self-presentational motives, concerns, and worries (Leary, 1995). L2 learning contexts, that is, second vs. foreign language, have different speech norms, and learners may have different L2 learning orientations. The effects of these cultural and contextual conditions interact and make negative psychological reactions like L2 pronunciation anxiety fluctuate. Because of participants' accessibility and knowledge of the particular situations, the research question of this study is as follows: *In what circumstances do female university students in Japan feel anxious in regards to their English pronunciation?*

3.2 Participants

A total of 64 female students learning English at a university located in the northern part of Japan participated in the first phase of this study. They belonged to two cohorts, taking a seminar course, English teaching/learning seminar in 2018 ($N = 34$) and in 2019 ($N = 30$). They ranged in age from 19 to 21 at the time of data collection. In the second phase, eight participants were chosen for subsequent interviews based on the content of their essays. All agreed to join. Most of the participants were either A2 or B1 on the *Common European Framework of Reference (CEFR)*. In this report, pseudonyms are used to refer to the students.

3.3 Procedure

The first phase of this study was conducted in April of 2018 and 2019 at the beginning of the course. The participants received a consent form with survey information and an

L2 pronunciation anxiety survey sheet for a focused essay. The information outlined the purpose of the study, the nature of participation, the use of the data, and how to withdraw the data. The survey sheet for the focused essay had only one prompt: the sharing of specific episodes in which participants felt anxious about their English pronunciation. All the participants in the two cohorts decided to join the survey project and agreed to write the essay in Japanese, their L1. They submitted their signed consent forms and essays on L2 pronunciation anxiety the following week in both 2018 and in 2019. The essays were 326 Chinese characters long on average, which roughly corresponded to 109 English words. Only the parts quoted in the Findings section were translated into English.

In the second phase, open-ended, retrospective interviews with the eight participants were conducted separately in my university office in June and July in 2019. The interviews were conducted in Japanese and each interview was about 30 min long. They were recorded, transcribed, and later translated into English. Before the interview, each participant was given a consent form and an aural explanation of the procedure, which were subsequently read and signed before the interview. At the beginning, participants were invited to read their own essay. Each interview started with a question or a request such as “Would you like to tell me more about this episode?” and “I’d like to hear more about your experience on your part-time job.” The following interview questions varied. As a single researcher of this project, I needed confirmation of my interpretation from the participants themselves before analyzing the data in detail. Each participant read the excerpt to be quoted in this article and asked if my interpretation was as they had intended. Furthermore, for a deeper understanding of the episodes, namely, the situations in detail, as well as their thoughts and emotions with a special focus on anxiety and related emotive responses, some specific questions such as “Do you remember what the customer said?” were asked.

One anonymous researcher compared the original Japanese essays and the interview transcripts with my translations. The researcher put marks where there was doubt about the translation accuracy or room for improvement. Minor changes and elaborations were made based on her suggestions.

3.4 Analysis

Thematic analysis (Braun & Clarke, 2006, 2013) was conducted, using MAXQDA 2018.2. First, I read the focused essays a few times to acquire the overall idea of the kinds of episodes the participants had shared, considered what made them feel anxious, and took careful notes for coding. Codes are core elements for analyzing the data sets to identify themes, central concepts for interpreting the data, and answering the research question. The codes I came up with were grouped into (a) a set of different situations, (b) a set of interlocutors/participants, (c) a set of emotive reactions, (d) a set of behavioral reactions, and (e) a set of temporal variables. Although these were essential building blocks for describing participants’ experiences, the codes

fell short of constructing themes to capture “patterned responses” (Braun & Clarke, 2006, p. 82) for a better understanding of the target phenomenon. As a second trial, I searched for sources or triggers of L2 pronunciation anxiety with the help of the above-mentioned different sets of codes. After a few readings, I came to identify five themes, “units for analysis” (Braun & Clarke, 2006, p. 88), which reflected the data content and meaning: need to belong, presence of others, teaching for accuracy, social expectations, and language ownership.

Member checking was conducted in October in 2019. The digital files of (a) the interview transcript and (b) findings and discussion sections of the earlier version of this paper were sent to the eight interview participants by e-mail. Three of them responded and shared their thoughts after they read the documents, but no participant asked for any changes on them.

4 Findings

In this section, each of the identified sources of L2 pronunciation anxiety, that is, the above-mentioned themes, constitute a subsection: need to belong, presence of others, teaching, social expectations, and language ownership. In interpreting the data, the self-presentation theory was found to be an operative tool to understand participants’ experiences in terms of their accented speech and negative emotions; thus, the themes are discussed in relation to people’s self-presentational motives and concerns.

4.1 *Need to Belong*

Past studies have demonstrated that young native-Japanese-speaking returnees prioritize their social need to belong to their school community and thus fake Japanese-accented English (e.g., Kanno, 2000). Struggling to readjust to their L1 culture, they try to hide their native-like accent and their identity, and learned to speak in deliberately deviated tones in order to fit into the classroom culture and practice. This maladaptive behavior turned out to be more widespread than had previously been thought. Some “regular” students including Reina also reported using Japanese-accented English as well.

Back in my junior high school days, my teacher used to say I was good at pronunciation, and I was proud of it. However, I was shy, so when reading aloud in English by myself in class, I became anxious about (using good) English pronunciation and deliberately used heavily accented Japanese English. About 80% of my classmates used the special accent, and I didn’t want to stand out. Besides, I was afraid some of my classmates might tease me if our teacher praised my pronunciation in public. (Reina)

Concern with need to belong, or fear of exclusion appears to be a powerful motive to shape L2 learners’ behavior. Psychological well-being in life is linked to good

personal relationships with others (Baumeister & Leary, 1995), and students have good reason to be anxious at the prospect of being envied, teased, or rejected by their peers (Leary, 2001). Fear of damaging or losing good relationships with significant others in their formative years was so overwhelming that some L2 speakers, whether returnees or not, felt that they had to change their L2 speech for the worse in order to belong. In her interview, Reina described this tension as follows.

- Reina: I really did not want to stand out. That's the last thing I would do.
Harumi: But you wrote (in your essay) that you were proud of your pronunciation.
Reina: Yes, I was. Yes, I was, but ...
Harumi: You thought that your friends would think you were showing off, right?
Reina: Kind of. I felt safe when I was hiding in the crowd or blending in and sharing the same "bad" English.
Harumi: What about now? Are you still hiding your pronunciation skills?
Reina: Not like I used to. No, but it takes courage to speak "as I speak."

Human beings are social creatures, and they are concerned about their public images. They try to control the impression we make on others both spontaneously and purposefully. People might act out their ideal values so that others form a high opinion of them in some situations, while in other situations they might play down their abilities based on hidden motives such as belongingness. People can purposefully convey specific impressions in the hope that others form the same impressions. Reina managed to control her impressions by using "bad" English.

Given the insights from a self-presentational perspective, reported L2 learners' behavior of using a heavy accent in class should not be dismissed as simply manipulative, maladaptive, unproductive, or related to dishonesty and deceit. The need to belong is an intrinsic and pervasive human motive. Forming and maintaining social bonds is associated with positive emotions; conversely, losing such bonds is linked to negative emotions such as anxiety (Baumeister & Leary, 1995). A certain amount of self-presentation is crucial for the functioning of society, including the functioning of language classrooms. Social interaction cannot occur effectively if participants do not reveal or construct their identities or present true images of themselves. L2 accent disguise may have profound implications for classroom practices.

4.2 Presence of Others

In everyday interactions, speakers' self-presentation should be approached from two perspectives: people are both "agents" and "targets" of self-presentation (Schlenker, 2003, p. 492). In their role of agent, people present the images they want to convey to others, who in turn evaluate truth values and moral values of the images presented by the agents, who are now the targets. The agents are uncertain as to how they are perceived and how successful their self-presentation has been, but as proactive agents, they try to make desired impressions, as well as monitor and try to control

how others perceive them. When people have doubt about the success of their self-presentation, they feel anxious. The targets of their self-presentation include not just interactants or interlocutors, but also third parties.

While I was talking with a native speaker teacher (teaching speaking class) in a hallway, a linguistics professor passed by. Suddenly I became self-conscious about my pronunciation and fluency and felt very nervous.... After the professor was gone, I was okay again. (Saki)

For Saki, the third party was her linguistics professor. Saki feared that the professor might overhear and then evaluate her L2 performance. People make attempts to “read” others’ views of themselves in order to evaluate their public performance. They care about what others think, whether they are being evaluated, and how the evaluation will affect their social and work lives. There is little doubt that teachers’ evaluation at school do matter in their everyday lives as university students.

- Harumi: You were okay when you were talking with your speaking class teacher, right?
 Saki: Yes, I was okay. I’m usually okay with that teacher. Yes.
 Harumi: However, ...
 Saki: However, the linguistics teacher makes me nervous. You may think it’s ridiculous, and I myself know it’s ridiculous, but you know, I cannot stop myself thinking that he is constantly evaluating how his students sound.

Saki considered herself the target of the teacher’s evaluation and could not help but become self-conscious when the teacher was around. It is likely that she was also preoccupied with interpersonal concerns and lacked the confidence to make desirable impressions. Her concerns are understandable in that teachers have power in a school environment and such a power distance creates space for anxiety.

For another student, Akari, the third party was her co-workers. Akari was also not sure if she could control the impressions she desired to make when her co-workers were listening to her serving customers. Although her co-workers are her equals, her self-presentational worries still emerged.

(In my part-time job), when I realize that other co-workers are listening to my interaction with a customer, I become anxious. (Akari)

For both Saki and Akari, the presence of others in the participants’ immediate context—people they assumed would affect their social life—influenced anxiety levels, and the levels fluctuated accordingly. People in such situations are anxious to impress others favorably and more attentive to clues about the impressions they are making. It is a rule of thumb that the more someone is motivated and the less confidence she has in her L2 pronunciation, the stronger the anxiety.

4.3 Teaching for Accuracy

In communicative language teaching, mutual understanding is the primary concern, and L2 pronunciation researchers have reported the limited, but positive effects of

pronunciation teaching (Thomson & Derwin, 2015). Derwin and Rossiter (2003), for example, demonstrated that teaching segmentals contributed to pronunciation accuracy, while teaching suprasegmentals promoted automaticity. In studies on Japanese learners of English, explicit instruction on English-specific segmentals such as /æ/, /r/ and /l/ had a significant effect on the comprehensibility of learners' speech despite not achieving a significant reduction in foreign accent (Saito, 2011). In fact, Japanese learners are known to have trouble identifying and producing English /r/ & /l/. Those two sounds are directly relevant to L1 listeners' recognition of accented speech, and errors in producing these core sounds can significantly reduce comprehensibility of L2 speech (Jenkins, 2002). In Japanese contexts, Suzukida and Saito (2019) argued that prioritizing communicatively crucial segmental features such as /r/ & /l/ and /v/ & /b/ was an efficient and effective pedagogical approach.

Considering the results of these studies, it appears that Rina's teacher did the right thing in the exchange that follows.

It was in an English phonetics class and there were 20 to 30 students. Our teacher made us practice /r/ and /l/ many times. Although we tried the right position and movement of the tongue in the way we were taught, he said we were not doing it right. The more I practiced, the more nervous I became. (Rina)

Her teacher explicitly taught students how to produce the key sounds for effective communication and had them practice. However, Rina was overwhelmed with the instructions she received and the classroom activities she was engaged in. She experienced enormous stress and came to feel that practice would not make perfect. In fact, she felt helpless. In the subsequent interview, she disclosed that the episode took place in a stand-alone pronunciation class with both theory and practical instruction, where students are given explicit instruction and feedback on their performance.

Rina: I felt time spent learning how to produce /r/ & /l/ in the class seemed meaningless, not to say useless, as far as I'm concerned. I ended up losing confidence almost completely.

Harumi: What about other classes, like speaking class? Do you feel just as stressful when your teacher focuses on specific pronunciation features?

Rina: Well, ...

Harumi: Don't you practice pronunciation in your speaking class?

Rina: (pause) Not really. I don't think we practice pronunciation much.

Harumi: Don't you practice word stress or intonation, then?

Rina: We do. Yes, we do. Each chapter (of our textbook) has a section for these things; zig-zag lines and bold type show ... rhythm, right?

Harumi: Yes. Don't you think word stress and intonation are also ingredients of pronunciation?

Rina: Now you said that, maybe right (long pause). Yes, they are, I think.

Harumi: Didn't you learn those global features of pronunciation such as stress, pitch, and sentence stress in your phonetics class?

Rina: Not really, I think. The focus was on individual sound.

Harumi: Okay, I see.

Rina's excessive concern over correct, native-like pronunciation of specific segmentals is likely to be linked to what she was taught and how it was taught in class. Her teacher seemed to focus on segmentals, emphasized accuracy, and almost skipped the prosody of the English language in the phonetics class.

For another student, Hikari, explicit teaching seemed to backfire and made her anxious and preoccupied with correct pronunciation to the extent that her speech became worse rather than better.

After learning how to (pronounce the sounds) in class, I felt awkward (with my pronunciation) and become anxious when talking in English. I could not talk properly and sometimes I ended up mumbling, when thinking too much about pronunciation. (Hikari)

The past studies conducted in ESL environments have demonstrated that learners are more concerned about segmentals (Derwing, 2003; Derwing & Munro, 2005; Derwing, & Rossiter, 2002), although other studies have emphasized the importance of teaching prosodic features. For example, most of the L2 speakers in Derwing's (2003) study thought that they had problems with pronunciation, and among these problems, segmentals comprised almost 78%. On the other hand, as Hahn (2004) demonstrated, stress timing is a significant factor for the comprehension and evaluation of accented speech. Likewise, Trofimovich and Baker (2006) indicated that prosodic features such as stress timing, speech rate, pause frequency, and pause duration contribute to listeners' perception of accented speech. A discrepancy likely exists between L2 learners' view of difficulty in their speech production and L1 listeners' perception of L2 speech.

What Hikari shared with us repeats what the past L2 anxiety studies have revealed so far: low confidence in L2 skills, competitiveness, and even self-worth are related to anxiety (Gkonou et al., 2017; Onwuebuozie et al., 1999).

Harumi: It seems that you did not like the class.

Hikari: Well, actually, to be honest, no. It may be because I don't have confidence in English pronunciation. I did not learn native-like pronunciation in junior high or senior high school. From the start of university, I feel inferior to my peers in my department.

Harumi: Do you mean your classmates are all better than you are?

Hikari: Well, you know, some are definitely much better than I am. I feel alienated.

Harumi: In all English classes?

Hikari: Especially in the phonetics class and sometimes in other classes as well.

Accuracy-focused teaching along with preoccupation with perfect speech likely made Hikari experience apprehension and even dread. At the same time, her interview also echoes the first theme of this study, namely, need to belong. She felt alienated because she had trouble in positioning herself in her classroom community.

4.4 *Social Expectations*

One factor influencing the level of anxiety is the probability of controlling the impressions communicated to others. People subjectively assess their success at self-presentation and their level of stress in an interaction increases if they sense they are not making the desired impressions. Leary (1995) and Leary and Kowalski (1995) asserted that it is a function of the strength of motives and the probability of success that determines how worried or awkward people feel in a particular interaction. Interpersonal stress such as L2 pronunciation anxiety is a reaction to self-presentational failures or difficulties in making desired impressions.

Arisa shared a stressful experience she considered a social blunder. Its is described in the following excerpt.

When I was serving a foreign customer at my part-time job, I asked, “(Would you like it) hot or iced”? I repeated the question a few times, but I was not able to make myself understood. In the end, I used body language and was finally understood. I felt frustrated and hated myself. It’s embarrassing. I’m an English major, but I could even say that phrase properly.
(Arisa)

The episode Arisa shared indicated that the probability of her presentational success had decreased drastically while she was trying, and almost failing, to make herself understood. Her stress level increased even more because her desire to get her meaning across was high, and she also spoke about expectations people possess for university English majors. In her interview, I asked Arisa if anybody ever told her how well English majors should be able to do. She thought a long time and said as follows.

- Arisa: Come to think of it, I can’t recall that anybody has ever told me I should be fluent in English or speak like a native speaker just because I’m majoring in the English language.
- Harumi: Do you think you should?
- Arisa: I don’t really know, but I think I’d like to be good. I’d like to live up to that kind of expectation.
- Harumi: Do you think people generally believe that university English majors should be fluent?
- Arisa: Well, I really don’t know, but I think people expect us to be fluent and speak with native-speaker-like pronunciation.

The native speaker model as the one and only yardstick of the L2 learning goal has been criticized as unrealistic (Ortega, 2014). For over a decade in SLA research, more practical, reasonable goals to be identified as ideal L2 selves have been promoted as powerful motivators (Dörnyei, 2009). However, L2 learners like Arisa have been cursed by this unproductive goal. If these expectations have been socially constructed, it might be difficult to free L2 learners from the image of a perfect L2 self with unaccented fluent speech and they will continue to be troubled by L2 pronunciation anxiety because they cannot present the idealized L2 self.

4.5 Language Ownership

Despite the status of English as a lingua franca (Seidlhofer, 2011) and multilingualism or plurilingualism as the reality of the world (Ortega, 2014), textbooks in Japan predominantly use North American English as the model (Sugimoto & Uchida, 2018) and teachers tend to believe that native-speaker speech should be the target of teaching (Uchida & Sugimoto, 2020). Past studies have mostly focused on native speakers' perceptions of L2-accented English (Lindemann, 2002) as well as other factors that contribute to the speaker's accent strength (Moyer, 2007). On the other hand, fewer studies have investigated the psychological consequences of having an accent on the speaker's perceptions of experiences and communicative outcomes (Derwing, 2003).

Yuka and Hitomi shared painful and stressful experiences that happened during their part-time jobs in serving customers in English.

A group of Chinese customers came to the store (I worked for) and asked questions about some items in English. I explained, but I had difficulty getting my meaning across. I even choked under pressure! I could not say in English what I could easily say in Japanese. I thought English has not become my language yet. (Yuka)

... I told the (non-native speaker) customer quite a few times the item was sold out, but he didn't get it. I became more and more anxious (about my accent). It was only a simple expression, but I was not able to make him understand. After the incident, I felt quite distressed the whole day. Well, English is not my native language. It couldn't be helped. But now I wonder if it (communicative failure) was due only to my pronunciation, or if it might have been partly due to his listening skills. He was also, I'm sure, a non-native speaker. English was not his language, either. (Hitomi)

Japanese students in general have limited contact with English speakers in real life. Although Yuka and Hitomi are both English majors, they did not have a chance to use English except in her part-time job. Moreover, especially on the job, they were under time pressure.

Harumi: Do you have chances to use English outside of class?

Yuka: No, not really. Actually, my part-time job is the only opportunity to use English in real life.

Harumi: Do you get nervous? I guess the situation is different on your job (from classrooms).

Yuka: Quite different, indeed. I have to serve customers one by one. I sense the people in line becoming impatient when I'm taking too much time on just one customer.

Past research has demonstrated that spontaneous interaction is not easy for immigrant speakers (Derwing, 2003; Derwing & Rossiter, 2002) and much less so for learners in EFL environments (Woodrow, 2006).

Harumi: So, you feel you've had a bad day when you have trouble in serving foreign customers.

Hitomi: It's shameful when I have to repeat the same thing again and again, without knowing for sure whether my pronunciation is correct. You know, people are in line, waiting their turn. English is not my language.

- Harumi: But you've been studying English for more than 10 years at school. English is one of your languages. You are an English major, so I think English is one of your important languages.
- Hitomi: Just because it's important, I feel all the more stressed when I cannot get my meaning across.

In these interview excerpts, Yuka and Hitomi talked about a sense of failure in self-presentation. Human beings are reflective: They are able to think consciously about themselves (e.g., Baumeister, 1999) and keep track of how others perceive them, while constantly constructing, monitoring, and reconstructing their social image. Hitomi did not think she could present a more competent self in her customer interaction as she wished because her L2 speech was not clear and therefore not comprehensible; thus, her self-perception made her feel bad about herself.

Furthermore, both Yuka and Hitomi referred to the ownership of languages (Widdowson, 1994). In the world of international English, non-native speakers have outnumbered native speakers for decades (Cristal, 2003) and variety exists in every aspect of language, not just in pronunciation. Language not only serves the purpose of mutual communication but also community membership and expression of identity (Barkhuizen & Strauss, 2020). Hitomi felt she was marginalized because of her communication difficulties. As a result, harmful, excessive self-concerns over her pronunciation built up to the extent that the experience made her doubt whether she can express herself in English.

5 Discussion

The research question of this study was in what circumstances do female university students in Japan feel anxious in regards to their English pronunciation. The results have identified five sources or triggers of L2 pronunciation anxiety: need to belong, presence of others, teaching for accuracy, social expectations, and language ownership. These sources have indicated the inherent link between contextual factors, L2 learners' self-presentational orientation, and their experiences of L2 pronunciation anxiety. Successful communication presupposes a certain level of self-disclosure (Cozby, 1973). That is, without the ability to express their own information, L2 speakers cannot gain information about others and receive support from them. Accents constitute an integral part of their social side of self and their L2 identity; thus, an act of speaking in public reveals much information about them. When L2 speakers cannot liberate themselves from their self-presentational worries over their accented speech, whether they sound as good as they hope in order to live up to their own or their significant others' expectations, or if they prefer playing down for fear of peer rejection, they experience L2 pronunciation anxiety. They fear the specter of self-presentational predicaments or alienation in their social performance. The more motivated the L2 learners engaged in successful impression management, the more troubled they were by negative self-talk, or mental "voice-over" about their supposedly poor social performance.

Although negative affect involved in accented speech is called L2 pronunciation anxiety in SLA, it is described and investigated as stigma in social psychology. People with non-standard accents are called stigmatized individuals. They are speech minority, and their speech patterns are associated with prejudice and stereotypes and have social consequences. In fact, accents are found to convey more significant information about the speakers than their appearance (Kinzler et al., 2009). L2 pronunciation anxiety research would benefit from stigma literature.

Although Arisa blamed her pronunciation of “iced” in her service encounter, the problem might have been cultural rather than linguistic. Although in Japan, iced coffee is popular, it is not in some other cultures. As such, the episode then entails difficulty in intercultural participation as a source of anxiety (Coryell & Clark, 2009); thus, she might well have experienced intergroup anxiety (Stephan, 2014). In fact, Arisa, Yuka, and Hitomi described unsuccessful service encounters between two non-native speakers with different accents in a third country where English is not the standard language. In general, intergroup climate presupposes one powerful majority language and other minority language(s), but as the world becomes more multilingual with English as the powerful lingua franca, communication in English among non-native speakers with different L1s will create a variety of distinct intergroup climates (MacIntyre et al., 1998) and, accordingly, intergroup anxiety.

Future L2 pronunciation anxiety research should be linked to L2 identity research (e.g., Barkhuizen & Strauss, 2020). Accent and identity are closely linked, and identity development is embedded in local and global culture (Baker, 2015). Age, gender, learning context, culture, and L2 learning orientations are likely to influence the ways in which L2 learners experience psychological stress such as anxiety. People construct identity in different ways in different cultures (Kroger, 2006), and men and women use different strategies to negotiate identity and impression (Calogero & Thompson, 2010). Expanding the scope of L2 pronunciation anxiety in this direction will help explain the nuanced and complex nature of L2 learner psychology.

Furthermore, future research on L2 anxiety in general and on L2 pronunciation anxiety research in particular will profit from a theoretical model similar to willingness to communicate (WTC) (MacIntyre et al., 1998). The so-called pyramid model captures layers of multiple mediating factors that can influence decisions whether “to enter into discourse at a particular time with a specific person or persons, using a L2” (p. 547). The layers involve both immediate and distant factors that can make L2 learners move toward or away from actual use of the L2. In fact, in the case of L2 pronunciation anxiety, the layers will include situated factors, motivational components, and social contexts that can affect the level of the negative affect. Situational factors include people in the discourse, motivational components involve self-confidence and fear of negative evaluation or social exclusion, and social contexts comprise local and global societal situations including educational systems and intergroup climate, for example. This study is exploratory, but an accumulation of similar studies on different participant groups in different contexts would contribute to a creation of schematic representation of L2 pronunciation anxiety.

The results of this study suggest three pedagogical implications. First, teachers should inform their students that L2 pronunciation learning is inherently anxiety

provoking, and that it is normal to become anxious. Second, teachers should inform them of the reality about the multilingual world where English users around the world speak with a variety of distinct accents. It is counter-productive to feel anxious about their pronunciation to the extent that they perceive themselves as deficient. These instructions would be reassuring and help learners cope more effectively with a certain level of anxiety. Third, teachers should keep in mind that they have the potential to unknowingly contribute to students' psychological stress like L2 pronunciation anxiety (Kimura, 2020). They need to offer activities which help learners build self-confidence in their pronunciation so that they will not unnecessarily be troubled by anxiety.

Two major limitations of this study require mentioning. First, I am the single researcher of this study and I conducted the data analysis alone. Although I checked my understanding and confirmed my interpretation by interviewing the eight participants I quoted in this study, the subjective interpretation inevitably falls short of thorough inspection from multiple perspectives. Second, the choice of participants and research site was due to participant accessibility and therefore highly selective. Although delimiting participants and environments makes sense for the investigation of situational and societal factors that can affect the ebbs and flow of learner affect, the findings should be taken as preliminary and examined for dependability, credibility, confirmability, and transformability by conducting similar studies with different groups of participants in a variety of different contexts.

6 Conclusion

L2 pronunciation anxiety fluctuates between both immediate and societal factors and these factors might well intertwine. Although past studies have been focused on rather stable individual characteristics, more studies are needed to investigate its dynamic nature that capture learners' experiences and promote deeper understanding of L2 pronunciation anxiety. This study focused on situational factors and identified five sources of L2 pronunciation anxiety in the Japanese context. The investigation is important because how we sound serves as a way of establishing, demonstrating, and judging our social identities as speakers of the language(s). A comprehensive model is needed for a better understanding of L2 pronunciation anxiety and comprehensible L2 speech, not unaccented speech, should be the target of L2 pronunciation teaching to ease learners' stress.

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In-Class Willingness to Communicate in English Among Third Agers: Results of a Questionnaire Study



Anna Borkowska 

Abstract The main objective of the paper is to present the results of the study conducted among third-age learners regarding in-class WTC. The instrument adapted for the purpose of this study was a questionnaire comprising biodata items, and a 10-item Peng and Woodrow's (2010) tool. The analysis revealed that senior learners' WTC were relatively high, particularly in the case of meaning-focused tasks. The participants were more willing to communicate in dyads rather than in front of the class. They also reported readiness to translate a spoken utterance from Polish into English. The most significant components of classroom instruction facilitating in-class WTC were a teacher's helpful attitude, a friendly atmosphere, as well as cooperation with a partner, and gentle error correction. The informants emphasized that the teacher was a key figure in the classroom, and he or she played an eminent role in creating a supportive classroom climate which positively influenced WTC. By contrast, third agers acknowledged that their readiness to interact was hampered by insufficient lexical resources. Similarly, fear of making mistakes was considered to be a predictor of low WTC. Surprisingly, only a small number of the participants admitted that memory decline could negatively affect their in-class readiness to speak English.

Keywords Willingness to communicate · Senior learners · Individual differences · Classroom atmosphere

1 Introduction

One of the cornerstones of contemporary second and foreign (L2) language pedagogy is promoting communicative behaviors among language students. Before actual communication occurs, however, a learner ought to be eager to participate actively in interaction. Willingness to communicate (WTC) in a second language (L2) is defined as "a readiness to enter into discourse at a particular time with a specific person or

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persons, using a L2” (MacIntyre et al., 1998, p. 547). L2 WTC has been intensively studied in university and high school students (e.g., Cao, 2011; Mystkowska-Wiertelak & Pawlak, 2017; Piechurska-Kuciel, 2018; Yashima, 2002). Yet, to the best of the present author’s knowledge, there are no publications explicitly referring to senior learners’ WTC in English and their perceptions of factors which may influence L2 WTC. The present study, therefore, was prompted by the lack of empirical research regarding WTC among older citizens. It attempted to investigate third-age learners’ in-class WTC in English, as well as identify factors which—from the participants’ perspective—facilitate or inhibit WTC in the educational context. For the purpose of the article, seniors are defined as individuals fifty-five years of age and older (cf. Gabryś-Barker, 2018; Ramírez Gómez, 2016; Stuart-Hamilton, 2012).

2 L2 Willingness to Communicate

Originally, the notion of WTC was developed with reference to the first language (L1), and it was perceived as a trait-like concept referring to a person’s general predisposition towards entering into verbal communication (McCroskey & Richmond, 1987). By contrast, L2 WTC was conceptualized at dual levels, namely as personality and situation-based variables (MacIntyre et al., 1998). The current multi-layered pyramid model of WTC (MacIntyre et al., 1998) involves “constructs commonly employed in the L2 literature according to proximal-distal continuum that captures the dimensions of time and specificity with a distinct intergroup flavor” (MacIntyre, 2007, p. 567). As explained by MacIntyre et al. (1998), the most distal layers (Layer V and VI) are devoted respectively to *the social and individual context* (i.e., intergroup climate and personality) and *the affective context* (i.e., intergroup attitudes, social situation and communicative competence). Layer IV comprises *motivational propensities*, subcategorized into interpersonal motivation, intergroup motivation, and self-confidence. The most proximal determinants of L2 WTC are located in Layer III, known as *situated antecedents* with two components: desire to communicate with a specific person and state communicative self-confidence. The construct of WTC as such is found in Layer II (*behavioral intention*), and it is understood as the final step before actual L2 communicative interaction. Finally, Layer I contains *communication behavior* related to L2 use in different contexts. What needs to be highlighted here is that the lowest levels of the pyramid (IV, V, VI) represent permanent, trait-like variables whereas the highest levels (I, II, III) appear to be linked to situational stimuli. Likewise, trait-like and situational components are found to complement each other, and the top layers are affected both by immediate as well as long-term variables situated in the bottom layers. The personality-based variables prepare learners for interaction by creating a tendency to react orally in situations whereas situational WTC influences a decision to initiate communicative behaviors in particular situations (e.g., MacIntyre et al., 1999; Zarrinabadi, 2014).

3 In-Class WTC

It goes without saying that WTC is of paramount importance for encouraging communicative engagement in an educational context, and, as stated by MacIntyre et al. (1998, p. 545), it ought to be “the primary goal of language instruction.” It is noteworthy, however, that early L2 WTC research made no distinction between in-class and out-of-class WTC. For instance, Macintyre et al. (2001) measured four language skills both inside and outside the classroom in the immersion context. Importantly, interactions referred to “strangers” or “friends” with no reference to specific professions. The most significant modification was made by Weaver (2005), who developed a scale measuring L2 WTC in both speaking and writing tasks, and in situations normally occurring in an L2 class, such as writing a paragraph or doing a role-play. A study conducted by Peng and Woodrow (2010) among university students in China, on the other hand, investigated L2 WTC in various activities between three types of interlocutors, namely a teacher, a peer, and a group of peers. The study used selected items from Weaver’s scale (2005), and paid due attention to students’ readiness to engage in meaning-focused and form-focused exercises. Chinese university students were more willing to communicate in controlled situations than in meaning-focused tasks as they were likely to represent exam-oriented goals, and, for that reason, scoring well in written examinations was of much significance to them (Simpson, 2008). Peng (2014) acknowledges that, as opposed to Western classrooms, Chinese educational settings are more teacher-centered, and silence is an indicator of respect for the teacher who is recognized as an authority in the classroom (Liu, 2002). Moreover, speaking up during classes may contribute to being criticized as a “show off” (Peng & Woodrow, 2010). Students in China also tend to avoid linguistically demanding situations because, as emphasized by some scholars, it may pose a threat of losing face or being ridiculed (e.g., Peng, 2014; Wen & Clément, 2003).

At this juncture, equally interesting should be Mystkowska-Wiertelak and Pawlak’s study (2016). The researchers developed a research tool and conducted a study among university students in Poland measuring WTC and relationships between its various underlying factors. In-class L2 WTC was based on Peng and Woodrow’s (2010) instrument with Likert-scale items adjusted to the Polish classroom setting. The high value of standard deviation in in-class WTC showed that individual difference variables had a considerable impact on classroom WTC. Mystkowska-Wiertelak and Pawlak (2016) concluded that learning styles, personal agendas for studying English, learning strategies, personality and anxiety were likely to attribute to such discrepancies between the results.

4 Variables Influencing WTC Inside the Classroom

It is worthwhile to mention here that there is a rich body of research on L2 WTC which has identified a whole range of different factors affecting in-class WTC (e.g., Cao,

2011; Mystkowska-Wiertelak & Pawlak, 2017; Peng, 2014; Peng & Woodrow, 2010; Riasati, 2012; Zarrinabadi, 2014). Cao (2011), for instance, stresses the importance of topic and task type. It is well established that students tend to engage more in discussions of topics which are more interesting and attractive in terms of familiarity since learners are likely to possess sufficient of vocabulary, as well as essential background knowledge to share with peers (e.g., Cao & Philp, 2006; Kang, 2005; MacIntyre & Legatto, 2011; Mystkowska-Wiertelak, 2016; Zhang et al., 2018). Also, interlocutors play a crucial role in sustaining L2 WTC. Typically, learners enjoy communicating with group members they know well, and those who are cooperative and actively involved in the task (e.g., Kang, 2005; Pawlak & Mystkowska-Wiertelak, 2015). Nevertheless, as pointed out by De Saint Léger and Storch (2009), classroom interaction ought not to be dominated by only talkative students as it dramatically decreases L2 WTC and discourages less secure students from communication.

In educational settings, classroom atmosphere also appears to be of unquestionable importance for L2 WTC. Several researchers (e.g., Cao, 2011; Dewaele & Dewaele, 2018) have suggested that a positive climate enhances general cooperation, and lowers the fear of speaking by alleviating learners' anxiety. To a large degree, an encouraging classroom atmosphere is created by the teacher who promotes communicative behaviors by providing numerous opportunities for language interaction (e.g., Riasati & Rahimi, 2018; Sheybani, 2019). As evidenced in the study of Mystkowska-Wiertelak and Pawlak (2017), students appreciate a teacher who is actively engaged in monitoring tasks performed in dyads since, obviously, it motivates them to make better use of interaction. It is evident that teacher immediacy, that is, his or her verbal and non-verbal behaviors (e.g., smile, encouragement, praising), as well as teacher support reduce the distance and facilitate a good rapport with learners (e.g., Cao, 2011; Wen & Clément, 2003). Zarrinabadi (2014), for example, demonstrated that L2 WTC is affected by the teacher's time devoted to task preparation, topic selection, and error correction. Errors ought to be corrected in a non-threatening manner since feedback is considered to be a factor exerting an influence on students' WTC (MacIntyre et al., 2011). Gentle correction helps students to feel confident and more eager to participate whereas immediate error correction may enhance their anxiety and discourage them from active involvement in future conversations (Zarrinabadi, 2014). Interestingly, fear of making mistakes was reported to be lower when students talked with interlocutors they did not know or were indifferent to (e.g., Baran-Łuczars, 2015).

Much in a similar vein, classroom interactional patterns in a conversational context are believed to influence WTC. Apparently, students prefer small group or dyad to whole-class exercises as teacher-fronted interaction is perceived as anxiety-provoking (e.g., Cao, 2011; Fushino, 2010; De Saint Léger & Storch, 2009). Learners with lower language competence identify turn-taking in pairs as less competitive and daunting (e.g., Cao, 2013; Cao & Philp, 2006; Mystkowska-Wiertelak, 2016). When it comes to the comparison between activities performed individually and in pairs, Mystkowska-Wiertelak and Pawlak (2014) found that students preferred monologues to dialogues, in spite of the fact that high WTC in monologues tended to drop during the task while in dialogues the initial low WTC was likely to increase in time.

In the light of these considerations, it is justifiable to highlight the individual dimension of WTC which refers to internal psychological and affective components possessed by each language student. Cao (2011) mentions such variables as perceived opportunity to communicate, personality, self-confidence, and emotion. Personality is regarded to either facilitate or inhibit L2 WTC as, for instance, students who tend to be more risk-taking are more prone to engage in communication and are willing to talk when a suitable opportunity arises (Cao & Philp, 2006; Wen & Clément, 2003). Self-confidence is understood at dual levels, namely, as the overall belief in being able to communicate, and as state self-confidence which is “a momentary feeling of confidence” which fluctuates at certain moments (MacIntyre et al., 1998, p. 549). This finding is echoed in a study by Peng and Woodrow (2010), who indicated that students with high self-evaluation of L2 competence were likely to be more willing to enter into communication. What should also be underscored is a diverse range of emotions in educational settings. As presented by Cao (2011), they may include positive emotions (e.g., enjoyment and satisfaction), and negative emotions (e.g., anxiety, boredom, frustration, embarrassment and anger). In line with this finding, Piechurska-Kuciel (2018) argues that a positive attitude to L2 may lead to a significant degree of L2 WTC. The author conducted a study among secondary school students in Poland whose aim was to investigate the role of openness to experience as a predictor of WTC levels. In brief, the results showed that higher levels of openness led to focusing on positive emotions, which contributed to higher WTC. Rather unsurprisingly, the lack of openness to experience puts learners in “a far worse position” where they are constantly faced with unpredictable, tension-generating communicative situations (Piechurska-Kuciel, 2018, p. 196).

The key factors presented above, namely learner-internal (e.g., personality, self-confidence and emotion), and learner-external (e.g., topic, task, teacher, interlocutors and classroom atmosphere) are of great value in the case of younger adults’ in-class readiness to communicate. In this context, however, it seems critical to concentrate on older adults’ communicative behaviors inside the language classroom.

5 The Significance of WTC in Senior Learners’ Language Classroom

As mentioned earlier, WTC among older citizens has not been scrutinized in the literature. Nevertheless, it may be reasonable to hypothesize that third agers’ WTC ought to be relatively high as they have a clear sense of language learning aims, as well as a strong desire to affiliate in classroom settings (e.g., Derenowski, 2018; Jaroszewska, 2013). Despite the fact that speaking is a major source of in-class discomfort experienced by third-age learners, this skill is considered to be the most fundamental in second language learning (cf. Grotek, 2018; Matusz & Rakowska, 2019). What seniors mainly seek in a language classroom are opportunities that, on the one hand, allow them to establish or maintain social contacts, but on the other

hand, help them gain and improve oral skills (Niżegorodcew, 2016; Oxford, 2018; Pawlak et al., 2018; Pfenninger & Polz, 2018).

In actual teaching practice, the present author's numerous observations of senior language learners as English students have shown that active participation is of significant interest to older adults who are eager to be absorbed in various types of classroom interactions. Interestingly, teaching seniors may become a challenge when it comes to maintaining discipline during communicative tasks since they seem to be overenthusiastic about using the L2 in speech. Very frequently, third agers answer a question all together although a teacher directs that question to a particular student. This might suggest that they wish to take advantage of all the available opportunities to speak English, which indicates their readiness to communicate in-class. What lends some support to such an interpretation are, for instance, Jaroszevska's (2013) and Ramírez Gómez's (2016) studies. The researchers have evidenced that people at a senior age primarily attend foreign language classes with a view to developing speaking abilities essential for independent communication abroad. Therefore, the teacher ought to have a flexible approach as older adults could be capable of negotiating the curriculum and take an active part in the teaching and learning processes (cf. Larrotta, 2019; Ramírez Gómez, 2016).

With this in mind, the teacher appears to play a vital role in the seniors' language classroom since he is perceived as the authority by older students (e.g., Derenowski, 2018). As such, the teacher has a major influence on promoting age-advanced learners' desire to communicate inside the classroom because he or she may offer a wide range of oral tasks in real-life patterns of interaction. This is in accordance with the view held by Pawlak (2015, p. 49) who aptly states that "conducting language lessons in such a way that language interaction exhibits the features of out-of-class communication is a sound proposition."

By the same token, the authors of the original model (MacIntyre et al., 1998, p. 547) point out that WTC is recognized as "a proper objective for L2 education." As a consequence, a mindful teacher should attach utmost importance to in-class WTC and a classroom environment that mirrors forms of communication that may naturally occur outside educational settings in daily verbal exchanges. In-class communicative opportunities are deemed to give rise to older citizens' readiness to enter into communication voluntarily, which increases the likelihood of active engagement in real-life interactions. As concluded by MacIntyre et al. (1998, p. 558), WTC is "the final step in preparing the language learner for communication, because it represents the probability that a learner will use the language authentic interaction with another individual, given the opportunity."

6 The Study

6.1 Aims and Research Questions

The overall aim of the study was to investigate third agers' in-class WTC in English in meaning-focused and form-focused tasks, as well as to identify factors which increase and decrease WTC. More specifically, the research was conducted to address the following questions:

1. What is the older adults' WTC in English in the classroom setting?
2. Which components of classroom instruction, according to the participants, are considered to foster in-class readiness to communicate?
3. Which factors are deemed to hinder in-class WTC from the older adults' perspective?

6.2 Participants

The informants were twenty-eight students (27 females and 1 male) of the Third Age University in Nowy Targ who had been regularly attending English courses (2 contact hours a week) at Podhale State College of Applied Sciences in Nowy Targ. They all were taught by the same teacher (the present author). When asked about the place of residence, most of the learners (89%) reported living in a town, and 11% in a village. The mean age was 64, with the youngest student being 56 and the oldest 72. The majority of the participants (68%) represented the A1 level whereas 32% were at the A2 level according to CEFR. On average, the respondents declared to have been learning English for 7 years throughout their life. When it comes to English courses for senior learners, the average length of participation was 3 years. As regards their education, 57% of the participants reported having graduated from a university, and 43% admitted having secondary education. The most fundamental reason for learning English in the third age was by all means communication (79%) during trips abroad, a stay abroad, as well as conversations with English speaking friends and family. Also, 18% of the participants highlighted the prominence of self-realization.

6.3 Research Instrument and Procedure

The instrument adapted to this study was a questionnaire (Appendix) comprising biodata items, one multiple choice question, two open-ended questions referring to the identification of factors which facilitate and inhibit in-class WTC, and a 10-item Peng and Woodrow's (2010) tool offering insights into the participants' in-class WTC. The scale was intended to measure L2 WTC in various activities between three

types of interlocutors, namely a teacher, a peer, and a group of peers, and it paid due attention to students' readiness to engage in meaning-focused (Appendix, item 2, 4, 5, 6), and form-focused exercises (Appendix, item 7, 8, 9, 10). In the present study, the in-class tool was designed as a 6-point Likert scale (from 1—*I strongly disagree* to 6—*I strongly agree*). Some items on the scale are as follows: "I am willing to give a short self-introduction without notes in English to the class" or "I am willing to ask my group mates in English of word I do not know." One item needed modification with regard to a cultural context: "I am willing to translate a spoken utterance from Chinese into English" was obviously adapted to the Polish context as "I am willing to translate a spoken utterance from Polish into English." The following two items were removed: "I am willing to give a short speech in English to the class about my hometown with notes" and "I am willing to ask my peer sitting next to me in English how to say an English phrase to express the thought in my mind." It is worth noting at this point that the present author's intention was to add statements which could reflect the focus on general in-class WTC in English specifically among senior learners. As a result, two new statements were constructed: "I am willing to communicate in English during classes" (item 1) and "I am willing to share my knowledge in English during the classes" (item 3).

The questionnaire was written in Polish, and Peng and Woodrow's (2010) tool was translated to reduce the risk of the items being misunderstood by the respondents. From a technical point of view, the survey was prepared to accommodate specific seniors' needs, that is, to reduce difficulties resulting from potential visual impairments. Therefore, the font size was 14 points, and in-between line space was 1.5 points (cf. Ramírez Gómez, 2016, 2019). All the participants agreed to complete the questionnaire which was administered during regular class time, and it took the respondents approximately 15 min to answer all the questions.

Once the questionnaires were collected and coded, Microsoft Excel was used to calculate the total means and standard deviations for In-class WTC scale, as well as for each individual item. Also, the total means and standard deviations were separately calculated for meaning-focused tasks, form-focused activities, and general statements. This was followed by both tallying Cronbach's alpha for In-class WTC scale, and for meaning-focused exercises, form-focused tasks and general statements. The data regarding components of classroom instruction were collected through an open-ended question (Appendix, Questions H). The data was divided into the aspects of classroom instruction that were most commonly mentioned and then calculated. In a similar vein, information concerning factors hampering in-class WTC was also gathered through an open-ended question (Appendix, Question I). The data was categorized into the most frequently mentioned variables and the responses were calculated. The informants' responses and excerpts from them were all translated into English by the present author.

6.4 Findings

6.4.1 In-Class WTC Among Third Agers

As illustrated in Table 1, Cronbach alpha for in-class WTC scale was satisfactory (0.72), both for meaning-focused (0.75) and form-focused tasks (0.71). The internal reliability for general statements was not acceptable, and thus item 1 and 3 were excluded from further analysis. WTC in English in meaning-focused activities was much higher ($M = 4.89$) than in form-focused activities ($M = 3.85$). This might suggest that less weight was given to tasks principally based on accuracy. When meaning-focused activities were performed, participants not only showed higher WTC but their responses were relatively also more homogenous ($SD = 0.77$). This is hardly surprising in view of the fact that older adults' major goal was real-life communication. Also, on the basis of the data given in Table 1, one may say that the standard deviation in form-focused activities was rather high ($SD = 1.60$). A possible corollary of this situation could have been divergences between the respondents' approach to the inability to comprehend utterances or individual, unknown lexical items.

When it comes to means and standard deviations for particular items, the data revealed that older adults were generally willing to use English in the educational setting ($M = 4.37$). As can be seen from Table 2, the total standard deviation ($SD = 1.19$) was relatively high, which suggest high variability in participants' responses. The highest mean ($M = 5.14$) was obtained for item 6 which was related to the translation of a spoken utterance from Polish into English. It is worth emphasizing that a role-play as such was perceived to be done much more eagerly with one's peer ($M = 5.00$) rather than in front of the class ($M = 4.75$). One plausible explanation for this is that the participants simply felt more secure and less anxious during interaction in dyads since they helped each other with the task and spoke with a partner who was potentially at the same proficiency level.

The age-advanced learners' in-class WTC was the lowest in statement 10 which was intended to gauge the informants' readiness to ask group mates in English about the pronunciation of a word ($M = 3.64$). Such a relatively low result might derive from the fact that most of the students represented the A1 level and they may have been aware that their peers lacked sufficient linguistic knowledge. Another possible interpretation could be that the older adults might have viewed the teacher as the only

Table 1 Means, standard deviations and Cronbach alpha values for in-class scale, including meaning-focused tasks (MFT), form-focused tasks (FFT) and general statements added by the author (GS)

Scale	<i>M</i>	SD	Cronbach alpha
In-class WTC	4.51	1.09	0.72
MFT	4.89	0.77	0.75
FFT	3.85	1.60	0.71
GS	5.08	0.69	0.32

Table 2 Means and standard deviations for in-class WTC scale ($N = 28$)

No.	Item	<i>M</i>	<i>SD</i>
2.	I am willing to give a short self-introduction without notes in English to the class.	4.64	0.78
4.	I am willing to do a role-play standing in front of the class in English (e.g. ordering food in a restaurant).	4.75	0.93
5.	I am willing to do a role-play with at my desk, with my peer.	5.00	0.67
6.	I am willing to translate a spoken utterance from Polish into English in my group.	5.14	0.71
7.	I am willing to ask the teacher in English to repeat what he/she just said in English because I didn't understand.	3.82	2.00
8.	I am willing to ask my group mates in English the meaning of word I do not know.	4.11	1.40
9.	I am willing to ask my peer sitting next to me in English the meaning of an English word.	3.82	1.47
10.	I am willing to ask my group mates in English how to pronounce a word in English.	3.64	1.54
Total		4.37	1.19

authority in class. In a similar vein, the third-age learners seemed to be less willing to ask the teacher in English to repeat an utterance that had not been understood ($M = 3.82$). What also needs to be stressed is that their responses were the most diverse here ($SD = 2.00$). It could be surmised that the seniors felt fearful to admit that they were incapable of understanding the teacher since they wished to avoid the risk of public humiliation.

6.4.2 Aspects of Classroom Instruction Facilitating in-Class WTC

Table 3 presents the most significant components of classroom instruction fostering in-class WTC among the third agers. The analysis revealed that the teacher was a

Table 3 The most vital components of classroom instruction increasing in-class WTC among the participants

No.	The most crucial components of classroom instruction mentioned by the respondents	No. of students
1.	Teacher's helpful and supportive attitude	13
2.	Friendly and positive atmosphere	13
3.	Cooperation with a peer	12
4.	Gentle error correction	8
5.	Using technology	5
6.	Interesting tasks	4

key figure sustaining the older adults' WTC and he or she played an eminent role in maintaining a positive atmosphere. Thirteen informants indicated that they were eager to communicate in a friendly classroom climate which was created by the teacher's supportive and helpful attitude. When asked about factors which facilitated in-class WTC, some respondents elucidated: "The teacher creates a friendly atmosphere which motivates me to learn (...)" (S5); "She [the teacher] can motivate and listen to our opinions and views" (S8); "The atmosphere during classes enhances communication" (S27).

Also, the participants placed an emphasis on gentle error correction (8 responses) which might boost their in-class WTC: "(...) even if one makes a mistake, you aren't criticized" (S27); "The teacher is a supportive person who corrects my mistakes patiently" (S21); "(...) the teacher reacts to our mistakes in a very gentle manner" (S11). It is worthwhile to note here that pronunciation was of particular significance for the seniors, and they found it essential to have their mistakes corrected in a conversational context. Error correction while speaking seemed not to have a negative influence on communicative behaviors, and, paradoxically, it was identified as a crucial variable which fostered WTC: "(...) the teacher controls my pronunciation in a friendly way and corrects mistakes each time and I like it" (S4); "It's important for me that the teacher corrects my pronunciation while speaking" (S2).

Much prominence was given to cooperation with a peer (12 students) as well. In this respect, the participants mentioned tasks in the form of dialogues, and some pointed out that asking and answering questions might increase their WTC. Likewise, the senior learners appreciated interaction with a partner during classes since, as stated by one of the respondents, there should be "(...) a lot of classes when students are forced to create dialogues between each other" (S18). It may be concluded that due attention was paid to dyadic communication because the respondents realized that in order to communicate effectively in English outside the classroom, they needed to be actively involved, and practice real-life interactions in a classroom environment.

Another noteworthy component of language instruction which, according to the third agers, may enhance in-class WTC, is new technology utilized in class. The participants reported that presenting didactic materials by means of multimedia equipment facilitated active engagement and helped them to revise new vocabulary. This ought to be interpreted as a positive sign of the seniors' openness to modern teaching methods which may, hopefully, inspire them to use computer-mediated communication or seek other multimedia channels to interact in English with foreigners. The data also suggested that WTC could be sustained by interesting tasks performed during classes which stimulated the senior learners' constant involvement in language interaction.

6.4.3 Factors Hindering in-Class WTC

When it comes to variables that negatively impacted in-class WTC, the analysis yielded vital insights into heterogeneity among the older adults. In one sense, their

Table 4 The most substantial factors inhibiting in-class WTC among the third agers

No.	The most significant factors mentioned by the respondents	No. of students
1.	Insufficient lexical resources	9
2.	Fear of humiliation	4
3.	Fear of making mistakes	4
4.	Memory problems	3
5.	No contact with foreigners	2
6.	Anxious classroom atmosphere	2

individual answers proved fruitful, but in another sense, they were rather diverse as each participant had his or her own views based on lifelong learning experience.

As can be seen in Table 4, insufficient vocabulary resources turned out to be the most important factor which might negatively influence in-class WTC. As mentioned earlier, the majority of respondents (68%) were A1 students, and thus it may come as no surprise that they might feel insecure to express themselves adequately in all classroom situations: “(...) too few words to feel free to communicate” (S13); “(...) the lack of vocabulary needed to communicate at a particular moment” (S4). To a large degree, insufficient lexical items were linked to fear of humiliation and making mistakes. The participants (9 responses) suggested that poor knowledge of vocabulary hampered their WTC as they felt anxious and stressed while speaking. Four learners acknowledged that fear as well as an anxiety-inducing classroom climate (2 students) could significantly reduce a desire to enter into communication, and as a result, it was a predictor of low WTC. As pointed out by the participants, they were mainly fearful of incorrect pronunciation and inability to retrieve necessary vocabulary. One student admitted: “I don’t always remember a certain word or a sentence and I feel ashamed that I don’t remember that” (S6). It is justifiable to note here that learners in the third age are typically conscious of their advancing age and potential memory capacity decline. Therefore, memory problems (3 respondents) appeared to hinder WTC particularly in the context of vocabulary retrieval. The data also revealed that a rather small number of students reported that a key to fostering their readiness to speak English were opportunities to communicate with foreigners. It ought to be made plain that seniors—as the most mature and experienced learners of all age groups—recognized the L2 not as academic knowledge but as a means of communication outside the classroom.

7 Discussion

The present study set out to examine in-class WTC among senior students, and identify factors deemed to facilitate and inhibit willingness to speak inside the classroom. What should be highlighted first and foremost is that, generally, third agers’ WTC was relatively higher than in-class WTC investigated among university students in

Poland (e.g., Mystkowska-Wiertelak & Pawlak, 2016). Certainly, younger adults majoring in English principally aimed at using English at work both in oral and written contexts whereas older adults are primarily concentrated on improving their speaking abilities (e.g., Gabryś-Barker, 2018; Jaroszewska, 2013). When it comes to WTC in English in meaning-focused and form-focused activities, the present findings are not in line with Peng and Woodrow's (2010) study. The researchers demonstrated higher WTC in form-focused activities among Chinese students. This current study, however, indicates that the senior students were more willing to speak in meaning-focused activities. The reason for the inconsistency is that, as discussed above, younger adults in China are exam-oriented students, and as such, they principally gain English academic knowledge necessary to achieve good exam results (e.g., Peng, 2014; Simpson, 2008).

In light of the findings of this research, WTC in English was higher in dyadic interaction. As shown in other studies, students tend to prefer working in pairs as it is considered to be less competitive than teacher-centered tasks (e.g., Cao, 2013; Mystkowska-Wiertelak, 2016; Mystkowska-Wiertelak & Pawlak, 2017). At this juncture, it is vital to mention that in the case of older adults, the social aspect of learning may also be of particular relevance since they give high priority to improvement of interpersonal bonds and a sense of belonging to a group (e.g., Derenowski, 2018; Jaroszewska, 2013; Pfenninger & Polz, 2018). Therefore, as shown in the analysis of the answers to the open-ended question, dyadic cooperation was identified as a significant component which fostered older students' readiness to speak, and gave an opportunity to share their linguistic knowledge and experience with a partner.

It is also essential to note that the teacher plays an eminent role in enhancing in-class WTC. This research echoed previous findings which indicated that the teacher's behaviors and attitudes are crucial in creating a supportive classroom atmosphere and enhancing relationships with students (e.g., Kang, 2005; Lee, 2009; MacIntyre et al., 2001). In addition, it is the teacher's duty to prepare interesting tasks that are of unquestionable importance for seniors. As evidenced in the studies conducted by Cao (2013) as well as MacIntyre and Legatto (2011), tasks and topics which students find attractive reduce a potential difficulty of conversation and facilitate WTC. In this regard, one may say that older adults associate interesting exercises with using multimedia equipment during classes. This seems to echo the view held by Krajka (2011), who underscores that new technology ought to be utilized as an educational tool while teaching older adults as some of them are advanced enough to appreciate its usefulness not only in class but also outside educational settings.

It was also found that error correction is a pertinent factor increasing seniors' WTC. As shown in the analysis, the teacher was expected to correct primarily pronunciation mistakes mostly because the seniors found it essential to improve their communicative abilities. As a matter of fact, the results are inconsistent with MacIntyre et al.'s (2011) study where immediate error correction was reported to reduce WTC. Some third agers claimed that there was an urgent need for correcting each mistake during interaction. Interestingly, on one hand, the seniors wanted to have their mistakes corrected, but on the other hand, fear of making mistakes was deemed to inhibit in-class WTC. It is therefore necessary to stress that errors ought to

have been corrected in a gentle and non-threatening manner. This finding is echoed in a study by Kang (2005). The researcher found that a method of delivering error correction affects in-class WTC. Basically, when the teacher creates a stress-free learning environment, learners feel less anxious and insecure about making mistakes. Notably, the teacher's supportive attitude towards mistakes may by far reduce the risk of public humiliation that could discourage older students from speaking English in the future.

Finally, as demonstrated in the current study, insufficient lexical resources appeared to be the strongest predictor of low in-class WTC among the third-age learners. A similar view has been presented by Cao (2011), who indicates that in terms of language production, poor vocabulary knowledge may negatively affect WTC among university students. The inability to express one's thought in English could lead to reliance on L1 and hence this situation hampers WTC. Also, one needs to point out that seniors may have difficulties with the recollection of vocabulary. This fact is strongly related to potential memory problems and processing speed issues (e.g., Jagodzińska, 2008; Pfenninger & Polz, 2018; Ramírez Gómez, 2016). The prime cause of age-related decline is working memory (e.g., Baddeley, 1986, Stuart-Hamilton, 2012). For instance, vocabulary retrieval requires more time as senior citizens experience the decline of general cognitive functioning (cf. Hasher & Zacks, 1988; Pfenninger & Singleton, 2019). In consequence, the process of recollection is interfered with by irrelevant information, which reduces the capacity of working memory (e.g., Jaroszewska, 2013; Singleton, 2018). Needless to say, effective communication essentially means adequate reaction to oral stimuli at a given time. In this regard, older adults realize that memory decay at an advancing age may hamper their in-class WTC in English. In order to help them with lexical retrieval, a great number of revision tasks ought to be planned on a regular basis. Such an approach may not only help seniors notice what has already been acquired, but it also gives them a sense of learning success which motivates them to engage in further language practice (cf. Kozerska, 2016).

Although the present study has surely contributed to a better understanding of age-advanced learners' in-class WTC in English, it is not without limitations. Its major weakness was the relatively small sample as well as the location of the third age university. Nowy Targ is a town in the south of Poland. Because a substantial number of its residents emigrated to English speaking countries, the participants are likely to have their friends and family abroad. As a result, senior citizens from Nowy Targ may have more opportunities to speak English outside the classroom. Therefore, this study was limited by the absence of older adults from different regions of Poland with dissimilar background experiences. What also seems unfortunate is that the study did not include seniors taught by different teachers representing diverse teaching styles. It is by all means certain that language instructors' approaches towards students and the teaching process itself could vary considerably and thus it might affect third agers' level of in-class WTC in English.

8 Conclusions

In spite of its limitations, this small-scale study provided valuable insights into the nature of in-class WTC in the case of third-age learners. The data gathered by means of a questionnaire indicated that seniors' in-class WTC was relatively high, and the participants were eager to interact in English in the educational setting. Certainly, their lifelong learning experience helped them to determine prominent factors which may push or drag WTC.

The pedagogical implication is that a thoughtful and supportive teacher positively impacts seniors' readiness to speak mainly because he or she creates a safe classroom environment. In a similar vein, senior language learners attach great importance to interaction during classes, which may testify to their full awareness of the fact that before real-life communication, it is necessary to be willing to practice speaking in the classroom. Therefore, dyadic tasks have a great deal of influence on boosting WTC as this pattern of interaction stimulates one of the most common forms of communication outside the classroom. In actual teaching practice, a prerequisite for high in-class WTC is basically the planning of a large number of communicative activities and bearing in mind that third agers place much emphasis on correction of pronunciation errors. As evidenced in this study, in order to avoid potentially negative emotions, which might ruin a good atmosphere, the teacher ought to correct errors without a sense of being judgmental or critical. Seniors realize that good pronunciation may facilitate their WTC in real-life settings as well as helping them be a more successful English speaker. Overall, it is apparent that readiness to communicate starts inside the classroom with a language teacher who promotes various interactions, and third-age learners who surely appreciate all opportunities to speak a second language during classes.

It ought to be noted at this point is that future investigations into third agers' in-class WTC in English would be beneficial. Further research might identify the relationship between in-class WTC, classroom environment, and teacher immediacy establishing whether group cohesiveness or teacher support would be a more powerful determinant of older adults' WTC. Also, future studies could explore seniors' readiness to speak English during meaning and form-focused task performance. This dynamic approach could help compare levels of WTC between those two kinds of communicative activities and identify types of activities that might have a more positive effect on in-class WTC in English. Further empirical research would be of great significance for language educators working with senior learners on a regular basis as it could provide crucial implications for everyday teaching practice.

Appendix

In-class WTC questionnaire for seniors.

A) **Gender:**

- female
- male

B) **Age:** years old

C) **Place of residence:**

- village
- town up to 50 000 residents
- town/city with more than 50 000 residents

D) **Education:**

- tertiary
- secondary
- primary

E) **How long have you been learning English throughout your life ?** years

F) **How long have you been learning English in the Third Age University** years

G) **Why are you learning English? Choose the one most important reason.**

- communication in English (during trips abroad, your stay abroad, conversations with English-speaking friends, family)
- self-realization
- memory improvement
- to maintain a rapport with groupmates, for company
- no reason
- other reason (what?)

1. **I am willing to use English to communicate during classes.**

- I strongly agree
- I agree
- I slightly agree
- I slightly disagree
- I disagree
- I strongly disagree

2. **I am willing to give a short self-introduction without notes in English to the class.**

- I strongly agree
- I agree
- I slightly agree
- I slightly disagree
- I disagree
- I strongly disagree

3. **I am willing to share my knowledge in English during the classes.**

- I strongly agree
- I agree
- I slightly agree
- I slightly disagree
- I disagree
- I strongly disagree

4. **I am willing to do a role-play standing in front of the class in English (e.g. ordering food in a restaurant).**

- I strongly agree
- I agree
- I slightly agree
- I slightly disagree
- I disagree
- I strongly disagree

5. **I am willing to do a role-play with at my desk, with my peer.**

- I strongly agree
- I agree
- I slightly agree
- I slightly disagree
- I disagree
- I strongly disagree

6. **I am willing to translate a spoken utterance from Polish into English in my group.**

- I strongly agree
- I agree
- I slightly agree
- I slightly disagree
- I disagree
- I strongly disagree

7. **I am willing to ask the teacher in English to repeat what he/she just said in English because I didn't understand.**

- I strongly agree
- I agree
- I slightly agree
- I slightly disagree
- I disagree
- I strongly disagree

8. **I am willing to ask my group mates in English the meaning of word I do not know.**
 I strongly agree I agree I slightly agree I slightly disagree I disagree I strongly disagree
9. **I am willing to ask my peer sitting next to me in English the meaning of an English word.**
 I strongly agree I agree I slightly agree I slightly disagree I disagree I strongly disagree
10. **I am willing to ask my group mates in English how to pronounce a word in English.**
 I strongly agree I agree I slightly agree I slightly disagree I disagree I strongly disagree
- H) **Which factors, according to you, facilitate in-class willingness to communicate in English?**
-
-
- I) **Which factors, according to you, inhibit in-class willingness to communicate in English?**
-
-

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Vocabulary Learning Strategies and the Representation of L2 and L3 Words in the Mental Lexicon



Teresa Maria Włosowicz

Abstract The study aims to investigate the representations of second (L2) and third (L3) language words in the multilingual mental lexicon. Even though access to the contents of lexical entries is limited, the spontaneous verbalization of word meanings and, possibly, of their use in context, provides some insight into the participants' declarative and to some extent procedural knowledge of the target words. As the results indicate, the choice of vocabulary learning strategies does not depend on the language combination, but is rather individual and, in fact, students tend to combine different learning strategies, which is also reflected in their ways of presenting the words. For example, one L2 word may be described by a definition in L2, its Polish equivalent and an example of its use in context. However, the learners' choices of means to define the L2 and L3 words and the correctness of their definitions do seem to depend on the language combination, as the results of the *chi*-square tests were statistically significant. Still, it can be supposed that this depends not only on the individual learners' learning strategies and lexical representations, but also on their programs of studies.

Keywords Mental lexicon · L2 and L3 word representations · Vocabulary learning strategies

1 Introduction

The mental lexicon has been an object of investigation for the last few decades, in contrast to earlier studies, which, as Aitchison (1996, p. 15) has remarked, focused on the acquisition of syntax and neglected vocabulary. While research first concentrated on second language (L2) vocabulary (e.g., Arabski, 2002; Schmitt & McCarthy, 1997), more recent studies (e.g., Cenoz et al., 2003; Gabryś-Barker, 2005) have extended their scope to the investigation of the multilingual (i.e., at least trilingual) lexicon. One of the most important questions regarding the multilingual lexicon is its organization and the representation of multiple languages. On a more general

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level, as Singleton (2003) points out, despite a high degree of integration, reflected, for example, in the dynamic interaction between the lexicons of first language (L1) and the languages, formal differences in phonology, morphology and so on constitute an argument against full integration. Rather, Singleton (2003) agrees with Cieślicka's (2000, p. 33) notion of "variable interconnection," dependent, among others, on a person's L2 experience. In fact, apart from the acquisition context, lexical representations may be influenced by the learners' language needs, including the requirements posed by their studies, such as the ability to translate. Moreover, an important role in the organization and functioning of multilingual mental lexicons is played by language distance, especially that perceived by the learners themselves (Herwig, 2001; Singleton, 2001). All of this shows that the organization of the mental lexicon is highly complex and numerous factors are likely to make each multilingual learner's lexicon unique. However, as certain vocabulary learning strategies tend to be more popular than others (Krawczyk-Neifar, 2002; Schmitt, 1997) and as the cross-linguistic similarities within particular language combinations may be perceived and exploited by different learners, it is possible that some similarity between learners' multilingual mental lexicons also exists.

Therefore, the aim of the present study is an investigation of third (L3) and additional language (cf. De Angelis, 2007) learners' vocabulary learning strategies and their representations of selected L2 and L3 words in the mental lexicon. The study takes into consideration, on the one hand, the participants' declarative and procedural knowledge of L2 and L3 words, as revealed by their verbalizations, and, on the other hand, possible relationships between the lexical knowledge acquired and the learning strategies used. Special attention is paid to the inter- and intralingual connections between words in the participants' mental lexicons, as a reflection of, broadly speaking, inter- and intralingual vocabulary learning strategies. Interlingual strategies are understood here as, for example, combining L2 and L3 words with words from another language, especially L1. Intralingual strategies involve, for instance, associating such lexical items with words in the same language (synonyms, antonyms, etc.) or with examples of sentence contexts. Last but not least, the correctness of the participants' definitions of the target words is taken into consideration: whether they retrieved the target meanings of the words, whether they confused words similar in form, whether they knew the words only partially, or whether they did not know them at all.

2 The Development of the Multilingual Mental Lexicon

2.1 The Representation of Words in the Multilingual Lexicon

In general, research evidence supports the view that lexical items in the bilingual and multilingual mental lexicon are to some extent interconnected, although the degree of interconnection may vary (Cieślicka, 2000; Herwig, 2001; Singleton, 2003). It

must also be remembered that lexical knowledge is highly complex and involves a large amount of varied declarative and procedural knowledge. In fact, there is some controversy as to what kind of knowledge is stored in the mental lexicon. For example, Levelt (1989, p. 185) defines the mental lexicon as “a passive store of declarative knowledge about words.” However, he further admits that the productive use of this “passive” store requires access to *lexical procedural knowledge*, for example, procedural knowledge of morphology. In fact, semantic knowledge can also be procedural. The correct comprehension of polysemous words requires procedural knowledge which combines knowledge that is stored in the mental lexicon with the context in order to arrive at the specific conceptual meaning (Möhle, 1997). It can thus be assumed that the method adopted in the present study, that is, defining word meanings and other properties aloud, taps mainly declarative knowledge, but some procedural knowledge can be accessed as well.

The variety of properties possessed by words was summarized by Richards (1976) in his seminal article on the importance of vocabulary teaching. In his view, knowing a word involves knowledge of its semantic value and different meanings, of its syntactic behavior, of its different forms, of “the degree of probability of encountering” (p. 79) it, of the words associated with it, both semantically (synonyms, antonyms, etc.) and in terms of co-occurrence in the same contexts, such as its collocates, as well as of the limitations on its use. Moreover, as Gabryś-Barker (2005) and the present author (Włosowicz, 2015) have shown, learners store in their mental lexicons not only “commonly shared” properties, but also idiosyncratic ones, such as associations based on culture or even on autobiographical memory. Certainly, one cannot expect a foreign language learner to verbalize all these properties upon seeing a word, but it can be supposed that at least some of these properties can be available for verbalization, provided the learner has stored them and the activation level of the word makes them available for verbalization. As Johnson-Laird (1987) has observed, speakers do not have full access to the contents of lexical entries, which is actually good, because such knowledge is often incomplete and having full access to it might feel like consulting a dictionary with missing pages.

Undoubtedly, in the case of L2 or L3 vocabulary, the meaning of a word may be expressed not only by a synonym or a definition in the same language, but also by an equivalent or a definition in another language, not necessarily in L1. According to Herwig (2001), the multilingual mental lexicon constitutes an interconnected network in which the lexicons of the two or more languages are interdependent and at the same time, the lexical entries are not stored as wholes, but rather, they are stored in a distributed way. For example, the syntactic, semantic, phonological, morphological, collocational and other properties are stored in separate nodes. As a result, words in the two or more languages may be connected at different levels. Thus, in the case of equivalents, links may exist between their semantic nodes, while in the case of phonologically similar words there may be links between the nodes which store their phonological representations (Herwig, 2001). This is why the links between cognates are so strong: There are multiple connections between their lexical entries, namely, between their semantic, phonological, morphological, orthographical and other representations. As Müller-Lancé (2002) has demonstrated, the links

between cognates can be stronger than the links between words of the same language which are dissimilar in form (e.g., synonyms).

The development of the bilingual and multilingual lexicon also involves changes in the strength and nature of the links between the words of the two or more languages. As proposed by Herwig (2001), the L2 lexicon starts out as an extension of L1 (and the L2 words are connected to their L1 equivalents by lexical links; Kroll & Stewart, 1994), but with time and increased proficiency, the connections between L2 lexical entries become stronger, while those between the L1 and the L2 words become weaker. In other words, the L2 system becomes more independent of the L1, which, as will be explained below on the basis of Jiang's (2000) model of lexical development, is also connected with the representation of other properties of lexical items, such as verb government. At the same time, an increase in L2 proficiency is often accompanied by the learner's increased ability to lexicalize concepts directly in L2, without having to rely on L1-L2 translation in language production and on L2-L1 translation in comprehension (Kroll & Tokowicz, 2001). In fact, as Kroll and Tokowicz (2001, p. 57) remark, even though there is some evidence that less proficient L2 learners may access concepts directly via L2 words, this process "may require the additional ability to resolve cross-language competition from alternatives in L1 with similar meanings." In fact, as L1 cannot be fully deactivated, L2 processing cannot be dissociated from that of L1 and some competition always takes place. According to De Bot's (1992) model of bilingual processing, based on Green's (1986) inhibitory-control model, a language can be selected, active or dormant; even though language production or comprehension basically takes place in the selected language, the active language participates in the processing and may be a source of interference.

Another problem with bilingual or multilingual lexical processing is the existence of words which have more than one equivalent. Thus, if, for instance, an L2 word has several L1 equivalents, as is often the case with abstract words, its translation is slower, which is a result of competition. As Kroll and Tokowicz (2001, p. 62) conclude, "[w]ords in both languages may access a shared conceptual system, but when a given target word is ambiguous, the properties of its meaning representation will give rise to interpretations that are more contextually dependent within and across languages." It may thus be supposed that, while defining a polysemous word in L2 or L3, a learner may actually access a context in which its contextually appropriate meaning may be defined, but, as a result, the other meanings of the word may actually become deactivated and more difficult to access.

Moreover, an important role is played by the similarity between the words in the languages involved (both between particular words and between the languages in general, as in the case of related languages), as well as between words in the same language. On the one hand, intralingual similarity may result in access to non-target meanings due to the confusion of word forms, which is particularly visible in less proficient bi—and multilinguals, at what Jiang (2000) calls the formal stage (see below). On the other hand, as Singleton (2001) has observed, L3, L4 and further languages also initially develop as extensions of already existing ones, but not necessarily of L1. For example, if L3 is more closely related to L2, it may start out as an extension of L2. However, the acquisition context also plays a role in the development

and organization of the multilingual lexicon, for example, the contexts in which both (or all three) languages are used together or separately (Abunuwara, 1992; Votaw, 1992). The result of the interplay between the acquisition context, learning strategies and/or teaching methods and the learner's proficiency level is what Cieřlicka (2000, p. 33) calls "variable interconnection." More precisely, the interconnection between the languages in the mental lexicon depends on such factors as learning strategies and language proficiency. Like Kroll and Stewart (1994), who divide links into lexical and conceptual ones, Cieřlicka (2000) assumes the existence of two kinds of links: conceptual links between L1 and L2 lemmas and the concept nodes of the underlying concepts, and associative links, which operate at the semantic-syntactic level between L1 and L2 lemmas. Yet, associative links can be formed not only between equivalents, but also between "semantically related items both within and across languages" (Cieřlicka, 2000, p. 33). The representation of lexical information can also vary with time. Not only can it become more native-like thanks to information extracted from the input, but it can also fossilize or undergo attrition.

Still, the acquisition of foreign language vocabulary is not a one-off event, but rather a process. Jiang (2000) distinguishes three stages of L2 vocabulary development: the formal stage, the L1 lemma mediation stage and the L2 integration stage. At the formal stage, L2 words are connected to L1 equivalents by pointers and only the L2 word forms are stored in the mental lexicon. As Talamas et al. (1999) have shown, this may lead to the confusion of formally similar words, e.g., *cuidar* ('to care, look after') and *ciudad* ('city') in Spanish. By contrast, at the L1 lemma mediation stage L1 lemma information (i.e., the semantic and syntactic properties of L1 words) is copied into the lemmas of L2 words, which makes L2 production and comprehension faster and more automatic, but which can result in negative transfer, such as assuming the same polysemy in L2 as in L1 or using L2 verbs with the same prepositions as in L1 regardless of the prepositions they actually take in L2. Finally, at the L2 integration stage, when L2 lemmas are filled with information extracted from L2 input, L2 words are used in a native-like way, without the transfer of L1 properties. However, according to Jiang (2000, p. 63), some lemmas may reach the L2 integration stage, while others may become fossilized at the L1 lemma mediation stage.

In fact, Jiang's (2000) model is quite compatible with Cieřlicka's (2000) variable interconnection hypothesis, with Herwig's (2001) model of the multilingual lexicon, and with Kroll and Stewart's (1994) revised hierarchical model. While at the beginning L2 words are connected to their L1 equivalents and learners rely on the transfer of lemma information (which can be negative in case of differences), with time and increased proficiency they cease to rely on L1 and learn to lexicalize L2 concepts directly and to use L2 words in accordance with their actual syntactic properties. Moreover, the same sequence of stages can be applied to the acquisition of L3, L4 and so on vocabulary, although it might be assumed that, in that case, the source of transfer may not necessarily be L1. For example, an L3 word may be attached to its L2 equivalent and not only its meaning (or meanings in case of polysemy), but also other lemma information, such as syntactic properties, may be transferred from the L2 lemma into the L3 one. In fact, this is quite possible if L2 and L3 are perceived

as typologically close (Singleton, 2001), but, as De Angelis (2005, pp. 11–12) has shown, due to the phenomena of “association of foreignness” and “perception of correctness,” two foreign languages are often perceived as closer to each other than to the native language and thus L2 may be regarded as a better source of transfer into L3 than L1 is. It is therefore possible that the L3 learners’ verbalizations will also contain traces of L2 transfer, which may be evidence of copying L2 lemma information into L3 lemmas.

2.2 Vocabulary Learning Strategies

One of the factors involved in foreign language learning is the use of learning strategies. The earliest definitions of language learning strategies include the one proposed by Oxford (1989, p. 235), who describes them as “behaviors or actions which learners use to make language learning more successful, self-directed and enjoyable.” This was then expanded into “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and transferable to new situations” (Oxford, 1990, p. 8). Later, she modified her definition even further by specifying that strategies, which can include “specific actions, behaviors, steps, or techniques’, serve to ‘facilitate the internalization, storage, retrieval or use of the new language” (Oxford, 1999, p. 518, as cited in Pawlak, 2011, pp. 19–20). It can thus be seen that strategies can be applied to the development of various aspects of L2 knowledge and use.

Among the factors influencing strategy choice, Oxford (1989) enumerates the language being learned, the duration of learning, the proficiency level, the degree of language awareness, the learner’s age and sex, affective variables such as attitudes and motivation, language learning goals, personality characteristics, learning styles, career or field of study, national (and thus cultural) origin, teaching methods, and task requirements. While Oxford (1990) divides strategies into *direct* and *indirect strategies*, the former including *memory strategies*, *cognitive strategies* and *compensation strategies*, and the latter covering *social*, *affective* and *metacognitive strategies*, she points out that all these strategies support one another. Additionally, strategies are flexible, which means that they do not always follow predictable patterns and are often conscious, but not always: although strategies are generally assumed to be conscious, they can become automatic with time and practice and, moreover, some learners use strategies instinctively, even uncritically (cf. Oxford, 1990).

However, while strategy use, especially in terms of readiness to use them, might be regarded as an individual factor, strategies themselves can be, on the one hand, classified into more general categories, applicable to different learners (e.g., cognitive or memory strategies), and, on the other hand, even one learner can change his or her strategy use, depending on the situation. As Dörnyei (2009, p. 183, as cited in Pawlak, 2011, p. 22) has observed, learning strategies “(...) are not ID factors even in the traditional sense because rather than being learner attributes, they refer to idiosyncratic self-regulated behavior, and a particular learning behavior can be

strategic for one learner and non-strategic for another.” Consequently, even though the use of L2 and L3 vocabulary learning strategies is relevant to the present study, the students’ choices in vocabulary learning may be strategic but do not have to, or—following Oxford (1990)—some of them may be used instinctively, perhaps on the basis of teaching methods. For example, combining L2 and L3 words with their L1 equivalents might be strategic for a translation and interpreting student who needs to have readily available equivalents, especially for interpreting, where there is little time for lexical search. By contrast, if a student who does not need highly automated lexical links and who might focus on developing native-like L2 and L3 lemmas relies on combining L2 and L3 words with their L1 equivalents, this may simply be a habit he or she developed as a beginner, when his or her L2 was only an extension of L1.

Therefore, certain tendencies in the use of vocabulary learning strategies will be taken into consideration, but they should be treated in probabilistic rather than in absolute terms. Even though the questionnaire may reveal the students’ ways of learning L2 and L3 vocabulary, it would be very difficult to determine for which of the participants it is really a strategy and for which ones it may be only a habit based, for example, on their former teacher’s approach. It may only be supposed that, as reliance predominantly on L1-L2 and L1-L3 lexical links disregards conceptual differences and leads to fossilization, it is a strategy only for translation and interpreting students, who need readily available equivalents. For others, it is a habit which should be enriched by strategies leading to greater lexical precision, such as the inference of word meanings from context, supported by the analysis of syntactic properties.

In fact, skilled use of vocabulary learning strategies requires a considerable level of language awareness, or else it may be limited to the memorization of word forms. Undoubtedly, it is also an important element of vocabulary learning (Piasecka, 1998), especially in a language which has a different morphology than the native language (Włosowicz, 2007), such as Arabic, where memorizing word forms may require different associations, the keyword method, etc. In general, as Singleton (2002) has concluded, effective vocabulary learning should combine context-based and atomistic (i.e., focusing on single words) strategies. While inference from context increases the depth of processing, not all contexts provide enough information and, consequently, inference should be supported by a verification of the meaning, for example, in a dictionary.

In his study on strategies in vocabulary learning, Schmitt (1997, p. 205), applied social, memory, cognitive and metacognitive strategies, based on Oxford’s (1990) taxonomy, to which he added determination strategies, or strategies for deciding the meanings of new words without recourse to the teacher or a peer. Thus, determination strategies range from the use of monolingual and bilingual dictionaries, through morphological analysis to guessing from context. On the other hand, strategies for consolidating word knowledge include memory, social, cognitive and metacognitive strategies. Memory strategies are of particular interest here, but guessing from context, accompanied by a certain processing effort, leads to memorization and is regarded as incidental vocabulary acquisition (Singleton, 2002). That is why inference from context is also regarded here as a vocabulary learning strategy. In Schmitt’s (1997) study, conducted in Japan, the meaning discovery strategies classified as the

most helpful included the use of dictionaries, asking the teacher for a paraphrase or a synonym, guessing from context and analysing pictures or gestures, while the most helpful consolidation strategies were oral and written repetition, connecting words with synonyms or antonyms and continued study. Similarly, in Krawczyk-Neifar's (2002) study conducted in Poland, regardless of the participants' age and proficiency level, the most popular means of discovering word meanings proved to be the dictionary. It can be supposed that the use of dictionaries, though leading to excessive reliance on L1 (in the case of bilingual dictionaries) and thus negative transfer, is preferred by students for a few reasons. First, dictionaries are easier to use than, for example, guessing from context, and are likely to be used instinctively, as a strategy acquired at lower proficiency levels. Second, dictionaries seem reliable, as guessing may seem inaccurate. In fact, inference from context, which allows deeper processing and the acquisition of contextual features such as collocations, is not always accurate and should be supplemented by looking up the inferred meaning in a dictionary (Schouten-Van Parreren, 1989, as cited in Singleton, 2002, p. 193). However, some students seem to skip the deeper processing stage and the opportunity to learn the words in context, and content themselves with L1 equivalents.

As for the multilingual context of the study, in general, multilingual learners have been shown to be fairly competent strategy users. As the factor model (Hufeisen, 2000) shows, L3 learning is qualitatively different from L2 learning. Not only are more languages involved in the process (and, consequently, there are more sources of transfer and interference), but L3 learners also have a higher level of metalinguistic awareness, more language learning experience and they have developed learning strategies specifically devoted to L2 learning. However, this also depends on learners' level of proficiency in the particular languages and their motivation to learn them. As Pawlak and Kiermasz (2018) have shown, comparing foreign language majors' use of learning strategies in L2 and L3, the students tended to use more learning strategies in L2 than in L3, and their L3 learning strategies "were simply more geared to the challenges that lower proficiency learners were likely to be faced with when learning an additional language" (2018, p. 436). Similarly, as the interview data revealed, the students rarely used "metacognitive, social, affective or compensation strategies," but rather tended to use "traditional memory and cognitive strategies" (2018, p. 437) such as, for example, memorization and formal practice.

It might be assumed that L3 learners are quite aware of the vocabulary learning strategies they use and they can also fairly reliably access and verbalize their lexical knowledge. However, despite a considerable body of evidence in favor of L3 learners' language awareness (Jessner, 1999), it cannot be taken for granted (Pawlak & Kiermasz, 2018). In fact, as was shown elsewhere by the present author (Włosowicz, 2009), multilinguals—L4 learners in that particular study—may lack sufficient language awareness to make active use of similarities between their L2, L3 and L4. In fact, it is possible that also in the present study the verbalizations may provide some insights into the participants' language awareness, apart from their mental representations of lexical items, which are the focus of the investigation. Moreover, as has been explained in Section 2.1 above, this study taps mainly declarative knowledge, but some procedural knowledge can also be revealed.

3 The Study

As was mentioned in the introduction, the study aimed to investigate multilingual (i.e., at least trilingual) language learners' representations of selected vocabulary items in L2 and L3 as a result of their vocabulary learning strategies. Thus, special attention was paid to their meaning discovery and consolidation strategies in particular, though, as was mentioned above, these two categories are not strictly separate, since not only can inference from context be a determination strategy, but it can also result in incidental learning. At the same time, the participants' ways of defining the target L2 and L3 words (by means of L1 equivalents, synonyms in L2 or L3 respectively, examples of sentence contexts and so on) could be supposed to reflect their vocabulary learning strategies (e.g., L1 equivalents could reflect combining L2 and L3 words with their L1 equivalents).

While studies on the multilingual mental lexicon have mainly focused on such aspects as storage and organization (Cenoz, 2003; Herwig, 2001), lexical access (Jessner, 2003), lexical associations and processing, for example, in translation (Gabryś-Barker, 2005), research on the representation of particular L2 and L3 words, focusing on their lexical entries in more detail, seems to be missing. That research questions in the present study were as follows:

1. What vocabulary learning strategies do the participants use?
2. Does the choice of learning strategies depend on the language combination?
3. What do the participants' verbalizations reveal about their mental representations of the L2 and L3 target words?

It could be assumed that, while the participants' mental representations were individual and highly idiosyncratic, the results could reveal certain patterns based, for example, on their language combination and/or the program of their studies.

3.1 Participants

The study was carried out with 70 multilingual participants (where the term "multilingual" was understood as "at least trilingual") with the following language combinations: Polish-English-German (PI-E-G: 41 participants), Polish-German-English (PI-G-E: 13), Polish-French-English (PI-F-E: 9), Polish-English-French (PI-E-F: 6) and German-English-French (G-E-F: 1). However, due to some technical problems, the verbalizations of three participants, two in the Polish-German-English combination and one in the Polish-English-French combination, did not get recorded. As a result, those groups consist of eleven and five participants respectively.

Apart from English, German and French as L2 or L3, the participants had also studied other foreign languages in their lives. The largest number had studied French (20 participants), followed by Russian (16), Italian (15), Spanish (10), Latin (5), German (4), Japanese (3), Swedish (2), Arabic (2), Chinese (2), Slovak (1), Icelandic

(1), Hindi (1) and, in the case of the German L1 speaker, Polish. They were mostly students of English philology with an additional specialization in German, of applied linguistics, or of English and French as applied languages, and four were academic teachers of English or French philology. Most of them were thus considerably advanced in both L2 and L3. It was impossible to begin the study with a placement test, but their proficiency levels can safely be assumed to have ranged from B2 to C2 in L2 and from A2 (those students of applied English and German who had started German at university and one of the academic teachers in English Philology), to B2 or perhaps even C1 in L3, especially in the case of the applied linguistics students.

3.2 Method

The method involved verbalizing all the information the participants could think of in response to the 15 L2 and 15 L3 target words (presented visually as a printed list). The words to be defined belonged to three grammatical categories: nouns, verbs and adjectives. It was decided not to limit the list to nouns, especially to concrete nouns, which are relatively easy to define and often have clear-cut equivalents (cf. Kroll & Tokowicz, 2001). At the same time, some of the words on the list were misleading, for example, because of the existence of “synforms” (Laufer, 1997, p. 26), such as, for example, “klönen” (‘to chat’) and “klonen” (‘to clone’), or “moue” (‘pout’) and “boue” (‘mud’); such items were supposed to tap the participants’ actual knowledge of those words, as reckless guessing on the basis of formal similarity could lead to errors.

The participants were encouraged to present not only the meanings (either as definitions or as equivalents—it was up to the participants, because their choices were supposed to be spontaneous and to reveal their mental representations and the connections between the words), but also possible examples of use, contexts in which they occurred, etc. The students’ verbalizations were recorded and then transcribed in order to create think-aloud protocols. The think-aloud protocols were then analyzed from the point of view of the ways in which the word meanings were presented. Some examples of excerpts from the transcriptions are presented in Table 6 in Section 3.3. below. As examples limited to L2-L1 and L3-L1 translations (e.g. “activity – czynność, aktywność”) were moderately interesting examples of meaning representation, Table 6 mostly shows selected definitions and examples of errors based on deceptive similarities. The respondents’ definitions and examples of word use were analyzed in terms of, first, the means used to render the meanings (see Tables 2, 3, 4 and 5) and, second, the correctness of the participants’ definitions, equivalents and/or examples of use (Tables 7, 8, 9 and 10).

As for the classification of the results, the definitions were first divided into correct L2, L2 and L3 equivalents, negative transfer-based responses, correct definitions and/or synonyms, intralingual interference, other information and the lack of an answer. More precisely, while correct (or sometimes partly correct) translations were

classified as L1, L2 or L3 equivalents, negative transfer and/or interference from one language could be identified in a translation into another language. For example, if the German word “Schnörkel” (‘a flourish’ in writing) was defined in Polish as “ *rurka do nurkowania*” (‘a tube for diving’), it was classified as interference from L2 English (‘a snorkel’). Similarly, if the source of an error in L3 could be both L1 and L2, as in the case of “*klönen*” (‘to chat’), translated as “*klonować*” (‘to clone’), it was classified as what Näf and Pfander (2001, p. 5) call *doubly supported interference* (‘*doppelgestützte Interferenz*’). Both possible sources were indicated, as the participants may actually have consulted both their L1 and L2 lexicons, so both L1 and L2 influence may have taken place. Indeed, as Heine (2004) has shown, determining the sources of interference errors in multilinguals’ language production is very difficult and relies considerably on probabilistic guessing.

As for the “L2 intralingual interference” and “L3 intralingual interference” categories, they involve both interference in the sense as the unconscious confusion of words (or reliance on word forms, as in the example of “*cuidar*” and “*ciudad*” (Talamas et al., 1999) and the result of misguided meaning inference, as in the case of deceptively transparent words (Laufer, 1997). However, as both result in the confusion of two words of the same language, they have been labelled “intralingual interference,” even if they might contain strategic, albeit negative transfer as well. “Other information” included, for example, the etymology of a word or some historical associations, and “context/collocation” was an example of the use of a word in the context of a sentence, a phrase or an expression. Finally, “no answer/avoidance” meant that no answer was given, whether the participant did not know the word, could not recall its meaning, or avoided providing an answer because of uncertainty.

On the other hand, the correctness of the responses was classified in terms of correct, partly correct and incorrect answers, as well as the lack of an answer. A correct answer was one that did not contain negative transfer or interference, be it interlingual or intralingual, but it did not have to express all the possible meanings of a word (although it could), as it could be assumed, following Johnson-Laird (1987), that all the contents of a lexical entry were not usually available. Therefore, for instance, even though the first target meaning of “*hunch*” was “intuition, premonition, a subconscious idea,” if a participant only gave the meaning of “*hump*,” it was accepted as correct.

On the other hand, a partly correct answer could either involve a meaning that was not specific enough (e.g., “a kind of sound” for “to croak”), the meaning slightly diverged from the target meaning (e.g., “*Kommilitone*” [‘fellow student’], interpreted as a colleague or a friend), only an example was given, without a proper definition (e.g. “attendant”—“for example, flight attendant”), or a correct answer was complemented by an incorrect one, for example, one participant translated the French word “*déception*” (‘disappointment’) almost correctly as “*zawieść kogoś*” (‘to disappoint somebody’; she only changed the grammatical category) and then added: “*angielskie deception*” (‘the English word *deception*’), which is actually a false friend. However, if a participant rejected a false friend without giving the target meaning (e.g., “*klönen*”—“to na pewno nie będzie *klonować*” [‘it surely won’t be *to clone*’]), it was classified as a case of avoidance, just like saying, for example, “I don’t know.” By

contrast, incorrect answers contained errors; for example, a false friend was translated as an equivalent, two words were confused (e.g., “überlaufen” for “to overflow, boil over” or “to defect”), translated as “wyprzedzić” (“to overtake”; “überholen” in German), or the participant’s definition was based on the morphological analysis of a deceptively transparent word (e.g. “attendant”—“somebody who attends a lecture,” “Haltung” (‘attitude, posture’)—“zatrzymanie” (‘stop, halt’)).

In order to find out whether there was a relationship between the participants’ language combinations and their ways of defining the target words, approximately reflecting the word representations in their mental lexicons, and between their language combinations and the correctness of their definitions, *chi*-square tests were carried out. As the data were largely qualitative and based on the participants’ spontaneous verbalizations, and could only approximately be made quantitative, the *chi*-square test was chosen to see whether any such relationship could be found.

The verbalization task was followed by a questionnaire concerning the participants’ knowledge of foreign languages, their language learning experience and vocabulary learning strategies, in a very general sense, understood as different ways of learning vocabulary. This is because, as has been explained above, their ways of learning L2 and L3 vocabulary did not necessarily have to involve strategic behavior, or, following Oxford (1990), not all strategies had to be conscious. The questionnaire included a list of vocabulary learning strategies for the participants to choose from as well as a possibility of adding some other strategies (see Table 1). In order to determine patterns in the participants’ strategy use, the percentages of students using the various strategies were calculated. Given that the language being learned can influence strategy use (Oxford, 1989), for example, because of differences in motivation to learn an L3 which is perceived as useful and one which is simply imposed by the university (Pawlak & Kiermasz, 2018, p. 439), a *chi*-square test was carried

Table 1 Percentages of the participants who use the different vocabulary learning strategies

Strategy	%
Combining an L2 or L3 word with its L1 equivalent	71.43
Associating a word with a definition in the same language	64.29
Associating an L2 or L3 word with several L1 equivalents	60
Inferring word meanings from context and then looking them up in a dictionary	55.7
Combining an L2 or L3 word with a synonym in the same language	50
Combining an L2 or L3 word with an equivalent or a definition, but also noting down the context in which the word occurs	44.29
Combining an L2 or L3 word with a definition in L1	32.86
Combining a foreign language (e.g. L3) word with an equivalent in another foreign language (e.g. L2)	31.43
Reliance on context only	21.43
Other	5.71

out in order to determine whether there was any relationship between the participants' language combination and their vocabulary learning strategies. However, the strategies were not divided into those applied to L2 and L3 vocabulary learning, as it was assumed that this distinction might not be clear-cut and the same strategies could be applied in L2 and L3 (possibly, for different reasons, for example, linking L2 words with L1 equivalents for translation purposes and linking L3 words with L1 equivalents because of limited L3 proficiency). Still, the language combinations could be supposed to be to some extent linked to the learners' interests and motivation. For example, as the utility of French in Poland is generally perceived as lower than that of English or German, students who chose to specialize in English and French may be presumed to have particular motivation to study French. Yet, learners of German as L2 before English as L3 could also have a special interest in German if they chose it before the world language—English. Second, some strategy choices could also be related to the distance perceived between L2 and L3. For example, the number of cognates of Romance origin in French and English might prompt learners to combine L3 French words with L2 English cognates (or, in the case of L2 English and L3 German, to associate cognates of Germanic origin).

3.3 Results

The participants' vocabulary learning strategies are presented in Table 1. In fact, the majority chose the strategies from the list, only four respondents added some strategies of their own, namely: visualization, pictures or images, gestures, flashcards and "Eselbrücken" (informal mnemonics; the German L1 speaker). This indicates that the list was quite exhaustive. The sum of the percentages exceeds 100%, but this is due to the fact that the participants were allowed to indicate as many options as they needed, in accordance with their actual use of vocabulary learning strategies.

In general, the dominant strategy involved combining L2 and L3 words with their equivalents in the native language. However, it was not indicated by all the participants, but by only 71.43% of them. At the same time, the other strategies, especially associating words with their definitions in the same language (64.29%), associating a word with several L1 equivalents (60%), inferring meanings from context followed by looking the words up in a dictionary (55.7%), and combining an L2 or L3 word with a synonym in the same language (50%), turned out to be very frequent too. The *chi-square* test carried out to check whether there was any relationship between the language combination and the choice of vocabulary learning strategies showed a lack of statistical significance ($p = 0.896$).

At the same time, the participants' verbalizations reveal a variety of information about their mental representations, from L2-L1 and L3-L1 lexical links, through definitions to examples of contexts and background information. However, within each language combination there seem to have been differences between the ways of presenting particular words, as shown in Tables 2, 3, 4 and 5 below. As in the

Table 2 (continued)

L2 English (%)		L1 equivalent	L1 negative transfer	L2 intraling. interference	L2 definition/synonym	L3 equivalent	L3 neg. tr./interference	Other information	Context/collocation	No answer/avoidance
Übermut	12.2						34.15			53.66
Stoff	58.54		2.44	2.44	2.44	9.76	2.44		4.88	39.02
Abwechslung	39.02				4.88	7.32	31.7			24.39
Betrieb	56.1				4.88	2.44	24.39	2.44	7.32	19.51
Kommilitone	14.63				2.44	2.44		2.44		75.6
Haltung	7.32					4.88	63.41		4.88	21.95
Schnörkel			7.32	2.44			14.63			80.49
überlaufen	26.83			12.2		2.44	31.7			29.27
ankurbeln	2.44						4.88			92.68
meckern	9.76					2.44	4.88			80.49
schnaufen	2.44						2.44			95.12
klönen	7.32		43.9	43.9			2.44			51.22
keck							2.44			97.56
erfolgreich	29.27		4.88	9.76	26.83	7.32	2.44			31.7
plump	7.32			43.9			2.44			46.34

Table 3 (continued)

L2 German (%)		L1 equivalent	L1 negative transfer	L2 intral. interference	L2 def./synonym	L3 equivalent	L3 neg. tr./interference	Other information	Context/collocation	No answer/avoidance
facility	100				9.09			45.45		
follower	100								9.09	
attendant	36.36						54.54		36.36	9.09
retribution	18.18	9.09					36.36		18.18	36.36
activity	100				9.09				18.18	
hunch	27.27						9.09			72.72
villain	81.81								9.09	18.18
to creep	81.81		9.09				9.09	9.09	9.09	9.09
to overlook	63.63						18.18		9.09	9.09
to scowl	9.09	9.09					36.36			63.63
to croak	36.36						18.18			45.45
to render	45.45								9.09	54.54
intrinsic	27.27									63.63
arduous	18.18		9.09				18.18			63.63
definitive	81.81						18.18		9.09	18.18

Table 4 Percentages of participants using different means of presenting L2 and L3 words in the Polish-English-French combination

L2 English (%)									
Word	L1 equivalent	L1 negative transfer	L2 intral. interference	L2 def./synonym	L3 equivalent	L3 neg. tr./interference	Other information	Context/collocation	No answer/avoidance
facility	40			80				20	
follower	40		20	60					
attendant	20		80						
retribution				20					80
activity	100			60				20	
hunch	20			20					60
villain	20	20	20	60					
to creep	20			60					20
to overlook	20		20	60					
to scowl	20								80
to croak	20			40					40
to render	40		20	40				40	
intrinsic	40			20					40
arduous	20			20				20	60
definitive	60			20					20
L3 French (%)									
Word	L1 equivalent	L1 negative transfer	L2 negative transfer	L2 equivalent	L3 definition/synonym	L3 intraling. Interference	Other information	Context/collocation	No answer/avoidance

(continued)

Table 5 (continued)

L2 French (%)										
Word	L1 equivalent	L1 negative transfer	L2 intral. interference	L2 def./synonym	L3 equivalent	L3 neg. tr./interference	Other information	Context/collocation	No answer/avoidance	
facility	100					11.11	11.11	11.11		
follower	44.44		11.11	11.11	33.33	11.11	11.11	11.11	11.11	
attendant	11.11		33.33			33.33		22.22	22.22	
retribution	11.11		33.33			22.22			44.44	
activity	88.89			11.11	11.11					
hunch									100	
villain	22.22		33.33	22.22	22.22	11.11			11.11	
to creep	55.56		11.11			22.22			33.33	
to overlook	33.33				11.11	44.44			22.22	
to scowl						11.11			88.89	
to croak	11.11								88.89	
to render	22.22		22.22		22.22		11.11		33.33	
intrinsic	22.22			11.11	11.11	11.11			55.56	
arduous	22.22		44.44			44.44			22.22	
definitive	66.67			11.11	22.22					

case of strategy use, the sums of the percentages exceed 100%, because one participant's description of a word could belong to more than one category, for example, a definition in L2, an L1 equivalent and an example of its use in context. Generally, the participants' representations were varied and complex. However, translation into L1 was very frequent, whether supported by other information (a foreign language definition, an example of a context, extra information, such as etymology) or not, which is possibly due to the learners' individual habits of language learning and use.

The different means of describing the L2 and L3 target words in the four language combinations (PI-E-G, PI-G-E, PI-E-F and PI-F-E) were compared by means of a *chi*-square test. Significant differences were revealed for both the verbalizations of L2 word knowledge and L3 knowledge ($p < 0.0001$). This suggests that the ways of defining the target words (and thus the underlying representations) depended on the language combination.

Although the participants focused mainly on providing the meanings, other information included, for example, whole collocations in which the words occurred. In fact, the word "attendant" seemed easiest to define by presenting the whole collocation "a flight attendant." In fact, "attendant" is a word which does not seem to have a clear-cut equivalent in Polish, so reliance on L2-L1 translation would result in an insufficient semantic representation. As for other idiosyncratic examples, one participant (the French philology teacher) even gave the etymologies of some words, for example, that "viennoiserie" ('a kind of pastry') in French came from "Vienna" as the city where such pastry was originally baked. Examples of the participants' definitions are given in Table 6.

As for the correctness of the participants' responses, they also varied. The percentages of correct, partly correct and incorrect responses as well as of missing answers (due to ignorance of the target words or avoidance) are given in Tables 7, 8, 9 and 10 below. The distribution of the responses is slightly different than in the case of verbalizing lemma information because a correct answer did not have to be of one kind. A correct L1 translation, a correct L2 or L3 translation, as well as a correct definition in L2 or L3 were all counted as correct responses. Similarly, an incorrect answer could be an incorrect translation or a false friend in L1, L2 or L3, an incorrect definition, or an example showing that the participant did not know the target word.

Words which were particularly easy for the participants were: "activity," "follower," "facility," "villain," "to scowl," and "to creep" in English, and "Stoff," "Betrieb," and "erfolgreich" in German. On the other hand, words which posed them particular difficulty included: "arduous," "hunch," "retribution," and "intrinsic" in English, and "keck" ('naughty, saucy'), "ankurbeln" ('to turn up, stimulate'), "schnaufen" ('to pant'), "meckern" ('to bleat, whine'), "Kommilitone" ('fellow student'), and "Schnörkel" in German. Predictably enough, there were more correct answers and less avoidance in L2, in which the learners were more proficient, but in both languages, the most difficult words were relatively infrequent ones, used in a fairly formal style. By contrast, "Stoff" and "Betrieb" proved to be familiar to the learners, who not only tended to define them well, but they also gave examples of their use in compound nouns, for example, "Industriebetrieb" and "Rohstoff." An interesting case is also the verb "to scowl," which tended to be confused with "to

Table 6. Examples of the participants' descriptions of L2 and L3 words

Language combination	Word	Example	Comments
Pl-E-G	<i>follower</i>	it is a person who: ^a + ^b er + which means + er + goes after + something + for example + a hm + religious follower	An acceptable L2 definition, supported by an example of the word in context
Pl-E-G	<i>erfolgreich</i> ('successful')	erfolgreich + czyli taki + z sukces- ^c + successful (erfolgreich + that is + with succes- + successful)	The participant decided the L2 equivalent would be better than an L1 translation
Pl-E-G	<i>Schnörkel</i> ('a flourish')	prawdopodobnie jakiś dźwięk + coś + w stylu + chrapania + ale to jest schnurren -- ^d nie + to jest rzeczownik (probably a sound + something + like + snoring + but it's schnurren -- no + it's a noun)	An attempt to explain the L3 word by an L1 equivalent; finding a more plausible word (non-target, as "schnurren" means 'to purr' and the verb for 'to snore' is "schnarchen"); abandoning the effort
Pl-E-G	<i>to croak</i>	the sound that + erm + a crow + no + sorry + a frog do + yes (...) + in Polish it would be + ż- + rechotać	An L2 definition, followed by the L1 equivalent; two repairs are also visible, as the participant corrected herself
Pl-E-F	<i>villain</i>	villain + euh + probablement + euh + vilain + donc + méchant (villain + er + probably + naughty/ugly + so + malicious)	Meaning inference or retrieval on the basis of formal similarity
Pl-E-F	<i>déception</i> ('disappointment')	déception to jest er: + oszustwo (déception is er: + deception)	Negative transfer from L2 into L3, reliance on a false friend
Pl-G-E	<i>keck</i> ('cheeky, saucy')	coś jest beznadziejne (something is hopeless/very bad)	An idiosyncratic association, possibly triggered by the slightly vulgar word "Kacke" (crap)

(continued)

Table 6. (continued)

Language combination	Word	Example	Comments
Pl-E-G	Betrieb (production plant)	Betrieb _ _ _ ^c zakład + fabryka (Betrieb _ _ _ a plant + a factory)	Providing two L1 translation equivalents after a long pause
Pl-G-E	<i>Stoff</i> ('material')	dann das Wort + Stoff + das ist ein sehr allgemeiner Wort + äh + und diesen Wort assoziiere ich vor allem + äh + er kann in einem + Vielzahl von Kontexten auftauchen + äh + kojarzy mi się także z mater- + z materiałem + jest to + Stoff + to po prostu (...) + to po polsku materiał + czy to jakiś materiał + äh do przerobienia na lekcji (...) (then the word + Stoff + this is a very general word + er + and this word I associate first of all + er + it can occur in a + number of contexts + er + I also associate it with mater- + with material + it is + Stoff + it's simply (...) + it's material in Polish + it may be some material + er + to study in class)	A very long and elaborate definition, starting with L3 German, but failing to arrive at a precise definition and then switching to the Polish L1 equivalent, together with an example. (The student's definition contains three gender errors in German: "ein sehr allgemeiner Wort" (correct: ein sehr allgemeines Wort), "diesen Wort" (correct: dieses Wort) and "in einem Vielzahl" (correct: in einer Vielzahl))
Pl-G-E	<i>to scowl</i>	I don't know but I think + it has something to do with + animals + with + the noises that + they make	An attempt at an L3 definition; confusing "scowl" with "howl"

(continued)

Table 6. (continued)

Language combination	Word	Example	Comments
Pl-F-E	<i>moue</i> ('pout')	moue + czyli + wilgotny albo + błoto (pout + or wet or + mud)	Two incorrect Polish translations due to the confusion of the French words "moue" (pout), "mouillé" (wet) and "boue" (mud); intralingual interference
Pl-F-E	<i>saillant</i> ('salient')	saillant + erm + brudzący + na przykład pranie (saillant + which gets dirty easily + for example laundry)	The confusion of two L2 word forms ("saillant" and "salissant"—which gets dirty easily, or which dirties other things)
Pl-F-E	<i>arduous</i>	płomienisty erm + bardzo + taki zaangażowany energiczny (fiery erm + very + so involved energetic)	A confusion of "arduous" and "ardent;" intralingual interference
G-E-F	<i>to creep</i>	it is like + hm a bit like crawling + maybe + but I'm not sure	An attempt to use an L2 synonym
G-E-F	<i>renard</i>	renard ist + Fuchs + fox + ähm + un animaux	An L1 and an L2 equivalent, followed by an attempt to provide an L3 definition, which was actually the plural of its hyperonym "animal"

^aA longer vowel, according to the rules of the transcription

^bA short pause

^cAn unfinished word; often used in the case of false starts

^dA medium pause

^eA long pause

howl" and defined as the sound made by a wolf, while one participant confused it with "to scold" and said: "to scowl + erm + say something in a + bad manner + for example mother + scowls + a child." At the same time, perhaps quite surprisingly, "erfolgreich" proved to result in a relatively large number of correct answers. Although it has no Polish equivalent, the participants tended to provide its English equivalent: "successful." However, in this case L2 English proved to be a source of negative transfer as well, as the incorrect responses included such translations as "wymagający wysiłku" (which requires effort); in fact, "Erfolg" (success) and "effort" prove to be quite easy to confuse (see Włosowicz, 2008, 2009).

Table 7. Percentages of correct, partly correct, incorrect and missing responses in the Polish-English-German language combination

L2 English (%)	L3 German (%)								
	Correct	Partly correct	Incorrect	No answer	Word	Correct	Partly correct	Incorrect	No answer
<i>facility</i>	75.6	12.2	2.44	9.76	<i>Übermut</i>	12.2		34.15	53.66
<i>follower</i>	87.8	2.44	9.76		<i>Stoff</i>	58.54		2.44	39.02
<i>attendant</i>	24.39	12.2	58.54	4.88	<i>Abwechslung</i>	21.95	19.51	34.15	24.39
<i>retribution</i>	7.32	9.76	24.39	58.54	<i>Betrieb</i>	56.1	7.32	17.07	19.51
<i>activity</i>	97.56	2.44			<i>Kommilitone</i>	4.88	17.07	2.44	75.6
<i>hunch</i>	34.15	2.44	2.44	60.98	<i>Haltung</i>	9.76	9.76	58.54	21.95
<i>villain</i>	87.8	4.88	4.88	7.32	<i>Schnörkel</i>			19.51	80.49
<i>to creep</i>	82.93	4.88	4.88	7.32	<i>tiberlaufen</i>	7.32	19.51	43.9	29.27
<i>to overlook</i>	85.37		9.76	4.88	<i>ankurbeln</i>	2.44		4.88	92.68
<i>to scowl</i>	9.76		48.78	41.46	<i>meckern</i>	12.2	2.44	4.88	80.49
<i>to croak</i>	51.22	9.76	9.76	29.27	<i>schnaufen</i>		2.44	2.44	95.12
<i>to render</i>	56.1	2.44	12.2	29.27	<i>klönen</i>	7.32		41.46	51.22
<i>intrinsic</i>	39.02	9.76	2.44	48.78	<i>keck</i>			2.44	97.56
<i>arduous</i>	17.07	2.44	9.76	70.73	<i>erfolgreich</i>	46.34	4.88	17.07	31.7
<i>definitive</i>	56.1	12.2	14.63	17.07	<i>plump</i>	4.88	2.44	46.34	46.34

Table 8. Percentages of correct, partly correct, incorrect and missing responses in the Polish-German-English language combination

L2 German (%)		L3 English (%)							
Word	Correct	Partly correct	Incorrect	No answer	Word	Correct	Partly correct	Incorrect	No answer
<i>Übermut</i>	54.54	18.18		27.27	<i>facility</i>	100			
<i>Stoff</i>	100				<i>follower</i>	100			
<i>Abwechslung</i>	100				<i>attendant</i>	36.36		54.54	9.09
<i>Betrieb</i>	100				<i>retribution</i>	18.18	18.18	27.27	36.36
<i>Kommilitone</i>	90.9	9.09			<i>activity</i>	100			
<i>Haltung</i>	90.9	9.09			<i>hunch</i>	18.18	9.09		72.72
<i>Schnörkel</i>	27.27		45.45	27.27	<i>villain</i>	72.72	9.09		18.18
<i>überlaufen</i>	54.54	18.18	27.27		<i>to creep</i>	72.72	9.09	9.09	9.09
<i>ankurbeln</i>	63.63		9.09	27.27	<i>to overlook</i>	72.72		18.18	9.09
<i>meckern</i>	100				<i>to scowl</i>		9.09	27.27	63.63
<i>schnaufen</i>	18.18	18.18		63.63	<i>to croak</i>	36.36		18.18	45.45
<i>klönen</i>			36.36	63.63	<i>to render</i>	45.45			54.54
<i>keck</i>	9.09	9.09	18.18	63.63	<i>intrinsic</i>	27.27		9.09	63.63
<i>erfolgreich</i>	100				<i>arduous</i>	27.27		9.09	63.63
<i>plump</i>	27.27		63.63	9.09	<i>definitive</i>	81.81			18.18

Table 9. Percentages of correct, partly correct, incorrect and missing responses in the Polish-English-French language combination

Word	L2 English (%)					L3 French (%)				
	Correct	Partly correct	Incorrect	No answer	Word	Correct	Partly correct	Incorrect	No answer	
<i>facility</i>	80	20			<i>moine</i>			40	60	
<i>follower</i>	80	20			<i>logiciel</i>			60	40	
<i>attendant</i>	20		80		<i>manutention</i>				100	
<i>retribution</i>		20		80	<i>renard</i>	40			60	
<i>activity</i>	100				<i>déception</i>		20	80		
<i>hunch</i>	40			60	<i>addition</i>	100				
<i>villain</i>	80		20		<i>viennoiserie</i>	20			80	
<i>to creep</i>	60	20		20	<i>apprendre</i>	100				
<i>to overlook</i>	80		20		<i>fêler</i>				100	
<i>to scowl</i>	20			80	<i>grogner</i>	20	20		60	
<i>to croak</i>	60			40	<i>dresser</i>	20		20	60	
<i>to render</i>	80		20		<i>taquiner</i>				100	
<i>intrinsic</i>	60			40	<i>vilain</i>		40	20	40	
<i>arduous</i>	40		60		<i>effectif</i>	60			40	
<i>definitive</i>	80		20		<i>saillant</i>				100	

Table 10. Percentages of correct, partly correct, incorrect and missing responses in the Polish-French-English language combination

L2 French (%)	L3 English (%)								
	Correct	Partly correct	Incorrect	No answer	Word	Correct	Partly correct	Incorrect	No answer
<i>moue</i>	11.11		66.67	22.22	<i>facility</i>	66.67	33.33		
<i>logiciel</i>	77.78	11.11	11.11		<i>follower</i>	77.78	11.11		11.11
<i>manutention</i>			33.33	66.67	<i>attendant</i>	22.22		55.56	22.22
<i>renard</i>	100				<i>retribution</i>	11.11		44.44	44.44
<i>déception</i>	88.89	11.11			<i>activity</i>	100			
<i>addition</i>	100				<i>hunch</i>				100
<i>viennoiserie</i>	33.33			66.67	<i>villain</i>	44.44	33.33	11.11	11.11
<i>apprendre</i>	88.89	11.11			<i>to creep</i>	44.44		22.22	33.33
<i>fêter</i>	11.11		88.89		<i>to overlook</i>	33.33		44.44	22.22
<i>grogner</i>	55.56	11.11		33.33	<i>to scowl</i>			11.11	88.89
<i>dresser</i>	77.78		22.22		<i>to croak</i>	11.11			88.89
<i>taquiner</i>	33.33	11.11		55.56	<i>to render</i>	33.33	22.22	11.11	33.33
<i>vilain</i>	88.89		11.11		<i>intrinsic</i>	33.33		11.11	55.56
<i>effectif</i>	100				<i>arduous</i>	22.22		55.56	22.22
<i>saillant</i>	44.44		11.11	44.44	<i>definitive</i>	100			

In general, the members of this group seem to have been relatively good in both L2 German and L3 English. The words which seem to have been problematic for them are “Schnörkel,” “plump,” and “attendant.” While “Schnörkel” may have been quite new to many of them, both “plump” and “attendant” seem to have been “deceptively transparent” in Laufer’s (1997) sense. While “plump” may have been taken for the counterpart of its English homograph (actually a false friend), “attendant” was mostly analyzed into attend—+—ant and interpreted as “somebody who attends a lecture, a meeting, etc.” In fact, the incorrect definitions of “Schnörkel” also indicate some deceptive transparency, as it was taken for a counterpart of “snorkel” in English or “sznurek” (‘string’) in Polish (here, the interference may have been supported by the German word “Schnur”).

In the language combination Pl-E-F the correctness of the responses seems to depend mainly on the individual words. While such words as “activity,” “apprendre,” and “addition” were presented correctly by all the members of this group (100%), there were also words (“manutention” [‘handling merchandise, preparing it for shipping’], “taquiner” [‘to tease’], “fêler” [‘to chip, e.g. glass’], and “saillant” [‘salient’]), for which there was 100% of avoidance and/or failure to provide their definitions. In fact, such words as “attendant,” “arduous,” and “deception,” whose definitions reveal a number of errors, seem to be deceptively transparent, though in different ways. As in the Pl-G-E group (see above), the participants tended to analyze “attendant” into morphemes and to assume it was a person attending a meeting, a lecture, etc. By contrast, the incorrect interpretations of “arduous” were often due to its confusion with “ardent.” Finally, “déception” and “deception” are a pair of false friends often taken for equivalents.

In the last language combination, Pl-F-E, the pattern of the responses seems to be quite different from the previous ones, but it also shares some similarities with them. Some of the French words, such as “grogner,” “logiciel,” “villain,” or “déception” were explained much more correctly, which suggests that the French L2 students may actually have known them well enough. At the same time, “manutention,” “fêler,” “taquiner,” and “viennoiserie” (‘a kind of pastry’) were very difficult also for the French L2 students, probably because these words are not very frequent.

As the results show, the percentages of correct, partly correct, incorrect and missing answers differ from one word to another. The responses of the different groups were compared by means of a *chi*-square test for both L2 and L3 words. For the L2 words, the difference was not statistically significant ($p = 0.487$), so the correctness of the L2 word descriptions did not depend on the language combination. On the other hand, for the L3 words, the difference did reach significance ($p < 0.0001$), which indicates that in the case of L3 correctness did actually depend on the language combination.

4 Discussion

To answer the research questions, first of all, the most frequently indicated strategy was combining an L2 or L3 word with its L1 equivalent, which could be due, on the one hand, to the participants' course of study and task requirements (cf. Oxford, 1989), as many of them studied applied linguistics or translation, and, on the other hand, to some automated habits from earlier stages of learning. However, as the results presented in Table 1 show, several other strategies, both interlingual and intralingual, were frequently used as well. In fact, a definition in the same language as the target word was the second most frequently indicated strategy, followed by several L1 equivalents (not only one, as words can be polysemous) and by inference from context, supported by a verification of the guess in the dictionary. This suggests that the students have a sufficient level of language awareness to know that learning foreign language vocabulary requires different strategies, especially the use of context (e.g., inference from context, learning words in context in order to learn the right collocations, etc.), and not only associating words with their equivalents. More precisely, they are aware of the fact that, for example, some words have no equivalents in L1, others overlap in meaning only partly and still others may overlap in meaning but not in syntactic and collocational properties, so reliance on lexical links may lead to negative transfer.

Simultaneously, the choice of the strategies is not only individual in terms of particular students' learning styles and strategy choices but may actually also depend on particular words. Words whose meanings cannot be inferred from context are likely to be looked up in a dictionary and combined with their equivalents, while words whose meanings can be inferred can more easily be learnt from context, either only by relying on inference, or also by writing down the whole sentence and memorizing it. Similarly, some words have no equivalents in L1, but they may have one in L2 or L3. For instance, "successful" has no Polish counterpart, but it has a German one—"erfolgreich," so an association between the L2 and the L3 words would be justified. In general, most of the students use more than one vocabulary learning strategy.

Secondly, the fact that the relationship between the language combination and strategy use proved not to be significant suggests that the choice of vocabulary strategies did not depend on the language combination, but rather on each learner's preferences and also on the properties of particular words. It is possible that the languages used were not very conducive to such associations and that if one of the language combinations had been, for example, Polish-Spanish-Portuguese, the members of such a group would have relied significantly more on L2-L3 associative links, but this hypothesis would require verification by future research.

Thirdly, the mental representations revealed by the participants' verbalizations are undoubtedly different and vary from one learner to another and from one word to another. They are also highly complex and one word in a single participant's mental lexicon can be linked, for example, to its L1 equivalent and to some possible contexts

and collocations. Moreover, especially in the Polish-English-German and the Polish-English-French combinations, while L2 words could be defined in more detail, with examples and the like, L3 words were often translated into L1 (either by means of equivalents or an incorrect L1 translation, due to some transfer or intralingual or interlingual interference), which may suggest that they were still at the L1 lemma mediation stage or even at the formal stage. In fact, the confusion of formally similar words such as, for example, “klönen” (‘to chat’) and “klonen” (‘to clone’), where “klönen” was rendered as “klonować,” suggests that such words were actually at the formal stage. However, the association of L2 and L1 equivalents was also quite frequent among the applied linguistics students, which indicates that, regardless of the underlying conceptual representations, translation and especially interpreting requires immediate, strongly automated access to equivalents.

In general, the words that proved particularly easy to define, probably because the participants were familiar with them, were “facility,” “activity,” “follower,” “villain,” and “to overlook” in English, “renard” (‘fox’), “addition” (‘addition’ but also ‘bill’), “apprendre” (‘to learn’) and “effectif” (‘effective’ but also ‘staff, the number of people employed somewhere’) in French, and “Stoff,” “Betrieb,” and “erfolgreich” in German. On the other hand, the most difficult words appear to have been “hunch,” “to scowl,” and “retribution” in English, “manutention,” “fêler,” “viennoiserie,” and “taquiner” in French, and “keck,” “klönen,” “schnaufen,” “Schnörkel,” and “plump” in German. While most of these difficult words are simply not very frequent and the students might not have encountered them often enough (some might not even have encountered them at all) “plump” (‘clumsy’ or ‘bad-mannered’) was particularly prone to interference from English and thus it was often interpreted as “plump” or “fat.”

However, as in the case of the representations of the L2 and the L3 words analyzed above, the differences between the language combinations are not a matter of language distance, but rather of the learners’ language experience and the acquisition contexts. While the Polish-German-English and the Polish-French-English groups consisted mainly of applied linguistics students who were considerably advanced in both L2 and L3, the Polish-English-French group was slightly less advanced (they were studying English and French as applied languages, but they had been admitted to university with a much higher level of competence in English than in French) and the Polish-English-German group was even more heterogeneous. On the one hand, the English-German translation students had a considerable difference in proficiency between English and German (much like the Polish-English-French group), especially those who had started studying German only at the university and, even though they were expected to catch up with their more advanced group mates, their knowledge of German vocabulary was visibly less detailed and less extensive. On the other hand, that group contained such participants as the English philology teachers, who had studied some German at the university (in fact, two of them were still studying it for the German language exam during their doctoral studies), but whose levels of proficiency in English were undoubtedly higher.

Even though these differences are not purely individual, they show the importance of the acquisition context and, to some extent, also of learning strategies. While there

was no statistically significant difference between the groups in terms of vocabulary learning strategies, the more advanced students may be assumed to have used, on the one hand, a greater variety of learning strategies more regularly (the less advanced ones may have relied on context from time to time, but on translation into L1 much more often) and, on the other hand, to have developed the ability to lexicalize concepts in L2 and L3. On the other hand, the less advanced students' confusions of word forms provide support for the existence of a formal stage (Jiang, 2000) and for the initial reliance on form rather than meaning (Talamas et al., 1999). Moreover, lexical links between L2 and L1 as well as between L3 and L1, however they were created (as associative links at the early stages of learning or later, due to the requirements of translation), seem to be particularly strong and to be present in the participants' lexical representations, either alone or accompanied by other information.

5 Conclusion

In general, the study confirms Cieślicka's (2000) variable interconnection hypothesis, as well as Jiang's (2000) and Talamas et al. (1999) views on the development of bi- and multilinguals' mental lexicons. Certainly, the participants use a variety of vocabulary learning strategies and often combine them, but the strategies depend not only on the learner, but also on particular words and on the requirements of the study context. For example, translation students need to develop strong and quick cross-linguistic associations, even though such associations often disregard subtle differences in meaning. This resulted in statistically significant differences between the different language combinations in terms of L3 correctness and of the representation of the target words, although not in terms of vocabulary learning strategies and L2 correctness. More precisely, while L2 words are often linked to correct L1 translation equivalents and/or their semantic properties are well known to the students, which is required by the course of studies, L3 words can be linked to a variety of words, from correct equivalents, through false friends to imprecise contexts. Still, considerable reliance on the native language seems to be inevitable in the case of both L2 and L3. Moreover, the choice of learning strategies does not depend on the language combination. They may be to some extent individual, but they are also largely influenced by contextual factors and also the properties of particular words. Finally, the mental representations revealed by the participants' verbalizations should be treated with some caution. Certainly, they reveal great complexity and variety of lexical information as well as world knowledge, on the one hand, and interactions between the languages, including both positive and negative transfer and interference, on the other. Still, just as the verbalizations, including errors revealed by them, are to some extent idiosyncratic, such interactions may be actually individual and may depend on language experience, learning strategies, etc. However, given the limitations of verbalization, future research on similar topics related to the multilingual mental lexicon should use a number of other techniques, both productive and receptive.

In fact, the study has its limitations, as only the knowledge of a limited number of words can be investigated this way, not the whole multilingual mental lexicon, which contains thousands of words. However, it can be assumed that the verbalizations of the meanings and examples of use of selected target words provide some interesting insights into the participants' mental representations of those words. For example, it might be assumed that learners who tend to combine L2 and L3 words with their L1 equivalents form lexical rather than conceptual links (cf. Kroll & Stewart's, 1994) and, consequently, also explain the meanings of L2 and L3 words by giving their L1 equivalents rather than, for example, L2 or L3 definitions or examples of their use in context. Yet, it must be remembered that this might be an oversimplification, as multilingual learners, especially advanced ones, have a sufficient level of language awareness and sufficiently developed language learning strategies not to rely on a single vocabulary learning strategy and to adjust the choice of strategies to the learning of particular words, for example, taking into consideration the possibility of combining L2 and L3 words with their L1 equivalents or the non-existence of such equivalents. However, it may be assumed that L2 and L3 learners display individual tendencies and, apart from the words used in the study, other words in their mental lexicons may have been learnt by means of the same strategies. In fact, in future research, it would be interesting to investigate the representations of larger numbers of words in order to obtain a more detailed picture of the multilingual mental lexicon.

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Pronunciation Learning Strategies Used by EFL University Students: A Classroom-Based Investigation



Sharif Alghazo

Abstract Research on good language learners has demonstrated that the use of language learning strategies is effective in developing students' second language (L2) competence and autonomy. Amongst the great number of studies conducted into language learning strategies in general, very few have looked into the area of L2 pronunciation, and even fewer in a Middle Eastern EFL context. This study aims to explore the language learning strategies that Jordanian English as a foreign language (EFL) university students use in their quest to develop L2 pronunciation. The study utilized three methods of data collection: classroom observations, a questionnaire, and semi-structured interviews. The participants were 87 English major university students. Oxford's (1990) framework was used to analyze the data and to classify pronunciation learning strategies (PLSs). The analysis revealed that cognitive strategies were the most commonly used by students inside and beyond the classroom, followed by social strategies and metacognitive strategies, respectively. Outside the classroom, students sought practice through the media and technology, but such learning was confined to exposure only, that is, to *receptive* L2 listening/viewing, with *productive* skills being largely overlooked. Implications for teachers include raising awareness of the benefits of using learning strategies, developing activities that enhance students' communicative use of L2, and, most importantly, incorporating strategy instruction into their teaching plans.

Keywords Pronunciation learning strategies (PLS) · Receptive and productive skills · EFL learning

1 Introduction

Throughout the past century, applied linguists and language teachers strove to find keys to success in L2 development. Early attempts at such a quest were directed to the *teaching* process, giving rise to a number of language teaching approaches and focusing exclusively on *teachers* as dominant participants who were thought

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to be alone responsible for language learning. Many approaches to L2 teaching have fluctuated throughout the century beginning with the Grammar-Translation Method, on to the Audiolingual Language Teaching, and lastly the Communicative Language Teaching (CLT) approaches. The advent of the CLT approach in the last quarter of the twentieth century was a turning point in the history of L2 learning and teaching. This was accompanied by the rise of constructivism as a school of thought that contributed to enriching our understanding of the role of *learners*, as social interactionists, in L2 development. Scholars—failing to find their answers in teachers—have begun to recognize that *learners* are equally, if not more importantly, active participants in the process of language learning and teaching. Notions of learner independence/autonomy and learner-centeredness (e.g., Nunan, 2013) have become widely prevalent in both English as a second language (ESL) and EFL educational settings. Amongst those developments was a turn away from addressing the question of “what to learn” to focusing on “how to learn,” giving rise to one of the widely established fields of study in today’s research, that of *language learning strategies*.

Since the seminal work of Rubin (1975) on good language learners, a large number of studies have been conducted to examine the relevance of strategy use to the overall proficiency of L2 learners. A respectable stockpile of studies showed the efficacy of strategy use in developing language skills and language subsystems. For example, O’Malley et al. (1989) found that the use learning strategies resulted in the development of effective *listening* skills among L2 learners. A similar finding into the efficacy of using metacognitive strategies in listening comprehension was reported by Vandergrift (2008). And in *writing*, Bloom (2008) has strongly argued for the effectiveness of using learning strategies in L2 learners’ compositions. Cohen (2008) offered a similar evaluation in relation to strategy use for L2 learners’ *speaking* development (see also Pawlak, 2018). However, the area of L2 pronunciation was—until recently (see the special issue in *Studies in Second Language Learning and Teaching* 2018)—rarely addressed empirically. Pawlak and Szyszka (2018) confirm the scarcity of research on PLS and call for more investigations of this kind. This study attempts to fill this gap by exploring the types of PLS used by Jordanian EFL university students and providing valuable insights for language teaching practitioners in and outside Jordan.

2 Pronunciation Learning Strategies (PLS)

Pawlak (2010, p. 191) presents a concise definition of PLS: “deliberate actions and thoughts that are consciously employed, often in a logical sequence, for learning and gaining greater control over the use of various aspects of pronunciation.” The concision of this definition stems from the fact that it is all-encompassing in that it emphasizes essential facets of the construct:

- (1) the purposefulness of the use of PLS, (2) a certain level of awareness of this use, (3) the fact that PLS can be both observable (e.g., numerous repetitions of words that are difficult to pronounce) and unobservable (e.g., a mental plan of how to get around a persistent pronunciation problem), (4) the importance of combining PLS into clusters or chains for the benefit

of achieving learning goals, and (5) the fact that PLS can be employed with the purpose of better understanding and remembering [target language] TL pronunciation patterns but also with a view to successfully employing various segmental and suprasegmental features in communication, or what could be related respectively to the development of explicit and implicit knowledge. (Pawlak & Szyszka 2018, p. 295)

Although, as noted above, strategy research—as it has come to be known—has constituted a fundamental part of L2 acquisition research since the 1970s, less attention has been paid to researching strategies related to L2 pronunciation learning. Most of these studies have focused, in the main, on examining PLS in ESL contexts, and very few on the use of PLS by EFL students. However, a careful review of previous research on PLS reveals that such explorations only began in the year 2000 by Peterson (2000) who, upon analyzing learner diaries of and interviews with 11 learners of Spanish in the UK, uncovered 12 strategies related to pronunciation which she categorized into six groups in accordance with Oxford's (1990) taxonomy. These groups and strategies are presented in Table 1.

Osborne (2003) conducted a similar study in which he looked at the use of PLS by 50 adult ESL university learners from a variety of first language backgrounds using oral reports. After qualitatively analysing the data, the researcher found eight strategies used by learners to develop their L2 pronunciation which he linked to the following areas: voice quality settings, individual sounds and clusters, individual syllables and words, focusing on prosodic structures, paralinguistic, memory or imitation, and self-monitoring. The analysis also revealed that mimicking the speakers and using paralinguistic were the most commonly used, while strategies related to clusters were the least commonly used by the learners. In addition, Eckstein (2007) uncovered three main learning strategies for L2 pronunciation that positively correlated with higher spontaneous pronunciation skills: frequently noticing others' English language mistakes, asking for pronunciation help, and adjusting the facial muscles.

Table 1 Peterson's (2000) PLS

Group	Strategy
Memory	Representing sounds in memory
Cognitive	Practicing naturalistically
	Formally practicing with sounds
	Analysing the sound system
Compensation	Using proximal articulations
Metacognitive	Finding out about TL pronunciation
	Setting goals and objectives
	Planning for a language task
	Self-evaluating
Affective	Using humour to lower anxiety
Social	Asking for help
	Cooperating with peers

Three more comprehensive studies on PLS were carried out in Poland by Pawlak (2006, 2008, 2018) who, in the first study, used a list of seven strategies and an open-ended question that sought to explore more PLS than those listed. A strong preference for cognitive strategies (e.g., repetition of words) and minimal use of metacognitive strategies (e.g., self-evaluation) were observed in the analysis of data. In the second study, Pawlak (2008), through a questionnaire that was distributed to 106 university students, identified two sets of strategies. Inside the classroom, the most frequently used were: (1) repeating after the teacher or tape, (2) carefully listening to the model provided, and (3) using phonetic transcription respectively; and less frequently used were: (1) using a dictionary, (2) reading aloud, (3) following instructions, (4) noting down words, (5) using sentences or dialogues, and (6) highlighting. Outside the classroom, the most frequently used strategies were: (1) repeating after the model provided on a tape or CD, (2) seeking exposure to English through the media, (3) looking up pronunciation words in dictionaries, (4) reading aloud, (5) using phonetic script, (6) recording one's pronunciation and then listening to it, (7) cooperating with other students, and (8) reviewing points recently covered in pronunciation classes. In the third study, Pawlak (2018), using open-ended questionnaires administered after the completion of two tasks, identified the use of PLS during two activities that were given to 54 English language learners in Poland. Pawlak focused on generating both controlled and spontaneous data in the hope of finding PLS that aid in the development of both explicit and implicit knowledge of pronunciation. The researcher concluded that the learners made minimal use of PLS across the three stages of the task relying mainly on the use repetition and comparison of their performance with that of other learners. This use was attributed to the nature of the tasks and the different foci the learners had in each.

Additionally, Całka (2011) elicited data from 74 teacher training college students using a survey that included—in addition to the Likert-scale items adapted from Oxford (1990)—an open-ended question to allow for the possibility of exploring new PLS. Quantitative analysis revealed that the most commonly used strategies were ordered in terms of frequency as follows: memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, and social strategies. Qualitative analysis of responses to open-ended question revealed that cognitive and metacognitive strategies were reported to be the most widely used by the respondents. A recent study on PLS was conducted by Szyszka (2014), who used diaries and semi-structured interviews with 31 trainee English language teachers and found sequences of PLS in the form of chains of two or more strategies. The most commonly used strategies were cognitive and memory strategies. Another recent study was that conducted in Turkey by Erbay et al. (2016), who explored the use of PLS by 56 English language learners and found a total of 18 tactics that were later grouped into six strategies using Oxford's (1990) framework. The researchers concluded that cognitive strategies were the most commonly used strategies.

In addition to the previously reviewed studies that were concerned with the identification of PLSs, a number of studies set out to examine L2 learners' perceptions of and preferences for PLS use. As this theme is beyond the scope of this study, only a brief review of some studies is in order. Vitanova and Miller (2002) examined the

perceptions of a group of graduate students towards their L2 pronunciation learning experience. In that study, the researchers identified preferences for three main strategies that were thought to help in pronunciation development: self-monitoring/self-correction, active listening and mirroring, and motivation, and further called for the incorporation of strategy research into language instruction. Teachers have to direct students on “*how to learn pronunciation, not just how to produce sounds and patterns*” (italics mine) (2002, p. 5). Moreover, Derwing and Rossiter (2002) examined the perceptions of 100 adult ESL college learners from a variety of first language backgrounds with regard to their pronunciation difficulties and identified preferences for eight learning strategies that students most commonly use as follows: paraphrasing, self-repetition, writing/spelling, adjusting volume, speaking clearly, slowing speech rate, calming down, and avoidance of problematic areas. In the Polish context, Wrembel (2008) examined the perceptions of 32 university students towards the efficacy of PLS and found that phonemic transcription, dialogue reading, and performing are perceived by the students to be the most useful. In yet another investigation within the same context, Pawlak (2011) explored 60 university students’ perspectives on L2 pronunciation learning and found that the most commonly reported preference among students was for cognitive strategies such as repetition and transcription.

Other lines of inquiry in PLS are concerned with the relationship between the use of PLS and individual factors such as motivation as well as to a more recent trend in strategy research, that of strategy-based instruction (see Oxford, 2011). These two lines are not the concern of this study, but interested readers can be referred to the extensive synthesis provided by Pawlak and Szyszka (2018).

3 Oxford’s (1990) Framework

One of the most popular classifications of language learning strategies is that of Oxford (1990), which I have adopted in this study because it is both detailed and comprehensive. In a comparative study of three classification systems of language learning strategies (i.e., O’Malley & Chamot, 1990; Oxford, 1990; Rubin, 1981), Hsiao and Oxford (2002) found that Oxford’s (1990) classification system was superior in accounting for the comprehensive variety of strategies reported by learners. Oxford (1990) classifies language learning strategies into two main classes which are further expanded into six sub-classes. The first class consists of *direct strategies* which are further classified into three types: *memory*, *cognitive* and *compensation strategies*. Memory strategies (e.g., using imagery) help learners to “store and retrieve new information.” Cognitive strategies (e.g., summarizing) help learners to “understand and produce new language.” Compensation strategies (e.g., using synonyms) help learners to communicate using the language (Oxford, 1990, p. 37). The second group consists of *indirect strategies*, which form a basis for language learning. Three types of learning strategy are involved: *metacognitive*, *affective* and *social strategies*. Metacognitive strategies (e.g., cantering, arranging, planning, evaluating) help

learners “to control their own cognition.” Affective strategies (e.g., lowering anxiety, encouraging, taking emotional temperature) help learners to “regulate emotions, motivations and attitudes.” Social strategies (e.g., asking, cooperating, empathizing) help learners to “learn through interacting with others” (Oxford, 1990, p. 135).

4 The Study

4.1 Research Questions

It should be recalled that this study aims to explore PLS used by a group ($N = 87$) of English major university students in Jordan. Three research questions were addressed as follows:

1. What are the pronunciation learning strategies used by Jordanian university students inside the classroom?
2. What are the pronunciation learning strategies used by Jordanian university students outside the classroom?
3. How do students perceive the usefulness of the pronunciation learning strategies they use?

4.2 Participants

The participants in this study were 87 English major university students in Jordan. They were enrolled in a four-year BA program that qualifies them to become English language teachers. They were chosen on the basis of their year of studying English. Thus, first year students were excluded from participation because pronunciation subjects are only offered to students in their second year or later in the study context. Of the 87 who participated in the questionnaire, 16 students (6 males and 10 females) responded to the researcher’s invitation to participate in a face-to-face audio-recorded interview. Their ages ranged between 18 to 20 and their first language was Arabic.

4.3 Data Collection

The study used three methods of data collection: non-participant classroom observation, a questionnaire, and follow-up semi-structured interviews. The researcher observed six pronunciation and phonology classes and took notes of what students were doing inside the classroom. This allowed him to list the tactics (see below for explanation) used by students inside the classroom. After each class, the researcher distributed a questionnaire to the students in each class. The questionnaire consisted

of two parts: The first listed a total of 26 learning tactics (15 inside the classroom and 11 outside it) that were collected from the literature, and the second had the same 26 tactics listed for students' evaluation on a 5-point Likert-scale. An invitation for participation in a face-to-face interview was made by the researcher and 16 students agreed to participate. The interviews were conducted in a classroom and audio-recorded for analysis. They allowed generating more data on PLS, which resulted in the addition of some PLS that were not included in the questionnaire.

This triangulation of instruments is argued to be the key to avoid the flaws associated with the use of single data collection tools (Pawlak & Szyszka, 2018). Indeed, each one of these the research methods mentioned above has drawbacks if used on its own (for a discussion of the advantages and disadvantages of strategy instruments, see Oxford & Burry-Stock, 1995; Pawlak & Szyszka, 2018). For example, relying solely on observation to assess the use of language learning strategies leaves out "much of the interesting information [which] cannot be observed because it is mentalistic and not behavioristic. Access to it must come from interviews, written questionnaires, and verbal report (...) wherein the learners generate the data" (Cohen & Scott, 1996, p. 93). And Oxford (2011, p. 145) further suggests that "it is helpful to combine observation with querying learners about their strategies through an interview, questionnaire, or a simple 'member check'." As Pinter (2006, p. 626) puts it, "observing task performances *without asking the learners* (...) cannot give a full picture of the strategies used" (*italics mine*). Thus, observable learning strategies in this study were explored through the researcher's non-participant classroom observations based on ethnographic field notes. Other, non-observable (mental) language learning strategies, which involve both non-observable learning strategies that are employed inside the classroom and outside the classroom, were investigated through the use of a questionnaire and follow-up interviews, as indicated previously. Macaro (2001, p. 56) asserts that "interviewing language learners about the way that they use strategies can be very productive and an excellent way of complementing a questionnaire."

4.4 Data Analysis

It may be recalled again here that Oxford's (1990) categorization of language learning strategies is adopted. Oxford (1990) follows the following sequence in presenting strategies:

Strategy category → *Strategy group* → *Strategy set* → *Strategy* → Tactic. Oxford (2011, p. 299) differentiates between 'strategy' and 'tactic' as follows:

Tactic _ a specific, 'ground-level' application of a strategy or metastrategy by a particular learner in a given setting for a certain, real-life purpose to meet particular, immediate needs; same as operations in activity theory. Example: 'I understand better when I look at the visible structure of the Spanish story', reflecting the strategy of Using the Senses to Understand and Remember.

In analyzing PLS in this study, a reversed pattern was followed, that is, learning tactics were presented first and then grouped into strategies: *Tactics* → *Strategies* → *Strategy set* → *Strategy group* → *Strategy category*.

5 Findings

The main aim of the present study was to explore the language learning strategies that EFL students employ to develop their L2 pronunciation. To do this, PLS were categorised into two categories: observable and non-observable learning strategies. The two categories are presented below:

5.1 *Observable Pronunciation Learning Strategies*

As we noted earlier, this type of strategies was observed by the researcher through classroom observations. A number of 20 tactics were recorded using the researcher's field notes and these are listed below.

1. Repeating aloud after the lecturer.
2. Repeating aloud after a native speaker on tape.
3. Listening carefully.
4. Writing phonemic symbols on the board and in notebooks.
5. Practicing sound distinctions through minimal pair drills.
6. Trying out different accents of English.
7. Trying out contrasts between Arabic and English.
8. Practicing sounds first in isolation and then in context.
9. Practicing difficult words over and over.
10. Imitating the lecturer's mouth movements.
11. Talking aloud to oneself to practice the pronunciation of difficult words.
12. Verbalizing and using hypotheses about pronunciation rules.
13. Asking help from the lecturer.
14. Practicing word stress placement.
15. Taking notes and writing rules about word stress.
16. Reading reference materials about target language rules.
17. Training their ears to listen to native speech.
18. Speaking slowly to get the pronunciation right.
19. Reading aloud.
20. Asking the lecturer to explain and give examples.

Those 20 learning tactics were grouped into 11 strategies according to Oxford's (1990) scheme. The division is presented in Table 2.

Table 2 Grouping of tactics into strategies

Strategies	Tactics
1. Repeating	Repeating aloud after the lecturer
	Repeating aloud after a native speaker on tape
	Reading aloud
	Practicing difficult words over and over
2. Formally practicing with sounds	Practicing sound distinctions through minimal pair drills
	Practicing word stress placement
	Talking to oneself to practice the pronunciation of difficult words
3. Practicing naturalistically	Listening carefully
	Trying out different accents of English
	Training their ears to listen to native speech
	Speaking slowly to get the pronunciation right
4. Reasoning deductively	Verbalizing and using hypotheses about pronunciation rules
5. Analysing contrastively	Trying out contrasts between Arabic and English
6. Taking notes	Writing phonemic symbols on the board and in notebooks
	Taking notes and writing rules about word stress
7. Getting help	Asking help from the lecturer
8. Using gesture	Imitating the lecturer's mouth movements
9. Placing new words into a context	Practicing sounds first in isolation and then in context
10. Finding out about language learning	Reading reference materials about target language rules
11. Asking for clarification or verification	Asking the lecturer to explain and give examples

5.2 *Non-Observable Pronunciation Learning Strategies*

This type of pronunciation learning strategies was explored through the use of both a questionnaire and follow-up interviews, as noted above. The questionnaire listed 26 learning tactics that were found in the literature regarding pronunciation learning. Of 26 learning tactics that were included in the questionnaire, 15 were concerned with inside the classroom learning and 11 with outside the classroom learning. During the interview, the researcher sought to identify any additional learning tactics that were not listed in the questionnaire.

5.2.1 *Inside the Classroom Strategies*

Analysis of students' responses to the questionnaire revealed that their use of the different learning tactics varied significantly. This variation is illustrated in the data included in Table 3. It can also be seen that PLS based on listening and repetition were used the most often.

Additionally, the researcher further questioned a subset of 16 students in an interview about the tactics they employed, which resulted in the data presented in Table 4. It may be seen that once again, listening and repeating after the teacher was found to be the most widely used tactic.

Table 3 Questionnaire responses: Students' use of inside classroom learning tactics

Learning tactics: General	N (%)
Listen and repeat after the teacher	70 (80)
Write and spell words and sentences that I hear	58 (67)
Repeat to myself or correct myself in my head	50 (57)
Repeat to myself or correct myself aloud	46 (53)
Listen and watch native speakers on videos and/or DVDs	40 (46)
Listen to native speakers on tapes or CDs	38 (44)
Converse with peers	36 (41)
Ask help from the teacher	36 (41)
Speak slowly	29 (33)
Increase volume of speech	27 (31)
Pay attention to:	
a. word stress	65 (75)
b. consonants and vowels	60 (69)
c. rhythm	35 (40)
d. intonation	33 (38)
e. all above	25 (29)

Table 4 Interview responses: Students' use of inside classroom learning tactics

Learning tactics	<i>N</i> (%)
Listen and repeat after the teacher	10 (62.5)
Read the word in mind and repeat to myself	8 (50)
Write down words and sentences	7 (44)
Pay attention to the teacher	2 (12.5)
Listen and repeat after the tape	2 (12.5)
Write the transcription of words	2 (12.5)
Use dictionaries (electronic)	2 (12.5)
Converse with the teacher	2 (12.5)
Share the pronunciation of words with peers	1 (6)
Read aloud	1 (6)

Interviews with students revealed four additional learning tactics employed inside the classroom that were not listed in the questionnaire. These were the following:

1. Write the transcription of words.
2. Use dictionaries (electronic).
3. Converse with the teacher.
4. Share the pronunciation of words with peers.

When combined, the results of the questionnaire and interviews produced a total of 19 pronunciation learning tactics that students employed inside the classroom to develop their L2 pronunciation.

5.2.2 Outside the Classroom Strategies

As noted above, the students were also asked about the learning tactics that they used to learn L2 pronunciation outside the classroom. The analysis showed that students' use of learning tactics outside the classroom also varied significantly. This can again be related to their environment or cultural context (see Table 5). The most frequently used tactic involved watching movies in English. It is essential, however, to comment on two survey items where student responses were unexpected: "speak English with Arabic friends" (46% of respondents) and "speak English with non-Arabic friends" (39% of respondents). In the first case, the researcher's experience as a student and teacher of English in the study context is that while some students do make use of code-switching in conversation with some Arabic-speaking friends, it is nearly always in the nature of single or occasional words rather than an extended bilingual discourse. Regarding the second item, again intuitive observations are that such exchanges tend to happen on a small scale—in this case with the relatively few international students who come from other Muslim countries such as Malaysia and Indonesia.

Table 5 Questionnaire responses: Students' use of outside classroom learning tactics

Learning tactics	<i>N</i> (%)
Watch movies in English on TV/DVD	74 (85)
Repeat to myself	56 (64)
Use dictionaries and transcription	55 (63)
Read aloud	51 (59)
Listen to songs in English	49 (56)
Use the Internet	42 (48)
Speak English with Arabic-speaking friends	40 (46)
Listen to native speakers on tapes or CDs	35 (40)
Speak English with non-Arabic speaking friends	34 (39)
Listen to the radio	28 (32)
Record myself and listen to my pronunciation	11 (13)

The questionnaire items were followed up on during the interviews. Table 6 presents the outside classroom learning strategies starting with those that the participants reported using the most often. It can be observed once again that “watch movies in English” was the most favored tactic. The interviews also revealed two additional learning tactics that were not listed in the questionnaire:

1. Code-switch between Arabic and English.
2. Use CAPT systems.

When combined, the results of the questionnaire and the interviews produced a total of 13 learning tactics that students use to develop their L2 pronunciation outside the classroom. Student responses can be viewed as being influenced by the environment that surrounds them in Jordan, as noted above. The fact that a great majority of students reported watching movies in English is likely to be the result of

Table 6 Interview responses: Students' use of outside classroom learning tactics

Learning tactics	<i>N</i> (%)
Watch movies in English	14 (87.5)
Listen to music in English	9 (56)
Use the Internet	9 (56)
Speak English with Arabic-speaking friends	6 (37.5)
Use dictionaries (electronic)	4 (25)
Read aloud	3 (19)
Listen to the radio	2 (12.5)
Listen to native speakers on tapes or CDs	2 (12.5)
Code-switch between English and Arabic	1 (6)
Use computer-assisted pronunciation teaching (CAPT) systems	1 (6)
Record myself and listen to my pronunciation	1 (6)

Table 7 Number of pronunciation learning tactics found in the study

Inside	Tactics	Outside	Tactics
Questionnaires	15	Questionnaires	11
Additional (interview)	4	Additional (interview)	2

the technological developments that accompanied globalization. In fact, several TV channels (e.g., MBC 2, MBC Action) air movies exclusively in English. Similarly, listening to songs in English can also be seen to be a result of people's exposure to the external world offered by technology nowadays. Table 7 summarizes the learning tactics identified in this study.

5.3 Students' Evaluation of Pronunciation Learning Tactics

As well as ascertaining the frequency with which students employed various pronunciation learning tactics, the study probed students' views on the value of each tactic. This was done by asking students to respond by means of a five-point Likert scale (where 1 indicates *helps a lot*, 2—*to some extent*, 3—*sometimes*, 4—*to a limited extent*, and 5—*not at all*) to the following question: "How helpful were the tactics you use in improving your pronunciation?"

5.3.1 Inside Classroom Learning Tactics

Table 8 illustrates the students' evaluation of inside classroom learning tactics. Comparing students' evaluation with their use of learning tactics described above shows a relationship between their beliefs and practices. That is, with the exception of *listening to native speakers on tapes* and *listening and watching native speakers on videos and/or DVDs*, students' actual pronunciation learning tactics correspond with their positive appraisal of these tactics. As indicated earlier, students' limited experience of *listening to native speakers on tapes* and *listening and watching native speakers on videos and/or DVDs* can be said to be related to the teacher-centered approach generally adopted in teaching pronunciation in Jordanian classrooms as well as to the fact that both students and lecturers reported lack of use of technology for teaching L2 pronunciation.

5.3.2 Outside Classroom Learning Tactics

Table 9 shows students' evaluation of outside classroom learning tactics. Looking at the students' responses presented in Table 9, it is clear that their positive evaluation was once again related to their use of learning tactics. With the exception of *speak*

Table 8 Students' evaluation of inside classroom learning tactics

Learning tactics	1%	2%	3%	4%	5%
Write and spell words and sentences that I hear	64	6	10	6	14
Listen and repeat after the teacher	63	5	13	9	10
Listen to native speakers on tapes or CDs	56	10	9	14	11
Listen and watch native speakers on videos and/or DVDs	57	6	14	10	13
Repeat to myself or correct myself aloud	51	3	16	20	10
Ask for help from the teacher	49	3	22	9	17
Converse with peers	45	5	17	11	22
Repeat to myself or correct myself in my mind	39	3	20	16	22
Increase volume	36	5	28	11	20
Speak slowly	33	6	20	13	28
Pay attention to:					
a. word stress	77	5	9	3	6
b. consonants and vowels	69	3	11	9	8
c. rhythm	39	3	17	14	27
d. intonation	36	5	22	28	9
e. all above	29	3	28	11	29

Table 9 Students' evaluation of outside classroom learning tactics

Learning tactics	1%	2%	3%	4%	5%
Watch English movies on TV/DVD	77	5	9	6	3
Speak English with non-Arabic speaking friends	57	9	11	14	9
Repeat to myself	56	6	22	6	10
Use dictionaries and transcription	51	9	17	11	12
Listen to native speakers on tapes or CDs	56	3	14	17	10
Read aloud	49	5	22	9	15
Listen to English songs	49	3	14	20	14
Use the Internet	39	5	28	14	14
Listen to the radio	33	9	29	11	18
Speak English with Arabic-speaking friends	29	6	14	25	26
Record myself and listen to my pronunciation	17	5	11	49	18

English with non-Arabic speaking friends, the most widely used five learning tactics reported above were also evaluated as being the most helpful for pronunciation development. As explained above, the exception is the result of the scarce opportunities for contact with non-Arabic speaking people.

5.4 *Categorizing Pronunciation Learning Tactics*

As indicated earlier, very few studies conducted so far have sought to investigate *pronunciation* learning strategies although the broader field of language learning strategies has long been explored by researchers such as Rubin (1975) and Oxford (1990), among others. Following Oxford's categorization, I begin by summarizing below the pronunciation learning *tactics* that were reported by 40% and more of students in the present study. Eighteen learning tactics from both inside and outside the classroom are integrated to form nine learning *strategies* (in italics), presented in Table 10.

As noted above, Oxford (1990) further groups language learning *strategies* into *strategy sets* and *strategy categories*. I now group both types of learning strategies explored in the study (i.e., observable and non-observable strategies) into strategy sets and categories. These are presented in Table 11.

6 Discussion

In analyzing the types of learning strategies presented above, it can be seen that most of the learning tactics found in the study fall within cognitive strategies (e.g., formally practicing with sounds, practicing naturalistically), social strategies (e.g., asking for help, cooperating with peers) and metacognitive strategies (e.g., finding out about TL pronunciation). Some represent memory strategies (e.g., placing new words in a context), affective strategies (e.g., using music), and compensation strategies. Several studies have shown the relative importance of cognitive and social strategies in developing L2 proficiency. For example, Park (1997) found that university students' use of cognitive and social strategies helped them achieve better scores of proficiency, as determined by the Test of English as a Foreign Language (TEFL), than other types of strategies. In a similar study in Taiwan, Wu (2008) found that the use of cognitive strategies greatly influenced students' L2 proficiency scores.

The results reported above clearly reflect the nature of pronunciation teaching and classroom conditions. Students complained about a lack of use of videos, DVDs or CDs in the classroom. In addition, students reported infrequency in the use of social learning strategies (e.g., conversing with peers and ask help from the teacher). This indicates that the approach to pronunciation is teacher-centered and there is little opportunity for students to speak and practice with one another. The fact that a majority of students do not pay attention to rhythm and intonation can be interpreted as reflecting the focus of teaching practices and teaching materials which give high priority to segments. The least frequently used learning tactics were *speak slowly* and *increase volume*. This may have something to do with students' identity, psychology and culture. Students may feel more self-conscious if they speak more slowly or loudly in the classroom.

Table 10 Tactics used by 40% and more of students

Strategy	Tactic
<i>Repeating</i>	Listen and repeat aloud after the teacher
	Read aloud
	Repeat to myself or correct myself in my head
	Repeat to myself or correct myself aloud
<i>Formally practicing with sounds and writing systems</i>	Write the transcription of words
<i>Practicing naturalistically</i>	Listen to and watch native speakers on videos and/or DVDs
	Watch English movies on TV/DVDs
	Use dictionaries and transcription
	Use the Internet
	Use CAPT systems
<i>Pay attention</i>	Pay attention to word stress
	Pay attention to consonants and vowels
<i>Cooperating with peers</i>	Share the pronunciation of words with colleagues
	Speak English with Arabic-speaking friends
<i>Cooperating with proficient users of the new language</i>	Converse with the teacher
<i>Taking notes</i>	Write and spell words and sentences that I hear
<i>Switch to the mother tongue</i>	Code-switch between English and Arabic
<i>Using music</i>	Listen to English songs

In relation to students' use of learning strategies outside the classroom, it should be recalled that such endeavors are encouraged as contributing to developing students' autonomy and self-directedness. In a seminal paper, Acton argued that "*the most important learning and change must go on outside of the class, not inside*" (1984, p. 73; italics in original). Naiman (1992) asserted that an important aspect of communicative pronunciation teaching is to develop learning strategies outside the classroom. In a questionnaire distributed to 24 Japanese high school students who were rated to be "successful foreign language learners" to investigate strategies for their English learning experience, Tominaga (2009, p. 127) found that "formal instruction

Table 11 Strategies grouping into strategy sets and categories

Strategy categories	Strategy sets	Strategies
<i>Cognitive strategies</i>	Practicing	Repeating
		Formally practicing with sounds and writing systems
		Practicing naturalistically
	Analysing and reasoning	Reasoning deductively
Analysing contrastively		
	Creating structure for input and output	Taking notes
<i>Compensation strategies</i>	Overcoming limitations in speaking and writing	Getting help
		Using gesture
		Switching to the mother tongue
<i>Memory strategies</i>	Creating mental linkages	Placing new words into a context
<i>Metacognitive strategies</i>	Arranging and planning your learning	Finding out about language
	Centring your learning	Pay attention
<i>Social strategies</i>	Asking questions	Asking for clarification or verification
	Cooperating with others	Cooperating with peers
		Cooperating with proficient users of the new language
<i>Affective strategies</i>	Lowering your anxiety	Using music

at school did not contribute much to their acquisition of pronunciation, and that they made the best use of the opportunity *outside the school* to motivate their learning” (emphasis mine).

The analysis of data shows that students strongly believe in the role of exposure to the target language in developing their pronunciation. Given the limited natural exposure to English in the study context, students look for exposure to English through the media (e.g., watching movies in English and listening to songs in English). The results echo the findings of Pawlak’s (2008, p. 314) study in which 50% of students reported “seeking exposure to English through the media” as the second most frequently used strategy outside the classroom.

Students’ use of repetition techniques (i.e., repeat to myself) indicates their strong belief in the usefulness of drilling techniques to develop their L2 pronunciation. This indicates the influence of classroom teaching materials and techniques on the development of autonomy in students. However, the use of drilling techniques in the classroom may be more helpful in the presence of a teacher who can perform as a model for students to imitate and who can provide feedback on their pronunciation, an opportunity that students may not have when using drilling techniques outside the classroom.

The use of electronic dictionaries, which was reported by 63% of students, may help students outside the classroom. Indeed, dictionaries provide a valuable resource for students as they allow looking up the pronunciation of new words. Ezza and Saadeh (2011) assert that dictionaries can be a major resource for providing practice in pronunciation for EFL students in the Middle East where contact with English native speakers is limited. In a study that examined dictionary use among 471 undergraduate English major students in four Jordanian universities, Al-Qudah and Al-Qudah (2011) found that nearly all students owned and used dictionaries, with 30.4% using printed monolingual dictionaries, 20.8% using printed bilingual dictionaries, and 43.7% using electronic dictionaries. The researchers found that students use dictionaries mainly to check the spelling and correct the pronunciation of certain words, and suggested that EFL students in Jordan are concerned more about their pronunciation than about semantics.

Furthermore, over half the students (59%) in the present study reported using the “read aloud” tactic in their L2 pronunciation learning outside of the classroom. In fact, the value of reading aloud has been debated in language teaching and learning. However, Gibson (2008) argues that reading aloud can help learners to acquire the prosodic aspects of English through raising awareness and practicing different aspects of pronunciation. Reading aloud can be practiced inside or outside the classroom. In both cases, it can be a useful tactic for language learning if used appropriately, though as noted with self-repetition above, if practiced without feedback, reading aloud may be limited in value.

Looking at the less widely used tactics reported above, there is little that can be seen as surprising. Indeed, speaking English with Arabic-speaking friends is reported by fewer than half the students for two reasons: (1) students find it easier to use Arabic because it is their mother tongue and it helps them to deliver the message, and (2) using English can be seen as “showing off,” which is not favored by most students, particularly by low level students. As for the similarly low incidence of speaking English with non-Arabic speaking friends, this again is likely to result from the study context, with few foreign students being enrolled at Jordanian universities.

7 Conclusion

As indicated above, the study has explored how students learn, through an examination of learning strategies, both observable *inside the classroom* and reported by students *beyond the classroom*. Inside the classroom, the IRF sequence (initiation—response—feedback) was a useful framework for understanding students’ learning. Students’ learning activities included *transcribing a word* or *marking word stress* on the board, activities which were usually paired with one other, that is, a student being led to *pronounce the word and repeat it in front of other students*. In all such cases, students’ learning was highly structured and directed by the teacher, with verbal contributions limited either to brief answers in speech or writing or to imitations of their teachers’ modelling. Moreover, this teacher-fronted approach did not allow

students to become involved in dialogic exchanges, through which a range of interpersonal meanings may be practiced. Beyond the classroom, L2 learners in this and similar contexts in the Middle East have limited opportunities for communication in English where L2 use for all but the elite is generally limited to occasional and brief code-switching. Accordingly, students' major experience of English happens in class with a teacher who is also a native speaker of Arabic. In some respects, students' strategies beyond the classroom were found to mirror those which they used in the classroom, particularly in the case of *repeating after a model* and *reading aloud*. But in other respects, students' outside learning stood in contrast to their experiences inside the classroom, and this may appear to relate in part to their stated goals and their overall motivation. Specifically, the students reported a number of independent strategies to obtain exposure to L2 through the media, in particular, favoring *watching movies in English* and/or *listening to music in English*. Additionally, the students turned to the audio components of electronic dictionaries and to computer technology more generally in order to listen to native speaker speech. Thus, it seems that students were able to locate and make use of learning strategies which complemented the kinds of learning offered by formal instruction. Indeed, it may be said that particularly in EFL contexts and in this study context where pronunciation was taught only in its theoretical dimension it is the learning which students initiate beyond the classroom which can make all the difference in achieving progress in L2 (Pawlak, 2008).

There is a caveat here, however. It is clear that students enthusiastically embraced opportunities to experience L2 beyond the classroom through English media. But such learning was confined to *receptive* L2 listening/viewing. What was missing in the kinds of experiences reported by students was engagement in *productive* L2 skills. However, in order to develop the capacity to communicate in L2, it is vital for students to have opportunities for two-way (productive) experiences as well as one way (receptive). Although informal learning beyond the classroom is clearly based on a student's own initiative, it may be said that the teacher still has a unique role here. There is enormous potential for independent learning through the web. These L2 opportunities are both *receptive*, through dedicated pronunciation sites, publishers' samples, peer resources, university links, and *productive*, through different kinds of activities afforded by peer-networks and cross-language tutor exchanges, for example. However, in order to gain maximum benefit from "beyond the classroom" experiences what is still required is teacher mediation. That is, students require the intervention of an expert in the field who can guide them through the array of possibilities to what is relevant, pedagogically-sound and effective. This represents a new role for many teachers, but a crucial one if we are to assist students to develop their potential in this area. Its inclusion in both preservice and in-service teacher education seems to be urgently needed (Snow et al., 2006).

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Beliefs About Grammar Instruction and the Mastery of the English Passive Voice



Mirosław Pawlak 

Abstract Beliefs about second language learning and teaching have been shown to play an important role because they can impact the effectiveness of the instructional options used as well as the ultimate levels of attainment. This also applies to perceptions concerning the role of grammar as well as the ways in which it should be taught. While quite a few studies have focused upon learners' beliefs in this area, often in comparison with those manifested by teachers, there is a paucity of research which looks into the link between such beliefs and grammar attainment. The study reported in this chapter sought to fill this gap by investigating the link between the beliefs about grammar instruction held by 132 Polish university students majoring in English and their mastery of the passive in this language, operationalized as performance on measures of explicit and implicit knowledge of this structure, also taking into account its productive and receptive dimensions. The findings are complex and provide evidence for some positive links in this respect which are related to the ways in which grammar is taught and evaluated in the context under investigation.

1 Introduction

Beliefs about different aspects of learning and teaching a second and foreign language (L2) have been of considerable interest to second language acquisition (SLA) researchers ever since Horwitz (1985, 1988) introduced the construct into the field and developed her *Beliefs About Language Learning Inventory* (BALLI), which focused on such general issues as the difficulty of language learning, foreign language aptitude, the nature of language learning, learning and communication strategies, as well as motivation and expectations. The scope of research into beliefs about L2 learning was considerably extended in the following decades, with Wenden (1999),

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for example, linking them with metacognitive knowledge, Mori (1999) relating them to epistemological beliefs, and Kramsch (2003) conceptualizing them in terms of metaphors by means of which the process of L2 learning is described. A major shift can also be observed from viewing beliefs as predetermined, stable mental representations to regarding them as dynamic, inconsistent and not always compatible with the actions learners ultimately take (cf. Barcelos & Kalaja, 2011). In addition, a distinction has been made between *explicit* and *implicit* beliefs, the latter of which have been referred to as *mindsets* (Dweck, 2012). Researchers have also started to pay attention to the emotional side of beliefs (e.g., Barcelos, 2015). Irrespective of such changes in the way in which the construct has been conceptualized, there is certainly still much truth to Dörnyei's (2005, p. 216) comment that "(...) the beliefs language learners hold considerably affect the way they go about mastering the L2." It should thus come as no surprise that numerous studies have been conducted that have looked into learners' and teachers' beliefs about different facets of L2 learning, such as the learning of particular skills and subsystems (e.g., pronunciation, see Pawlak et al., 2015), content-based instruction (e.g., Briggs et al., 2018), classroom experiences (e.g., Nilsson, 2020) or the use of the mother tongue (e.g., Wach & Monroy, 2019), to name but a few. Beliefs about grammar instruction (GI) and correction of grammar errors are certainly no exception. However, very few studies have explored the relationship between such beliefs and L2 grammar attainment and, to the best knowledge of the present author, none has related them to the use of a specific grammar structure, surely not with respect to explicit and implicit knowledge of this structure. The study reported in this chapter aims to fill this gap by investigating the link between beliefs about different aspects of GI and the mastery of the English passive voice in terms of the productive and receptive dimensions of its explicit and implicit representation.

2 Mastery of L2 Grammar

When asked about the essence of the mastery of L2 grammar, most people would probably just point to the familiarity with relevant rules and the ability to apply them, presumably in controlled exercises and on different kinds of tests. However, the situation is more complex than that for at least two crucial reasons. First, as has long been shown in the literature, the knowledge of TL grammar is multi-faceted, not only because of the long-standing traditional distinction between syntax or morphology but also interfaces between grammar and lexis (cf. Larsen-Freeman & DeCarrico, 2020). Second, as Larsen-Freeman (2003) argues, the mastery of any grammatical structure has to be considered with respect to its form, meaning, and use. Specifically, in her view, learners do not only need to get to know how a particular structure is created but also what its use indicates in semantic and pragmatic terms, that is, the message its employment conveys and the circumstances in which communication takes place. Third, there is also the crucial distinction between *explicit* and *implicit knowledge* of L2 grammar (cf. e.g., Ellis, 2009; Pawlak, 2019). The former is conscious, declarative, available for self-report and to a large extent independent of

limitations related to age and developmental sequences, but it can only be drawn upon when learners have sufficient time to recall the relevant rules they have been taught. By contrast, the latter is tacit and procedural, it cannot be verbalized, it is subject to constraints stemming from age and the ability to perform requisite processing operations (Pienemann & Lenzing, 2015), but it can be accessed rapidly in real-time processing required by communicative interaction. When we think about the English passive which is the focus of the study reported below, it is one thing to know the rules governing how it is formed, what we mean by using it and what message we want to get across by choosing this structure, that is, having explicit knowledge that we can deploy in controlled exercises or on tests, and quite another to be able to use the different form of this TL structure in the right way in spontaneous communication, which requires implicit knowledge. One important qualification, however, is that it is difficult to talk about purely implicit knowledge in settings where learners may have little everyday access to the TL and where instruction starts with explicit provision of rules, as is the case with most foreign language settings. In such contexts, it makes more sense to talk about *automatized explicit knowledge* (DeKeyser, 2010, 2017; DeKeyser & Juffs, 2005) which is functionally indistinguishable from implicit knowledge but still relies on rules that advanced learners can easily access. It is this rationale that underlay the construction of measures of L2 knowledge used in this investigation. However, for the sake of convenience, the term *implicit knowledge* will be employed throughout the remainder of the paper, with the vital caveat that it is primarily meant to refer in this case to *automatized explicit knowledge*.

When it comes to establishing the mastery of L2 grammar in SLA studies with the aim of relating it to some other variables, several options are available. It is possible, for example, to take into account the scores on standardized tests (e.g., CAE, TOEFL) or some of the sections they include. Although such tests are characterized by high validity and reliability, they do not always provide us with the exact information we might require and are perhaps more suitable in cases where we are interested in general indices of TL proficiency. Another option is to rely on the outcomes of evaluation measures used in a particular institution such as final grades in courses devoted to grammar or scores on official examinations in English or their parts. While this approach is relatively straightforward and very practical, one possible problem is that the assessment provided by different teachers is not always comparable while homegrown tests might not always be designed with sufficient rigor. Also, when the evaluation scale is limited to just several choices, it may not be sensitive enough for differentiating among participants for research purposes. Some empirical investigations also resort to learners' self-assessment, either as a sole index of attainment or in combination with other indices. In this case, however, a question arises as to the extent to which students can be expected to be both objective and precise when conducting self-evaluation, and, yet again, the sensitivity of the scale used. The best option by far is to develop tailor-made tests that would tap into learners' mastery of TL grammar. However, this solution clearly poses a daunting challenge with large samples, not only because of the complex logistics or finding teachers who are willing to help out with data collection but also because the conditions of administration should be similar. Besides, the value of such tests is by no

means guaranteed if the decision as to what structures to include and how to establish their mastery is not meticulously premeditated. First, especially at more advanced levels, it is extremely difficult to decide on the selection of structures that would be reflective of the overall command of TL grammar. Thus, it might be warranted to focus on a specific feature or a set of such features, the mastery of which will be easier to diagnose on the basis of the profiles of participants. Second, it is necessary to go beyond traditional test items (e.g., paraphrasing, translation, multiple choice), which tap only into explicit knowledge, and also include tasks that require the use of grammar in communicative interaction, which allows insights into implicit or highly automatized explicit knowledge. Obviously, this will be more feasible if the focus is on a specific structure rather than a range of grammatical features (cf. Pawlak, 2014, 2020). In line with this reasoning, in the study reported in this chapter, grammar attainment was measured in terms of the receptive and productive dimensions of the explicit and implicit (automatized) knowledge of different aspects of the English passive.

3 Previous Research on Beliefs About Grammar Instruction

Although there are quite a few studies that have examined beliefs about grammar teaching, they have pursued sometimes quite different goals, involved different populations, adopted diverse interpretations of what GI involves (e.g., inclusive or exclusive of the provision of error correction), and relied on disparate data-collection instruments. There is also a handful of studies which have looked into the relationship between learners' beliefs and their mastery of L2 grammar. In light of this, the overview in the present section is limited to studies that are the most germane to the focus of the empirical investigation reported later in this chapter, that is, such that have targeted beliefs manifested by learners, also in comparison with those exhibited by teachers, as well as those that have attempted to take into account attainment in relation to TL grammar.

Two early studies that looked into learners' beliefs about GI in terms of the provision of corrective feedback (CF) were conducted by Griffiths and Chunhong (2008), who focused on English majors from China, and Pawlak (2010), who collected data from secondary school learners in Poland. Even though the researchers set their sights on quite different aspects of CF, the results were similar, indicating the need for frequent error correction, especially such that is direct and is provided by the teacher rather than other learners. Pawlak (2011), in turn, investigated the differences in beliefs about grammar teaching exhibited by 106 Italian and 106 Polish university students majoring in English. The data were collected by means of an earlier version of the tool employed in the study reported below. While there were some differences between the two groups of participants regarding specific instructional options, both of them were convinced of the importance of grammar teaching

as well as the need for feedback focusing on erroneous use of grammar structures in the TL. In addition, both groups expressed a preference for a structural syllabus, the use of deduction to introduce new grammar structures, the need to practice these structures in different ways, also in the course of communicative tasks, as well as the utility of immediate CF on grammar errors, provided by the teacher. CF as such was also the focus of the study carried out by Kartchava and Ammar (2014), who explored whether beliefs in this respect determined what was noticed and learnt by 99 participants in the L2 classroom. The analysis indicated that two out of four common beliefs correlated with noticing in an immediate recall measure as well as scores on a picture description and spot-the-difference task, but none of them was related to actual learning outcomes. Beliefs about GI were also investigated by Graus and Coppen (2016), who focused on 832 university learners of English enrolled in a teacher education program in Denmark. It turned out that the respondents favored explicit inductive instruction, although higher-level participants were more likely to manifest a preference for embedding grammar structures in communicative activities. Another two studies that are worth mentioning at this juncture were conducted with the aim of developing and validating research instruments that would gauge learners' beliefs about GI and the provision of CF. One of these, undertaken by Loewen et al. (2009), resulted in the construction of a comprehensive instrument of this kind and the analysis of the data also demonstrated that the beliefs in question varied between participants studying English as a second and foreign language. In the second study, Spada et al. (2009) developed a questionnaire tapping learners' preferences concerning isolated and integrated form-focused instruction (i.e., intervention that precedes or follows a communicative activity vs. such that occurs during its performance, respectively).

There are also research projects that have sought to compare beliefs about grammar instruction and corrective feedback held by learners and teachers. Schulz (1996, 2001), for example, investigated this issue in the US and Columbia, showing that in both cases it was learners who favored more explicit GI but also providing some evidence for the impact of cultural differences. Liao and Wang (2008) employed questionnaires and interviews to gain insights into the beliefs about GI exhibited by high school students and teachers in Taiwan. It was found that while both groups were favorably disposed to teaching this TL subsystem, the learners were much more in favor of the use of immediate, direct corrective feedback. In another study, Jean and Simard (2011) looked into the perceptions of GI in the case of high school students learning English and French as a second language as well as their teachers. Despite slight discrepancies between both groups of participants, the main finding was that grammar teaching was seen as necessary but not particularly enjoyable, with the TL, age and gender playing a marginal role. Pawlak (2013) employed the same instrument as in the study mentioned above (Pawlak, 2011) to compare the beliefs concerning form-focused instruction of Polish university students majoring in English and lecturers working in English departments. He demonstrated that while both groups were convinced about the importance of GI, they differed with respect to the utility of grammar for mastering specific TL skills as well as the preferred instructional options (e.g., students tended to favor more the deductive approach and

more controlled types of practice). Some incongruences were also found by Deng and Lin (2016) in their investigation of beliefs about GI in the case of high school teachers and students in China. In particular, the analysis of the data gathered through questionnaires and interviews showed, somewhat in line with the findings reported by Pawlak (2013), that the teachers were much more likely to opt for a focus on communication. More recently, Mansouri, Jami, and Salmani (2019) compared the beliefs about isolated and integrated GI held by students and teachers in intensive English programs taught in colleges in Iran and the USA. Participants' responses on questionnaires containing both Likert-scale statements and open-ended items revealed similar trends to those identified in previously described studies, with teachers being more enthusiastic about integrated GI and learners showing a preference for isolated GI.

Research that has actually attempted to relate to beliefs about grammar teaching and the correction of grammar errors to the mastery of this TL subsystem is extremely scarce. One relevant study was conducted by Polat (2009), who investigated the extent to which matches and mismatches between Georgian teachers' and learners' perceptions of the importance of grammar and preferred ways of teaching impacted achievement, both in relation to this TL subsystem and overall. Using data from questionnaires, interviews, observations, evaluation inventories and coursebook analysis, the researcher showed an overwhelming preference for traditional GI for both groups and demonstrated that matching beliefs translated into higher grades in grammar but not greater overall L2 achievement. In light of the paucity of existing empirical evidence, there is a need for more research that would address the link between learners' cognitions concerning GI and their mastery of this TL subsystem. This is the gap that the study reported below sought to fill, narrowing down grammar attainment to explicit and implicit knowledge of the English passive voice in terms of its production and comprehension.

4 The Study

4.1 *Aim*

The present study constitutes part of a larger-scale research project which aimed to examine the relationship between selected cognitive and affective individual difference variables, and the knowledge of TL grammar in the case of advanced learners of English. Its main objective was to shed light on the link between students' self-reported beliefs about different aspects of GI and their mastery of the English passive voice in terms of the productive and receptive dimensions of explicit and implicit knowledge. The choice of the targeted structure was dictated by the need to find a grammatical feature with which the participants were to some extent familiar but which was versatile enough to ensure differential levels of performance. The passive satisfied this requirement because its accurate, meaningful and appropriate

use necessitates reliance on a wide range of tenses, aspects and verb forms, and it can be said to pose considerable difficulty with respect to both explicit and implicit knowledge (Ellis, 2006). The following research question was formulated: *What is the relationship between beliefs about different aspects of grammar instruction and the knowledge of the targeted structure?*

4.2 Participants

The participants were 132 Polish university students majoring in English (88 females and 44 males), enrolled in years 1, 2 and 3 of a three-year BA program. The main aim of the program was to develop a high level of TL proficiency so that its graduates could work in the capacity of English teachers, translators, interpreters, or business and media specialists, and, if they so wished, pursue their MA either in the L2 or some other area. The core of the program was an intensive course in English as a foreign language, divided into components devoted to specific TL skills and subsystems such as grammar, pronunciation, speaking and writing. The students were also required to attend a number of content classes (e.g., linguistics, literature, culture, history, foreign language methodology), most of which were also taught through the medium of English. The students' experience in learning English amounted to 11.98 ($SD = 2.84$) years and they rated the importance of L2 grammar as 4.15 ($SD = 0.62$) on a 5-point scale (1 lowest and 5 highest). Participants' TL proficiency fell somewhere between B2 and C1 in terms of the *Common European Framework of Reference* (Council of Europe, 2001) but considerable individual variation could be observed not only between the levels of the BA program but also within the same year. The majority of the students reported regular contact with English, but in most cases it was confined to the media and online resources, with scarce opportunities to interact with native speakers or other advanced users of English.

4.3 Data Collection and Analysis

Two types of data were collected for the purpose of the present investigation: those related to beliefs about grammar instruction and those reflecting the mastery of the targeted feature. Participants' beliefs about GI were tapped by means of a slightly modified version of the tool used by the present author in two previous studies (i.e., Pawlak, 2011, 2013). The instrument consisted of 30 5-point Likert-scale items (1—*strongly disagree* and 5—*strongly agree*), which pertained to the following six areas: (1) overall importance of grammar instruction, also with respect to specific TL skills, (2) the design of the syllabus (i.e., structural vs. task-based or task-supported), (3) planning grammar-oriented lessons (i.e., isolated vs. integrated teaching, or the extent to which instruction is embedded in communication-based tasks); (4) the ways in which grammar structures are introduced (i.e., deduction vs. induction,

Table 1 Descriptive statistics and Cronbach alpha values for different subscales and measures ($N = 132$)

	α	$M(SD)$
<i>Beliefs about GI—subscales</i>		
Overall importance of grammar instruction	0.81	4.22 (0.55)
Design of the syllabus	0.72	3.92 (0.82)
Planning grammar-oriented lessons	0.74	3.85 (0.86)
Introducing grammar structures	0.86	3.83 (1.04)
Practicing grammar structures	0.78	4.15 (0.96)
Correcting errors in the use of grammar structures	0.88	3.78 (0.86)
<i>Mastery of the English passive—the four measures</i>		
Explicit productive knowledge	0.87	7.35 (2.62)
Explicit receptive knowledge	0.70	10.15 (1.85)
Implicit productive knowledge	0.89	5.95 (3.05)
Implicit receptive knowledge	0.62	8.72 (1.82)

reliance on the first language, the use of grammatical terminology), (5) the ways in which grammar structures are practiced (i.e., controlled vs. communicative practice, production-oriented or reception-based instructional options), and (6) the correction of errors in the use of grammar structures (i.e., its focus, timing, source as well as corrective techniques used). The Likert-scale statements representing each of the six categories were scattered throughout the inventory rather than grouped together. Cronbach alpha values calculated for each of the categories were by and large satisfactory (see Table 1). The instrument also contained a demographic section with queries concerning the length of experience in learning English, evaluation of the importance of L2 grammar, self-assessment, etc.

When it comes to the mastery of TL grammar, operationalized in terms of the ability to use different aspects of the passive voice, it was tapped by means of four measures which were specifically designed for the purpose of gauging the productive and receptive dimensions of explicit and implicit knowledge of the targeted feature. The measures were the following:

1. *A measure of explicit productive knowledge*, which required participants to put 15 verbs in parentheses in a continuous text in the correct form; no strict time limit was imposed; each response received 0, 0.5 or 1 points, depending on the seriousness of the error;
2. *A measure of explicit receptive knowledge*, which comprised an untimed grammaticality judgment test, where the students were asked to indicate whether 15 sentences were correct or not and in the latter case add a justification for this judgment; each response was accorded 0, 0.5 or 1 point, depending on whether it was accurate and whether an appropriate justification was provided;
3. *A measure of implicit productive knowledge*, which took the form of a timed focused communication task (Ellis, 2003); the participants were asked to

- describe a place using 15 prompts; they had two minutes to prepare and then another eight to complete the task; their oral performance was audio-recorded; each prompt could be accorded 15 points and each sentence generated on its basis received 0, 0.5 or 1 points, depending on error gravity;
4. *A measure of implicit receptive knowledge*, which was a timed grammaticality judgment test; participants decided whether 15 sentences included in a Power-Point presentation were correct or not; in this case, the responses received 0 or 1 points, depending on whether the judgment was accurate.

Two crucial points need to be made about the four measures. First, their internal consistency reliability, determined on the basis of Cronbach alpha, varied but can be overall regarded as satisfactory, perhaps with the exception of that of implicit receptive knowledge (see Table 1). Second, yet again with the exception of the measure of implicit receptive knowledge where the scoring was quite straightforward (i.e., correct vs. incorrect), the responses of 20% of the students were coded by another researcher, with interrater reliability falling in the range of 0.81–0.94.

The data concerning beliefs and GI and the mastery of the passive were subjected to quantitative analysis. In the case of the questionnaire, this involved calculating means and standard deviations for specific items and the six main domains, with the caveat that some of the statements were key-reversed. A higher overall mean for a specific area indicated greater importance of grammar as well as a reflection of more traditional ways of teaching it (e.g., structural syllabus, deduction, controlled practice). In relation to the measures of the explicit and implicit knowledge of the targeted feature, the scores for all the answers were added in each case and then mean scores and standard deviations were computed. Pearson correlation coefficients were then tabulated among the various domains of beliefs and the different dimensions of L2 knowledge.

4.4 Findings

Although this was not the main focus of the present study, a few comments are in order about the nature of the participants' beliefs about GI and their mastery of the targeted feature (see Table 1). In the first place, it is evident that learners recognize the importance of TL grammar ($M = 4.22$) and they tend to express a preference towards more traditional ways of teaching it, as can be seen in the fact that the means for all the five remaining categories were higher than 3.5, reaching the highest value (4.15) for practicing L2 grammar structures. The extent of individual variation was quite limited, with the *SD* values only exceeding 1.00 in the case of the introduction of grammar structures. With respect to attainment, the students did best on receptive measures, irrespective of whether they tapped into explicit or implicit knowledge ($M = 10.15$ and $M = 8.72$, respectively). On the other hand and predictably to some extent, the measure of implicit productive knowledge turned out to be more challenging than the measure of explicit productive knowledge ($M = 5.95$ and M

Table 2 Correlations among different domains of beliefs and the measures of L2 knowledge ($N = 132$)

Beliefs about GI—subscales	Explicit productive	Explicit receptive	Implicit productive	Implicit receptive
Overall importance of grammar instruction	0.71*	0.63*	0.44*	0.22
Design of the syllabus	0.21	0.18	0.12	0.06
Planning grammar-oriented lessons	0.04	0.12	0.15	0.03
Introducing grammar structures	0.68*	0.36*	-0.32*	-0.14
Practicing grammar structures	0.58*	0.18	0.45*	-0.03
Correcting errors in the use of grammar structures	0.75*	0.44*	0.53*	0.34*

Note *indicates a statistically significant value at 0.05

= 7.35, respectively). By contrast, it should be noted that individual variation was more pronounced on the productive rather than the receptive measures.

The results of the correlational analysis of the different subscales of beliefs and the mean scores on the productive and receptive facets of the measures of explicit and implicit knowledge of the English passive are presented in Table 2. It immediately becomes clear that beliefs about syllabus design or lesson planning are not related to any of the dimensions of L2 knowledge of the targeted feature. On the other end of the spectrum, a number of significant correlations were identified as well. In relation to explicit productive knowledge, it correlated positively and strongly with beliefs about overall importance of GI and correction of grammar errors ($r = 0.71$ and $r = 0.75$, respectively), accounting for 50% and 56% of the variance. It was also positively, moderately related to beliefs about the introduction of grammar structures ($r = 0.68$) and the ways of practicing these structures ($r = 0.58$), with 46% and 34% of the variability being explained. Explicit receptive knowledge, in turn, correlated positively and moderately with beliefs about the importance of GI ($r = 0.63$, 60% of the variance explained), and positively but weakly with those concerning the way in which grammar should be introduced ($r = 0.36$, 13% of the variance accounted for) as well as those about correction of grammar errors ($r = 0.44$, 19% of the variability explained). When it comes to implicit knowledge, the measure of its productive dimension was positively and moderately related to beliefs about the correction of grammar errors ($r = 0.63$), accounting for 40% of the variance. Positive, weak correlations were also uncovered in the case of the importance of GI and ways of practicing specific grammar structures ($r = 0.44$ and $r = 0.45$), with 19% and 20% of the variance accounted for. Interestingly, the scores on the task tapping into this type of representation proved to be negatively and weakly correlated with

beliefs about how points of grammar are introduced ($r = -0.32$, 10% of the variance explained). Finally, performance on the measure of implicit receptive knowledge was only significantly correlated to beliefs about errors correction, with this relationship being positive and weak ($r = 0.34$, ca. 12% of the variance explained).

5 Discussion

Before addressing the research question directly, it makes sense to offer a brief interpretation of the participants' beliefs about GI identified in the present study as well as their knowledge of the English passive. With respect to beliefs, the students were convinced of the overall importance of grammar and were for the most part in favor of more traditional approaches to teaching it. In other words, most of them tended to show a predilection for a clear sequence of the grammar structures taught, traditional class formats, deduction, controlled practice and direct, immediate, teacher-provided correction. While this cannot be interpreted as meaning that they attach no significance whatsoever to using grammar in communicative interaction, the trends are quite clear-cut. On the whole, these findings mirror those of many of the studies mentioned in the literature review (e.g., Jean & Simard, 2011; Mansouri et al, 2019; Pawlak, 2011, 2013; Schulz, 2001) and they should also not come as much of a surprise in this context. After all, while grammar may not be given ample weight on the final examinations in high school, it is routinely taught in English classes which still mostly follow the structural syllabus. Moreover, once students are accepted into the BA program in English, they are required to get to know the various intricacies of this subsystem which are the focus of separate classes. The mastery of grammar is also decisive on the end-of-the-year examinations in English, not only because this subsystem is tested in its own right but also because it largely determines the outcomes of oral interviews and written assignments, as specific rubrics are assigned to it. With respect to the measures of the knowledge of the different aspects of the passive, what is surprising is the relatively low students' performance, oscillating between a little over 75% on the measure of explicit receptive knowledge and ca. 40% of the measure of implicit productive knowledge. This shows that despite their overall assumed level, there remains much to be learnt and then automatized when it comes to the knowledge of the passive. On the other hand, it could have been expected that the productive tasks would be more challenging than the receptive tasks and those tapping implicit knowledge would be more difficult than those targeting implicit knowledge. This is because, production requires simultaneous reliance on and coordination of different resources and processes (Kormos, 2006) while the performance of complex tasks, particularly in real-time processing, places heavy demands on working memory (Tagarelli et al., 2015; Wright, 2015).

Shifting the focus back to the main question investigated in the present study, that is the relationship between beliefs about different aspects of GI and the mastery of the passive, the findings are complex and not always easy to interpret. Perhaps the least surprising is the fact that participants' performance on all the measures, except

for that of implicit receptive knowledge, was positively related to beliefs about the overall importance of GI, particularly in the case of productive and receptive explicit knowledge. Given the nature of the program, it certainly makes sense that positive beliefs in this area should go hand in hand with grammar attainment, whether more broadly or more narrowly operationalized. By the same token, it is unsurprising that positive beliefs concerning the correction of grammar-related errors were related positively to all types of L2 knowledge, even if explicit, immediate teacher correction was by and large favored. This is because the provision of CF is something that English majors are accustomed to and it occurs in the course of both controlled practice in grammar classes and communicative interaction in other components of the intensive English course. Besides, in the latter case it is obviously not limited to largely implicit recasts or comments provided after interaction has been terminated (Ellis, 2017; Pawlak, 2014). Additionally, the correlations were on the whole stronger in the case of productive tasks, a finding that can be explained by the fact that CF can only be provided when learners generate some kind of output, whatever the context in which this transpires. In light of the overall nature of the participants' beliefs in these two areas, with a clear preference for deduction and controlled practice, a positive relationship with the performance on measures of explicit knowledge was to a large extent predictable. It is also unsurprising that the correlation held for both production and reception in the case of the beliefs about introducing grammar but only for production in the case of practicing grammar structures. The reason for this could be that while getting to know a specific rule involves both modalities, practice activities in the grammar course are primarily based on output production rather than just understanding form-meaning-function mappings, as postulated in VanPatten's (2003) input processing theory. In this connection, the negative, weak link between beliefs about how TL grammar should be introduced and the measure of implicit productive knowledge is understandable since any kind of communicate practice in such contexts is highly unlikely.

At the same time, some of the results of the correlational analyses are exceedingly difficult to interpret. First, beliefs about practicing grammar, which favored a more traditional approach to such practice were positively, albeit weakly, correlated with performance on the measure of implicit productive knowledge. This may suggest that the practice that actually typically occurs in grammar classes is not entirely traditional or controlled but also that the participants, possibly due to their previous experiences, find it difficult to distinguish between different types of activities, being convinced that all of them contribute to their mastery of the targeted structures. A question also arises why the beliefs concerning syllabus choice or class design failed to be related to the mastery of the English passive. One possible explanation is that, while the participants were in favor of more traditional solutions, such issues do not at the end of the day have a bearing on grammar attainment for the simple reason that it is the actual tasks that they engage in that play the decisive role. Yet another issue which deserves consideration is the fact that, on the whole, students' beliefs were more likely to correlate with measures of explicit rather than implicit knowledge. This could be ascribed to the overall more traditional orientation of the students who

apparently opted for more explicit types of instruction where they get to know the requisite rules and fall back upon them when needed.

The present study is not without its share of limitations. First, it could be argued that it might be somewhat futile to seek relationships between beliefs about different aspects of GI and the mastery of a specific grammar feature, the English passive in this case. While this seems to be a valid reservation in view of the fact how many different structures the mastery of L2 grammar encompasses, it should also be pointed out that, based on the results of the tests, this was the right structure to use, let alone the fact that its accurate, meaningful and appropriate use is contingent upon appropriate employment of a range of other structures (e.g., tenses, aspects, modals, verb forms). Second, the empirical investigation relied solely on quantitative data and the insights into the links between beliefs about GI and performance could have been considerably enriched by insights obtained through interviews or immediate reports upon the completion of the tasks intended to shed light on the mastery of the passive. Third, there can be doubts about the internal reliability consistency of some of the measures, in particular the test of implicit receptive knowledge, which might at least partly explain the failure to identify relationships with most of the dimensions of beliefs about GI investigated in the study. Fourth, it could also be argued that some of the measures of the knowledge of the passive may not have elicited the kind of employment of this structure for which they were designed. For example, the measure of implicit productive knowledge may have allowed the participants to excessively draw upon prefabricated patterns in which the passive was used (cf. Larsen-Freeman & DeCarrico, 2020) rather than relevant rules underlying such use.

6 Conclusion

Learners' beliefs clearly have the potential to affect different aspects of how the process of L2 learning unfolds and to impact the outcomes of this process, with the learning of L2 grammar certainly not being an exception. However, empirical studies seeking to link the two constructs are few and far between. The study reported in this chapter attempted to determine whether beliefs concerning different domains of GI were related to productive and receptive measures of explicit and implicit knowledge of the English passive voice. Even though the results were complex, positive, strong, moderate and weak relationships were revealed between the four measures of L2 knowledge and different categories of beliefs. Despite possible reservations about whether the command of a particular structure is reflective of overall attainment with respect to TL grammar and whether it can be expected to correlate with beliefs in this domain, this is certainly a promising line of inquiry that deserves to be further pursued. This is because the effectiveness of the instructional options that we apply in our classrooms is bound to be mitigated by what learners think about the efficacy and soundness of these options. This is certainly an area in urgent need of further research if we need to improve upon the way we teach grammar in an L2, be it English or any other additional language.

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Foreign Language Learners' Pronunciation Learning Beliefs and Strategies



Magdalena Szyszka 

Abstract This quantitative research investigates the extent to which adult L2 learners act in line with what they declare to believe in regarding pronunciation learning. In other words, this paper focuses on determining the strength of the relationship between the frequency of use of L2 pronunciation learning strategies (PLS) and the beliefs the individuals hold on selected factors affecting pronunciation acquisition, pronunciation instruction, self-efficacy, pronunciation learning goals and affective factors in pronunciation learning. A group of 116 learners of English as a foreign language who took an English phonetics course responded to the *Pronunciation Learning Strategies Inventory* (PLSI) and the *Beliefs on Pronunciation Learning Inventory* (BPLI), an instrument designed for the purposes of the current study. Correlational analysis confirmed several statistically significant positive relationships and very few negative interplays between the two focal variables. The highest values of coefficients were calculated between the belief that theoretical knowledge on pronunciation can help in pronunciation learning and the use of cognitive ($r = 0.53$) and metacognitive ($r = 0.55$) PLS, explaining 27% and 29% of the variance respectively.

Keywords Pronunciation learning strategies · Pronunciation learning beliefs · Individual learner differences · Foreign language learning

1 Introduction

The relationship between individual learner differences (ILDs) and foreign or second language (L2) learning processes has long been established (Dörnyei, 2005). L2 learners' characteristics have attracted a number of scholars in the pursuit of categorizing ILDs and grasping their impact on the ultimate L2 attainment (cf. Arabski & Wojtaszek, 2011; Dörnyei & Ryan, 2015; Ellis, 2008). However, scarce consideration has been given to researching the interplays across various ILDs. This line of enquiry may lead to mapping several significantly correlated networks of ILDs that

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allow better understanding of how these clusters of ILDs affect language learning processes, including the processes of acquiring different L2 skills and subskills, for instance, pronunciation, which is in the limelight in this paper.

The acquisition processes of L2 segmental and suprasegmental systems interact with biological, cognitive and affective learner characteristics, such as age (Johnson & Newport, 1989; Piske et al., 2001), language aptitude (cf. Celce-Murcia et al., 2010), mimicry ability (Hinton, 2013; Purcell & Suter, 1980), learning styles (Baran-Łuczak, 2012), self-regulation (Moyer, 2014, 2018), learning strategies (cf. Pawlak & Szyszka, 2018), motivation (Purcell & Suter, 1980; Smit, 2002; Smit & Dalton, 2000) and beliefs (Pawlak et al., 2015). Nonetheless, more needs to be done in order to understand complex relationships between the above-mentioned ILDs and how their mutual interplay affects pronunciation acquisition. This research aims to add more insights into recognizing the relationship between two ILDs that inform L2 pronunciation acquisition: pronunciation learning beliefs and strategies. Interestingly, although the relationship between beliefs and action, for instance the use of learning strategies, has not been denied (Barcelos & Kalaja, 2011) and there has been a number of studies exploring the link between language learning strategies and beliefs (e.g. Abedini et al., 2011; Li, 2010; Yang, 1999; Zhong, 2015), there is a paucity in research investigating this relationship in the area of pronunciation learning. In order to fill this existing gap in research, the main objective of this paper is to verify whether L2 learners' beliefs concerning pronunciation (LLB) interact with actions they choose to learn L2 pronunciation which are operationalized here as pronunciation learning strategies (PLS). A further aim is to investigate specific beliefs about pronunciation learning that correlate highly with the types of pronunciation learning strategies.

2 Language Learner Beliefs and Pronunciation Learning Strategies

Research into the beliefs that L2 learners hold about various internal and external processes concerning language learning and teaching was grounded in the 1980s by its pioneers Horwitz (1987) and Wenden (1986). Since that time both the definitions of the construct and the stance in research have evolved to a considerable extent. Bernat and Gvozdenko (2005) reviewed the early definitions, in which the scholars would perceive learners' beliefs as metacognitive knowledge, stemming from implicit learner theories that are self-constructed on the basis of learners' general conceptions of learning. These, in turn, entail L2 learners' assumptions about themselves, about factors affecting L2 acquisition, and about the nature of L2 learning and teaching. Learner beliefs were viewed as stable characteristics shaped by the past experiences and socio-cultural background (Yang, 1999). The classic instrument, the *Beliefs About Language Learning Inventory* (BALLI), designed by Horwitz (1987), scrutinized learners' beliefs from the perspective of such areas as language aptitude,

motivation and expectations, language learning and communication strategies, difficulty and nature of L2 learning. However, more recent approaches position learners' beliefs as far more multidimensional and multilayered than they have previously been understood. For instance, Kalaja et al. (2016) explain that "holding a belief (or believing) is an occasion when a learner (...) happens to reflect on aspects of language learning or teaching, relates these to experiences of his or her own or those of others, and assigns these aspects his or her own personal meanings" (p. 10). These beliefs are no longer permanent characteristics because, being shared and influenced by experiences and others in time and space, they are dynamically constructed and re-constructed, simultaneously sustaining some elements of stability (see Mercer, 2011; Barcelos & Kalaja, 2011). Moreover, being contextually situated, they depend on a specific learning situation (Barcelos, 2003; Peng, 2011; Zhong, 2014), for instance, on pronunciation learning and teaching. They are also interpreted as dynamically related to actions (Borg, 2006; Kalaja & Barcelos, 2003), so also to the use of learning strategies or pronunciation learning strategies.

Pronunciation learning strategies can be understood as "deliberate actions and thoughts that are consciously employed, often in a logical sequence, for learning and gaining greater control over the use of various pronunciation aspects" (Pawlak, 2010, p. 191). Thus, PLS are goal-oriented actions directed towards improving L2 pronunciation features. They may also perform various functions, for instance memory, cognitive, compensation, metacognitive, social and affective, depending on "the task, the physical context, and the learner's internal context" (Oxford, 2017, p. 141). More specifically, a learner who wants to improve a specific pronunciation area usually selects one or more strategies, executing a specific function, from the available array but these choices may be determined by a number of contextual factors, such as task types (Szyszka, in press), instructed or naturalistic pronunciation learning, ESL or EFL environment, to name but a few, and individual learner differences (ILDs) or "personal variables such as motivation, personality, style, age, gender, affect, beliefs, nationality, ethnicity, culture, anxiety, self-efficacy, self-esteem, proficiency level" (Griffiths, 2013, p. 10). So far, however, little is known to what extent the choice of pronunciation learning strategies is related to learners' beliefs about pronunciation learning. And yet, L2 learning processes are tailored by learners' "individual contributions (...) such as their motivation, attitudes, learning styles, and beliefs, all of which frame what and how they learn" (Barcelos, 2015, p. 304). In other words, learners' beliefs shape the psycho-cognitive processes of learning which in turn inform learners' in- and out-of-class actions (Bernat, 2008), so also language learning strategies.

Beliefs concerning pronunciation have been mostly investigated from the learners' and teachers' perspectives (for an overview see Pawlak et al., 2015). For the purposes of this paper a brief account of selected studies regarding only the former standpoint is offered. Interestingly enough, learners coming from various L1 backgrounds differed in their beliefs on the acquisition and instruction of L2 pronunciation. Cenoz and Lecumberri (1999) investigated the beliefs concerning factors that influence pronunciation acquisition. They grouped these factors into seven categories: contact with native speakers, ear-training exercises, motivation, general proficiency

in English, phonetic practice, personal abilities and knowledge of other languages. Their 53 Spanish and 33 Basque respondents believed that the interaction with a native speaker as well as ear-training technique, motivation and proficiency were the key factors affecting the acquisition of the English sound system. Interestingly, only among the Basque participants a significant negative relationship was found between the perceived difficulty of segmentals and suprasegmentals, and the belief about the importance of ear-training, and a positive correlation between the perceived importance of individual sounds and contact with native speakers.

Beliefs concerning the value of pronunciation practice in L2 pronunciation learning were also investigated by Simon and Tavernier (2011). Their study aimed, among others, to explore the beliefs concerning pronunciation learning of the tertiary level learners of English. Their 117 Dutch undergraduate students of English responded to an online questionnaire which included items on the beliefs about learning grammar, pronunciation and vocabulary. The participants held the belief that L2 pronunciation was not as important for effective communication as vocabulary. They connected the success in pronunciation learning with the effort invested in studying and practicing pronunciation. They also believed that an extended stay in a target language country was needed to achieve success in acquiring a foreign language pronunciation. In the study conducted by Pawlak et al. (2015), more attention was given to the beliefs associated with pronunciation instruction. The participants were 110 Polish learners of English pronunciation at the tertiary level who reported their beliefs regarding the value of pronunciation instruction, the choice of the syllabus, the design of pronunciation classes, introducing and practicing pronunciation features and the role of corrective feedback in pronunciation. Generally, the participants expressed their positive beliefs about the value of pronunciation instruction and appreciated their teachers' corrective feedback concerning pronunciation. However, they differed in their beliefs concerning the design of a pronunciation-centered lesson, as well as effective approaches to introducing and practicing pronunciation features.

Scarce investigations into the relationship between the beliefs on pronunciation learning and pronunciation learning strategies have provided only some preliminary evidence. For instance, Sardegna (2012) investigated the role of self-efficacy beliefs and strategy use in instructed learning of English stress and linking in the group of adult ESL learners. She also aimed to scrutinize some other factors contributing to final achievement regarding the above-mentioned pronunciation aspects. The findings of this exploratory research disclosed that pronunciation progress sustained over time resulted from a combined occurrence of such variables as engagement in pronunciation practice, use of pronunciation learning strategies, and the participants' strong belief in their self-efficacy.

Sardagna et al. (2018) hypothesized a structural model regarding self-efficacy beliefs, learners' attitudes toward pronunciation practice and pronunciation learning strategy use. The participants, 704 Korean adolescent learners of English, completed two questionnaires: the *Strategies for Pronunciation Improvement* (SPI) inventory and the *Learner Attitudes for Pronunciation* (LAP) inventory. The results confirmed that self-efficacy beliefs had a significant direct effect on pronunciation learning strategies. Interesting as they are, these findings provide a promising but preliminary

path of investigation. However, further research, exploiting not only self-efficacy but also a wide range of beliefs about pronunciation learning, entailing alternative research designs in various contexts might provide more insights into the area of pronunciation learning beliefs and strategies of individual learners.

3 The Current Study

The aim of this study was to examine whether and to what extent learning beliefs that advanced adult Polish learners of English as a foreign language hold on pronunciation learning processes are related to the declared use of pronunciation learning strategies. The following research questions were addressed:

1. Which beliefs on L2 pronunciation learning do advanced learners of English strongly agree or disagree with?
2. Do L2 learners' beliefs (LLB) on factors affecting pronunciation acquisition, pronunciation instruction, pronunciation self-efficacy, goals for pronunciation acquisition and affective factors in pronunciation acquisition interplay with the frequency of use of six pronunciation learning strategies' (PLS) categories?
3. Which specific beliefs about pronunciation learning correlate high with the use of PLS?

3.1 *Participants*

Participants included a group of 116 adult learners studying English (L2) at a BA level in one of Polish universities. Their age ranged between 17 and 24 with the mean value reaching 19.6. There were 19 males and 97 females declaring on average 12.3 years of experience in learning the L2. They expressed their satisfaction with their L1 and L2 pronunciation on a 9-point scale (from 1—*unsatisfactory* to 9—*very satisfactory*). The mean values equaled 7.7 and 6.8, respectively. Surprisingly enough, these outcomes revealed that the participants did not feel fully satisfied with their native language pronunciation, posing additional questions concerning the level of difficulty of Polish pronunciation not only for foreigners (see Tambor, 2010), which might be the subject of a separate investigation. Despite incomplete satisfaction regarding their L1 and L2 pronunciation, the individuals who participated in the current study were finishing their 30-h course of practical English phonetics. They were familiarized with the Standard British English sound system, transcription symbols and selected aspects of suprasegmental features (see Roach, 2009). However, their knowledge and instructed practice in several aspects of connected speech and intonation were still limited. Although the participants were not directly instructed in the use of pronunciation learning strategies, they were informed about their nature and provided examples of PLS prior to research.

3.2 Instruments and Procedure

The questionnaire adopted for the purposes of the current study consisted of three parts, the first of which focused on demographic queries regarding gender, age, age of onset—understood as the age of an individual when they initiated L2 learning—and the evaluation of the level of satisfaction concerning L1 and L2 pronunciation. Although the report was anonymous, the individuals were requested to provide their own codes, which they would be able to apply in further empirical investigations.

The second part of the questionnaire comprised the *Pronunciation Learning Strategies Inventory* (PLSI) (Szyszka, 2017)—the instrument collecting the data on the frequency of PLS use. This inventory consisted of 52 items belonging to PLS categories performing six functions, which reflected Oxford's (1990) memory (items 1–6), cognitive (items 7–28), compensation (items 29–35), metacognitive (items 36–43), affective (items 44–48) and social (items 49–52) strategies respectively. For instance, a strategy performing a memory function was represented by an item “I use phonetic symbols or my own code to remember how to pronounce words in English,” an item reflecting a cognitive function was worded as “I imitate native speaker's or my teacher's pronunciation,” item 29—“I avoid saying words which I have difficulties in pronouncing”—exemplified a compensation function, item 36—“I try to learn something about English phonetics”—a metacognitive function, item 44—“I have a sense of humor about my mispronunciations”—an affective function, and item 49—“I ask someone else to correct my pronunciation—a social function.” The responses were reported on a 5-point Likert scale indicating the frequency of PLS use, ranging from *almost never or never* to *almost always or always*, with the minimum of 52 and the maximum number of points reaching 260. The PLSI's internal consistency reliability calculated with Cronbach's alpha was 0.88, which may be interpreted as very high.

In the third part, the instrument called the *Beliefs on Pronunciation Learning Inventory* (BPLI) was designed for the purposes of the study. It included 20 items and measured the degree to which the participants agreed or disagreed with the beliefs on selected factors affecting pronunciation acquisition (item 53—“Children learn L2 pronunciation in an easier way than adults,” item 54—“Some people are born with special abilities to learn L2 pronunciation,” item 55—“My pronunciation is affected by factors which are independent from me,” item 56—“We can learn good pronunciation only when we live in an L2 country,” item 64—“Communication with native speakers helps in improving pronunciation”), pronunciation instruction (item 57—“L2 pronunciation should be taught in secondary schools,” item 58—“L2 pronunciation should be taught in primary schools,” item 60—“L2 pronunciation course can improve my pronunciation,” item 70—“Theoretical knowledge on pronunciation can help in pronunciation learning”), self-efficacy beliefs (item 69—“I am able to improve my pronunciation by working on it,” item 71—“I think I have a talent for pronunciation,” item 72—“Learning L2 pronunciation is difficult for me”), goals for pronunciation acquisition (item 59—“It's important for an English Philology student to have good pronunciation,” item 62—“Good pronunciation is important in

everyday communication in L2,” item 63—“It’s important for an English teacher to have good pronunciation,” item 68—“I want to speak English like a native speaker”) and affective factors in pronunciation (item 61—“I do care to have good English pronunciation,” item 65—“I am satisfied with my English pronunciation,” item 66—“My L2 pronunciation gives me the feeling of high self-confidence,” item 67—“It irritates me when my colleague speaks English with a strong Polish accent”). The design of this part of the instrument was inspired by the literature review. However, importantly enough, the list of the items included in the BPLI is limited, and the author did not intend to provide a fully-fledged scale on pronunciation learning beliefs in the current study. The individuals indicated their responses on a 5-point Likert scale, from 1 (*don’t agree at all*) to 5 (*I totally agree*). The minimum score was 20 and maximum 100. The reliability of the scale was measured with Cronbach’s alpha and reached the value of $\alpha = 0.69$.

The questionnaire was administered electronically during phonetics classes. The participants were requested to complete the Polish version of the questionnaire and encouraged to ask clarification questions. Prior to data collection, the students were instructed that the participation was voluntary, anonymous and would not affect their final course mark. The collected data were analyzed with the SPSS software. The analysis included the calculations of descriptive statistics (mean, median, min., max., and standard deviations), Pearson product moment correlations, measuring the degrees of relationship between PLS and beliefs on pronunciation learning, and R square (R^2), indicating the amount of variance in the dependent variable—the use of PLS belonging to a specific PLS category—that was explained in this study by the independent variables—the clusters of beliefs on pronunciation learning which correlated significantly with a dependent variable.

4 Results and Discussion

Descriptive statistics was used in order to address the first research question regarding the beliefs on L2 pronunciation learning that advanced learners of English strongly agree or disagree with, as can be seen from Table 1. In the study it has been assumed that the mean values equal to or above 4.5 presented high levels and those below 2.5 low levels of agreement with a given belief.

The belief concerning the importance of holding good pronunciation on part of an English teacher scored the highest mean value ($M = 4.82$) with low standard deviation ($SD = 0.47$), implying that the group was rather undivided in expressing strong agreement with this belief. The individuals also agreed that they did care about their L2 pronunciation ($M = 4.7$, $SD = 0.64$) and they also believed strongly that communication with native speakers helps in improving pronunciation ($M = 4.64$, $SD = 0.64$). Optimistically, the students of English held the belief that it is important for an English Philology student to have good pronunciation ($M = 4.54$, $SD = 0.61$) and they wanted to speak English like a native speaker ($M = 4.53$, $SD = 0.80$). Moreover, the participants generally disagreed with the statement depriving them of

Table 1 Descriptive statistics for the beliefs on pronunciation learning in the group of 116 participants

Beliefs on pronunciation learning	Mean	Median	Min	Max	SD
53—Children learn L2 pronunciation in an easier way than adults	3.99	4	1	5	1.10
54—Some people are born with special abilities to learn L2 pronunciation	3.78	4	1	5	1.14
55—My pronunciation is affected by factors which are independent from me	2.47	2	1	5	1.11
56—We can learn good pronunciation only when we live in an L2 country	2.49	2	1	5	1.15
64—Communication with native speakers helps in improving pronunciation	4.64	5	1	5	0.64
57—L2 pronunciation should be taught in secondary schools	4.32	5	1	5	1.00
58—L2 pronunciation should be taught in primary schools	4.03	4	1	5	1.13
60—L2 pronunciation course can improve my pronunciation	4.33	4	2	5	0.74
70—Theoretical knowledge on pronunciation can help in pronunciation learning	3.41	3	1	5	1.04
69—I am able to improve my pronunciation by working on it	4.50	5	2	5	0.69
71—I think I have a talent for pronunciation	3.23	3	1	5	1.11
72—Learning L2 pronunciation is difficult for me	2.84	3	1	5	1.14
59—It's important for an English Philology student to have good pronunciation	4.54	5	3	5	0.61
62—Good pronunciation is important in everyday communication in L2	4.16	4	1	5	0.84
63—It's important for an English teacher to have good pronunciation	4.82	5	3	5	0.47
68—I want to speak English like a native speaker	4.53	5	1	5	0.80
61—I do care to have good English pronunciation	4.70	5	1	5	0.64
65—I am satisfied with my English pronunciation	3.52	4	1	5	0.88
66—My L2 pronunciation gives me the feeling of high self-confidence	3.56	4	1	5	1.13
67—It irritates me when my colleague speaks English with a strong Polish accent	3.36	3	1	5	1.27

an active role in the process of pronunciation acquisition (“Pronunciation is affected by factors which are independent from me”) ($M = 2.47$, $SD = 1.11$) as well as with the necessity of acquiring the sound system in the target language country (“We can learn good pronunciation only when we live in an L2 country”) ($M = 2.49$, $SD = 1.15$).

The data collected in order to respond to the second research question—whether L2 learners' beliefs (LLB) on factors affecting pronunciation acquisition, pronunciation instruction, pronunciation self-efficacy, goals for pronunciation acquisition and affective factors in pronunciation acquisition interplay with the frequency of pronunciation learning strategies' (PLS) use—were analyzed statistically in terms of Pearson product moment correlation coefficient. Table 2 presents the outcomes generated from 116 participants.

A considerable number of 52 statistically significant correlations were detected between six PLS categories and 20 statements regarding beliefs on pronunciation learning. As many as 11 significant positive relationships were calculated between beliefs and the use of cognitive PLS, explaining 53% of the variance ($R^2 = 0.534$). The same number of significant positive correlation coefficients, explaining 33% of the variance ($R^2 = 0.334$), were found between pronunciation learning beliefs and social PLS. Half of the beliefs included in the questionnaire correlated positively with metacognitive PLS, accounting for 49% of the variance ($R^2 = 0.493$). Weak or moderate but significant positive correlation coefficients were calculated between six different beliefs and the frequency of use of compensation as well as affective PLS, explaining 28% and 18% of the variance respectively. Four beliefs correlated positively and significantly with memory PLS, accounting for 20% of the variance.

Although the majority of correlation coefficients indicated a positive relationship, there were few with a negative value. The participants who reported more frequent use of memory and compensation PLS scored statistically significantly lower on the belief concerning their level of satisfaction with L2 pronunciation. This might indicate that learners who are dissatisfied with their L2 articulation prefer to use strategies performing a memory function more often, or those who deploy these shallow processing memory strategies (cf. Oxford, 2011), perhaps not as effective as deep processing cognitive strategies, perceive their pronunciation as different from the target-like pronunciation which in turn affects their beliefs. Moreover, those who were displeased with their L2 pronunciation compensated for pronunciation inaccuracies and uncertainties more frequently. Nevertheless, the values of the correlation coefficients were weak ($r = -0.19$ and $r = -0.18$ respectively), explaining 3.7% and 3.4% of the variance, respectively. Similarly, a weak and negative relationship ($r = -0.19$) was found between social PLS and the self-efficacy belief stating that L2 pronunciation learning is difficult ($R^2 = 0.038$). Those who agreed with this belief tended to use social strategies less frequently. Naturally, a learner who believes that L2 pronunciation is problematic and perhaps does not feel confident in using it withdraws from any interaction that may expose him or her to a face-threatening situation.

Further scrutiny of the results revealed several interesting observations. There were two beliefs that had not correlated with the use of any PLS: "People are born with special abilities to learn L2 pronunciation" and "it's important for an English teacher to have good pronunciation." The responses to the former were varied within this group ($SD = 1.14$ and the mean value of 3.78), indicating the existence of strong discrepancies. In contrast to this, the latter scored very high and the group was comparatively unanimous, as discussed earlier. Those two beliefs do not directly refer

Table 2 Pearson's correlation coefficients (*r*) for pronunciation learning beliefs and six categories of pronunciation learning strategies (PLS)

		PLS					
		Memory	Cognitive	Compensation	Meta-cognitive	Affective	Social
Pronunciation acquisition	53—Children learn L2 pronunciation in an easier way than adults	0.2*	0.00	0.38*	0.01	0.14	0.08
	54—Some people are born with special abilities to learn L2 pronunciation	-0.12	-0.01	0.02	0.03	0.02	0.06
	55—My pronunciation is affected by factors which are independent from me	0.19*	0.13	0.26*	0.2*	0.10	-0.08
	56—We can learn good pronunciation only when we live in an L2 country	0.09	0.08	0.16	0.19*	0.10	0.04
	64—Communication with native speakers helps in improving pronunciation	0.00	0.13	-0.03	0.07	0.00	0.20*
	57—L2 pronunciation should be taught in secondary schools	0.09	0.22*	0.19*	0.14	0.23*	0.33*
Pronunciation instruction	58—L2 pronunciation should be taught in primary schools	0.17	0.28*	0.14	0.16	0.18*	0.31*
	60—L2 pronunciation course can improve my pronunciation	0.21*	0.36*	0.21*	0.39*	0.31*	0.31*
	70—Theoretical knowledge on pronunciation can help in pronunciation learning	0.35*	0.53*	0.08	0.55*	0.13	0.12
Self-efficacy	69—I am able to improve my pronunciation by working on it	0.1	0.34*	-0.01	0.26*	0.16	0.20*
	71—I think I have a talent for pronunciation	-0.06	0.31*	-0.13	0.17	0.19*	0.24*

(continued)

Table 2 (continued)

Beliefs on pronunciation learning		PLS						
		Memory	Cognitive	Compensation	Meta-cognitive	Affective	Social	
Pronunciation goals	72—Learning L2 pronunciation is difficult for me	0.14	0.05	0.23*	0.15	-0.05	-0.19*	
	59—It's important for an English Philology student to have good pronunciation	0.14	0.37*	0.00	0.33*	0.22*	0.36*	
	62—Good pronunciation is important in everyday communication in L2	0.02	0.16	-0.02	0.11	0.03	0.23*	
	63—It's important for an English teacher to have good pronunciation	0.05	-0.01	-0.11	-0.05	-0.02	-0.06	
	68—I want to speak English like a native speaker	0.06	0.36*	0.21*	0.31*	0.24*	0.30*	
Affective factors	61—I do care to have good English pronunciation	-0.02	0.27*	0.01	0.24*	0.15	0.33*	
	65—I am satisfied with my English pronunciation	-0.19*	0.10	-0.18*	0.00	0.11	0.16	
	66—My L2 pronunciation gives me the feeling of high self-confidence	-0.01	0.35*	-0.11	0.22*	0.16	0.31*	
	67—It irritates me when my colleague speaks English with a strong Polish accent	0.03	0.22*	-0.14	0.19*	0.04	0.12	

Note * $p < 0.05$

to actions that learners might deploy in order to accelerate pronunciation learning, and for these reasons they may not correlate with any of PLS.

There were eleven beliefs which correlated weakly or moderately with the use of three or more PLS categories. For instance, the conviction that an L2 pronunciation course can improve pronunciation related positively with all types of PLS categories. In other words, those who declared frequent application of a range of various PLS also held the belief that instructed and guided pronunciation learning promotes its acquisition. The beliefs concerning pronunciation instruction on primary and secondary school levels were associated with more frequent use of both cognitive and social strategies. Additionally, those who set the goal of native-like pronunciation (item 68) reported using cognitive, metacognitive, compensation, affective and social strategies relatively frequently. And those who agreed that theoretical knowledge of pronunciation can help in pronunciation learning declared more often application of memory, cognitive and metacognitive PLS. Interestingly, the use of cognitive PLS correlated significantly with all the beliefs regarding pronunciation instruction but none of those referring to pronunciation acquisition. Perhaps learners' assumptions about guided pronunciation learning trigger the cognitive actions they take in order to improve pronunciation, or, reversely, the strategies selected for pronunciation perfection shape learners' beliefs on how the instructed learning should look like. This interplay, however, cannot be detected when the beliefs are linked to factors entailing impuissance concerning pronunciation learning processes. In brief, if adult learners believe that children learn L2 pronunciation in an easier way than adults, they may not be willing to invest effort in the deployment of cognitive PLS. Instead, they compensate for pronunciation inaccuracies by using a number of compensation PLS, such as synonyms, circumlocutions or avoidance.

The last research question pertained to the highest values of correlation coefficients calculated between the beliefs and particular pronunciation learning strategies. For the purposes of this research, only the values indicating correlations of more than $r = 0.4$ will be analyzed (see Table 3). Interestingly, the belief that theoretical knowledge about pronunciation can help in the process of an L2 pronunciation acquisition correlated with three PLS which entail metacognitive actions: application of phonetic symbols ($r = 0.48, p < 0.05$), forming-using hypotheses about pronunciation ($r = 0.49, p < 0.05$) and reading reference materials ($r = 0.43, p < 0.05$). In other words, in the group of the participants who were enrolled in the phonetics course the belief regarding metacognitive aspects in pronunciation was strongly associated with the actions they declared to take. In this case, context may have played a role in shaping both students' convictions and behaviors. Additionally, those who believed that their good pronunciation added to their high-confidence reported noticing different accents and dialects more often than those with lower confidence in their L2 pronunciation ($r = 0.43, p < 0.05$). The link between these two variables seems to be of an indirect nature because there may be several cognitive or emotional factors shaping both the belief regarding confidence in L2 pronunciation and the use of the strategy concerning L2 accents. For example, a learner may have not received sufficient input or instruction and may feel anxious about L2 pronunciation, which can interplay

Table 3 Higher than 0.4 values of correlation coefficients calculated for pronunciation learning beliefs and strategies

Beliefs on pronunciation learning	Pronunciation learning strategies				
	I use phonetic symbols to remember how to pronounce words in English	I form and use hypotheses about pronunciation rules	I notice different English accents and dialects	I read reference materials about pronunciation rules	I teach or help someone else with their English pronunciation
It's important for an English Philology student to have good pronunciation					0.43
My L2 pronunciation gives me the feeling of high self-confidence			0.43		
Theoretical knowledge on pronunciation can help in pronunciation learning	0.48	0.49		0.43	

with both confidence and accent or dialect recognition. Finally, a moderate correlation was detected between the belief that an English philology student—all the participants belonged to this group—should have a good English pronunciation and know strategies of helping others with their pronunciation ($r = 0.43$, $p < 0.05$). Learners who believed strongly that the way students of English articulate words and utterances was important engaged in teaching English sound system to other peers more frequently than those who did not hold this belief. This relationship, however, may be affected by a number of moderating variables, such as the level of an L2 sound system proficiency or other individual learner differences.

5 Concluding Remarks

This research investigated the relationship between the beliefs that advanced adult Polish learners of English held about their L2 pronunciation learning and the actions they declared to take in order to improve English sound system acquisition. Firstly, the results showed that this group believed strongly that an English teacher should be a good pronunciation model. This stance is in line with Celce-Murcia et al. (2010)

who emphasize the role of pronunciation in the course of professional training of non-native teachers of English. Secondly, similarly to Cenoz and Lecumberri (1999), communication with native speakers was believed to advance pronunciation competence. Thirdly, most English philology students held the belief that having good pronunciation was important for them and they aimed at native-like pronunciation. Finally, in contrast to Simon and Tavernier's (2011) outcomes, the participants generally did not believe that they could acquire good pronunciation only by residing in English-speaking countries.

The analyses of the outcomes of the current study revealed a considerable number of positive relationships between beliefs and strategies regarding pronunciation learning, generally supporting the interplay between what students think and do. Cognitive, metacognitive and social pronunciation learning strategies correlated significantly with at least half of the statements representing pronunciation learning beliefs on instruction, self-efficacy, learning goals and affective factors in pronunciation. These results are in line with other research investigating general language learning beliefs and the use of language learning strategies, where moderate correlations were found (cf. Abedini et al., 2011; Li, 2010; Yang, 1999).

Despite the fact that the current study provided a lot of interesting insights into the intricate interplays between beliefs and actions in the area of pronunciation learning, its limitations need to be addressed. Firstly, the results are by no means generalizable because, being informed by other research, language learner beliefs including those regarding pronunciation are context-dependent and dynamic. Therefore, the outcomes show only one piece of a puzzle that requires broader synchronic and diachronic investigations. Secondly, more fine-tuned instruments and study design incorporating qualitative data would generate more findings, supplementing the sophisticated representation of the relationship between beliefs and actions associated with pronunciation learning. Finally, the participants were English Philology students, forming a group not fully representing an average L2 pronunciation learner. All in all, more research in different contexts, age and proficiency groups is needed in order to paint a more comprehensive picture of this interplay.

On a more practical level, the results of the current study raise the issue of the role of the teacher as the provider of not only the model pronunciation, but also instruction on how to approach pronunciation learning. If beliefs are influenced by significant others (Navarro & Thornton, 2011), so also teachers, then pronunciation instructors may shape these beliefs, for instance, by teaching pronunciation learning strategies. As a result, learners' awareness of a broad repertoire of strategies may trigger their more frequent use, which again with a down-spiraling effect can alter beliefs on pronunciation learning.

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Oral Corrective Feedback in University EFL Contexts: The Interplay Between Students' and Teacher's Beliefs



Adelina Sánchez Centeno and María Celina Barbeito

Abstract This exploratory study aimed at (a) identifying and comparing the beliefs of a class of seven EFL students and their teacher in relation to oral corrective feedback (OCF) within the context of a university English language course, (b) identifying students' emotional response to OCF, and (c) determining how students' and the teacher's beliefs about OCF interplayed in the classroom. Qualitative data were gathered by means of semi-structured interviews and videotaped classroom observations. The results showed that the students' and teacher's beliefs were largely in agreement regarding the reception and provision of OCF. Students and their teacher shared the beliefs that OCF contributed to language learning and agreed that the most effective ways of providing and receiving OCF were (a) avoiding interruptions to provide OCF while students speak, (b) encouraging students to achieve self-correction by providing output-prompting OCF strategies, and (c) providing OCF which does not generate negative emotions. As regards their emotional responses to OCF, the students showed a range of mixed emotions towards the reception of OCF. Besides, the teacher was aware of the impact OCF could have on students' emotions and on their classroom oral participation.

Keywords Oral corrective feedback · Teacher beliefs · Learner beliefs · University students' emotions

1 Introduction

The need to communicate orally in English to have access to better professional prospects is essential for Argentinean university students. Therefore, how to better develop university students' speaking skills becomes a major concern for English as

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a foreign language (EFL) teachers. One way to help students become more effective communicators is by providing corrective feedback on students' errors when delivering oral messages. It has been acknowledged that the oral corrective feedback (OCF) provided by teachers is of great importance for students' language development (Ellis, 2017; Lyster & Saito, 2010; Mori, 2011), and that students' eagerly look forward to receiving evaluative comments on their oral productions from their teachers (Kartchava, 2016; Martínez Agudo, 2012, 2013; Schulz, 2001). Furthermore, the emotional impact that the provision of OCF might cause on students' classroom participation is starting to gain attention (Ellis, 2017; Méndez López, 2016; Nassaji & Kartchava, 2017; Pekrun, 2014; Roothoof & Breeze, 2016).

An important distinction must be made between error correction¹ (EC) and OCF. Lyster (2018) explains that "teachers actually cannot correct students' errors, but they provide feedback and it is up to the students to ultimately correct their errors" (R. Lyster, personal communication, April 17, 2018). Regarding the study of beliefs about OCF in the field of FL, researchers have recently examined teachers' beliefs about the provision of OCF in FL classes (e.g., Ayedh & Khaled, 2011; Battistella & Santos Lima, 2015; Pessôa & Santos Lima, 2019), and teachers' beliefs as well as their impact on their practices (e.g., Alkhamash & Gulnaz, 2019; Bao, 2019; Dilāns, 2016; Sánchez Centeno & Ponce, 2019). In addition, investigations have also been undertaken regarding students' beliefs and/or emotional responses to OCF in FL contexts (e.g., Akiyama, 2017; Elsaghayer, 2014; Kartchava, 2016; Kartchava & Ammar, 2014; Martínez Agudo, 2013; Santos Gargallo & Chaparro, 2014; Zhang & Rahimi, 2014) and comparison between teachers' and students' beliefs about OCF have also been made (e.g., Brown, 2009; Da Silva & Figueiredo, 2006; Farahani & Salajegheh, 2015; Garcia-Ponce & Mora-Pablo, 2017). However, very few studies have explored and compared teachers' and students' beliefs and emotions about OCF in FL classrooms (Roothoof & Breeze, 2016; Santos Gargallo & Alexopoulou, 2014). This also applies to studies that have explored and compared students' and teachers' beliefs about OCF in EFL classes at the university level.

This research study sets out to explore EFL students' and their teacher's beliefs in relation to the reception and provision of OCF at an EFL language classroom at university level. It is exploratory in nature and aimed at (a) identifying and comparing the beliefs of seven students and their teacher in relation to OCF within the context of a university EFL course and (b) determining how their beliefs about OCF interplayed in the EFL university classroom. These objectives led to the following research questions:

1. What are the beliefs held by seven EFL university students about OCF and their emotional reactions to it? (RQ1)
2. What are the beliefs held by an EFL university teacher about OCF? (RQ2)
3. How do the students' and the teacher's beliefs about OCF feedback interplay in the EFL classroom? (RQ3)

¹Throughout this paper, the concept of *error correction* is also sometimes used interchangeably with *corrective feedback*; in addition, the concepts of *error* and *mistake* are also employed interchangeably.

2 Literature Review

From a contextual perspective (Barcelos, 2003), beliefs are defined as “a form of thought, constructions of reality, ways of seeing and perceiving the world and its phenomena which are co-constructed with our experiences and which result from an interactive process of interpretation and (re)signification, and of being in the world and doing things with others” (Barcelos, 2014, as cited in Kalaja et al., 2015, p. 10). In turn, emotions are defined as “the primary human motive” which functions as an “amplifier, providing the intensity, urgency, and energy to propel our behavior in everything we do” (MacIntyre, 2002, p. 61). The complex relationship between beliefs and emotions is one of interaction and reciprocity, not one of causality (Barcelos, 2015). By the same token, Barcelos (2015) asserts that “understanding the relationship between beliefs and emotions can help us understand how together these influence teachers’ and learners’ actions” (p. 304). One of the most recent definitions of corrective feedback has been provided by Nassaji and Kartchava (2017), in which it is described as the “utterances that indicate to the learner that his or her output is erroneous in some way” (p. ix). The emphasis placed on beliefs and corrective feedback in language settings has led researchers to refer to *beliefs about corrective feedback* as “attitudes, views, opinions, or stances learners and teachers hold about the utility of CF in second language (L2) learning and teaching and how it should be implemented in the classroom” (Li, 2017, p. 143). Overall, these definitions provide the theoretical framework within which this study was carried out.

Corrective feedback is considered “one of the most powerful influences on learning and achievement” (Hattie & Timperley, 2007, p. 81) and “one of the major classroom instructional responsibilities for second language teachers” (Mori, 2011, p. 451). For these reasons, the study of OCF is of great significance for the field of second and foreign language (L2) teaching and learning. In addition, many researchers have stressed the importance of studying teachers’ beliefs in relation to OCF (Lasagabaster & Sierra, 2005; Lyster & Mori, 2006; Mori, 2002; Sheen, 2004), and they have also suggested that looking for additional information can provide more depth to the understanding of OCF practices in the classroom context. As important as teachers’ beliefs about OCF are those held by students, since they are a fundamental gearing of this complex machinery that is the EFL classroom. In consequence, students’ beliefs about OCF should also be considered (Cohen & Fass, 2001; Da Silva & Figueiredo, 2006; Farahani & Salajegheh, 2015; Kartchava, 2016; Schulz, 2001) in order to determine whether students and teachers’ beliefs about OCF converge or are in conflict. Being cognizant of this, teachers would have a better chance at guiding their students to successful language learning; otherwise, mismatches could create potential conflicts in the processes of L2 teaching and learning (Brown, 2009). Even though it has been recognized that teachers and students’ beliefs have an important impact on the teaching and learning processes, research studies are still scarce. In the following, a summary of previous studies about the comparison between EFL teachers and students’ beliefs about OCF in EFL classrooms is provided.

Several studies have focused on teachers' beliefs about OCF and their relationship with classroom practices (e.g., Carazzai & Santin, 2007; Farrokhi, 2007; Junqueira & Kim, 2013; Kamiya, 2016; Mori, 2002, 2011; Sánchez Centeno & Ponce, 2019; Sepehrinia & Mehdizadeh, 2016; Sepehrinia et al., 2020), while others have concentrated on students' beliefs about OCF (e.g., Kartchava, 2016; Kartchava & Ammar, 2014; Martínez Agudo, 2012; Zhang & Rahimi, 2014). However, not many studies have compared EFL teachers and students' beliefs about the provision and reception of OCF in EFL university classes. Garcia-Ponce and Mora-Pablo (2017), Farahani and Salajegheh (2015), Da Silva and Figueiredo (2006), Cohen and Fass (2001), and Schulz (2001) are among the few researchers who have dealt with the issue.

In their exploratory study, Garcia-Ponce and Mora-Pablo (2017) investigated the interplay between teacher and peer provision of OCF and the effects of their beliefs during classroom interactions at a Mexican EFL university context. They collected data by recording classroom interactions, administering teacher interviews and implementing learner focus groups. The results confirmed that the amount of OCF was scarce or absent during classroom interactions despite the high number of errors that were identified in the interactional data. In addition, it was found that the teachers' and learners' beliefs about OCF were in conflict. In general, the three teachers and 63 learners valued the role of OCF, but it was perceived by both parties as inhibiting learners and limiting their oral production. Even though teachers and learners believed that the provision and reception of OCF was of considerable importance for L2 development, this belief was not reflected in the classroom because both groups also believed that the provision of OCF on learners' erroneous utterances may be perceived as face-threatening. These conflicting beliefs deter teachers and peer learners from providing OCF. The researchers highlight the need to reflect upon the importance of OCF in the EFL classroom to find the way to develop a positive attitude towards and reaction to initiating and receiving CF.

Farahani and Salajegheh's (2015) study aimed at investigating teachers and students' beliefs regarding the provision and reception of OCF, the frequency for offering and receiving spoken error correction, and the types of spoken errors that need to be corrected. The results showed an agreement between teachers and students on most of the questions. However, there were some discrepancies between teachers and students' beliefs specifically related to the frequency of OCF. Farahani and Salajegheh inferred that these discrepancies might be evident when different teaching methodologies are employed in the language classroom. The findings indicated that to select an appropriate OCF strategy in the correct moment, teachers should consider the social and situational context and take into account the factors that may play a role in the teaching–learning processes, such as students' level, age, needs, skills, time, materials, etc. This is because students' L2 learning can be hampered if their beliefs about the role of error correction are not heeded and their expectations cannot be met. These authors affirmed that it is the teacher's responsibility to examine his or her students' beliefs about OCF to improve language learning and to ascertain whether student preferences or pedagogical practices were to be changed to prevent conflicts. Furthermore, the researchers concluded that if students' expectations are not met, there might be a decrease in student motivation and teacher credibility since

they perceive the teacher as a specialist whose role is to teach the language and provide feedback.

Similarly, Da Silva and Figueiredo (2006) sought to identify beliefs related to oral and written error correction provided by two Brazilian public school EFL teachers and compare them to some of their students' beliefs. Amongst the conclusions reached, they reported that the teachers' prior experiences as EFL students influenced their daily classroom practices, as well as the ways they dealt with error correction. The participant teachers believed that the best way of providing OCF on their students' mistakes was direct correction, without giving any extra explanation. Such beliefs were shared by some of the students, but conflicted with some others, who were convinced, for example, that they should be given the opportunity to find and produce a correct utterance before being given the right answer. The results highlighted the importance of offering teachers opportunities to get to know, reflect on, discuss and question their beliefs in general, not only those about error correction, in order to improve the teaching and learning processes.

Cohen and Fass (2001) carried out research at a private Colombian university with the purpose of examining the beliefs and practices of 43 teachers and 63 students of EFL regarding the teaching, learning and assessment of the speaking skill. Data revealed that pronunciation and grammar were the most frequent aspects of the language that teachers considered when assessing students orally. Moreover, there was no prevalent method among teachers for giving feedback; instead, they preferred using the assessment tasks provided in the textbook. The researchers concluded that the beliefs held by teachers and students did not reflect the communicative approach to L2 teaching which the teachers reported following in their classroom practices. In consequence, they proposed that teacher training programs should incorporate tools and strategies aimed at helping teachers to enact their beliefs in the classroom and match their students' beliefs to avoid incongruity.

Schulz (2001) investigated teachers and students' beliefs about grammar instruction and error correction across US and Colombian cultures. In relation to error correction, students from both cultures expressed strong expectations concerning their teachers' provision of oral error correction and most of them expressed a preference for their teachers to correct their oral errors in class. With respect to teachers' perceptions, there was a discrepancy between the Colombian and US groups about the desirability of providing feedback on oral errors. Only half of the teachers from both cultures believed that oral errors should be corrected in class, which reveals a mismatch between students and teachers' expectations regarding OCF. Schulz concluded that it is the teachers' responsibility to tap students' beliefs and expectations to either help modify what students believe or to adjust their own instructional practices to meet the students' expectations.

The investigations carried out by Garcia-Ponce and Mora-Pablo (2017), Farahani and Salajegheh (2015), Da Silva and Figueiredo (2006), Cohen and Fass (2001), and Schulz (2001) emphasized the importance of studying teachers' and students' beliefs about OCF. They highlighted the importance of providing students with the opportunity of getting to know and reflecting upon their beliefs about OCF to improve the EFL teaching and learning processes. Most of the researchers emphasized that it

is teachers' responsibility to find a common ground between their students' beliefs and actual classroom practices in order to meet learners' expectations. The results provided by these studies call for further research on these critical issues. Therefore, the present study attempts to gain insights into the interplay between students' and a teacher's beliefs about OCF in uncontrolled EFL classroom interactions to enhance the opportunities to provide students with better learning opportunities.

3 Method

This study falls under the qualitative paradigm. Data come from an MA titled *A teacher and her students' beliefs about oral corrective feedback in the EFL classroom at university level: A case study* (Sánchez Centeno, 2016), which was written by the first and supervised by the second author of this paper. It documented OCF beliefs of a teacher and seven students collected by means of a semi-structured interview, stimulated recall and video-recordings of classes (see Sánchez Centeno & Ponce, 2019). In this article, data from the semi-structured student interview, the semi-structured teacher interview and four videotaped classroom observations are presented.

3.1 Context of the Study and Participants

The present study took place at the National University of Río Cuarto (hereafter UNRC). This is a medium-sized public university located in the province of Córdoba, in the central part of Argentina. Among the academic programs offered by the Language Department at the Faculty of Humanities we find *Tecnicatura en Lenguas Inglés – Francés*,² a three-year program which aims at preparing professionals competent in communicating in English and French as foreign languages. During the course of studies, students attend Spanish, French and English language courses, among others. As regards the English language, they attend three successive courses (English Language I, II and III) which take students from a pre-intermediate level to an upper-intermediate level (or from B1 to B2, according to the Council of Europe, 2018).

This study was conducted in English Language III course. This is a 26 week-long course taught eight hours per week during the whole academic year in the third and last year of the program. The course syllabus informs that its general aim is to form competent students who can effectively communicate in English to understand and produce oral and written texts in the following genres: expositive, descriptive, narrative and argumentative. In addition, students are made conscious of the degree

²For more information about this program, visit the website: https://www.unrc.edu.ar/unrc/carreras/hum_tecnicatura_lenguas.php.

of formality and principles of politeness expressed in the English language. The teaching approach adopted in this course is a combination of communicative and intercultural approaches in which students become aware of their own culture to be able to compare it to the target culture under study (Byram et al., 2002; Puren, 2004).

The participants of this study were an EFL teacher in charge of English III and seven students attending the course during the year 2015. Patton (2015) defines this sampling strategy as a complete *target population* since it “involves interviewing and/or observing everyone within a group of interest” (p. 639). Raquel (pseudonym), the 38-year-old EFL teacher was an experienced full-time teacher with more than 15 years teaching EFL. The seven participating students volunteered to take part in this study. They were all female and their ages ranged from 21 to 60 years old. It is important to mention that the teacher and her students shared Spanish as their mother tongue.

3.2 *Instrument and Data Collection Procedure*

Qualitative case study methodology was adopted to inquire into the stories of individuals to capture and understand their perspectives (Patton, 2015). Two types of data were collected: perceptual data (i.e., a semi-structured student and teacher interviews) and interactional data (i.e., videotaped classroom interactions). The semi-structured interviews were designed for the purpose of gathering demographic information and exploring student and teacher beliefs about OCF, and consisted of four demographic questions and ten guiding questions (see Appendix A and B). The teacher interview was designed and administered in English, whereas the student interview was conducted in Spanish so that participants could express themselves fluently and confidently. All the responses were transcribed verbatim and in their original language and translated into English by the authors of this article. The videotaped classroom observations captured teacher-student interactions, the types of OCF strategies employed by the teacher, the teacher’s and students’ body language, the tone of their voices, teacher-student rapport and classroom environment, with the ultimate aim of determining whether the teacher’s and her students’ beliefs and emotions were reflected in the language classroom.

A pilot study was conducted to ensure the clarity and effectiveness of the questions and statements in the teacher and student semi-structured interview before the final implementation. This further enhanced the validity of this study. It is also important to highlight that the purpose of this study was not completely disclosed to the participants until the data collection process had finished to avoid any possible behavioral changes in Raquel’s teaching practices and the students’ spontaneous oral participation in the observed classes. Instead, they were informed that the research goal was to examine general teaching techniques, as was previously done by Junqueira and Kim (2013) and Mori (2002, 2011). For this reason, the data collection phase started with the videotaped classroom observations. Four lessons were observed and videotaped during the months of May and June 2015, constituting a total of approximately 12 h.

After the last videotaped session took place, the semi-structured student interview (SSSI) and the semi-structured teacher interview (SSTI) were administered. Data collection took place during scheduled class time in June 2015. The interviews were administered individually and audio recorded.

3.3 Data Analysis Procedures

Once the participants' answers to the semi-structured interviews were fully transcribed, the qualitative data obtained was analyzed using content analysis. The purpose of content analysis was to identify the students' and teacher's beliefs and emotions towards the provision and reception of OCF. The themes identified will be highlighted in bold and italics so that it is easier for the reader to follow the data analysis.

The data obtained from the students' answers was organized in order to carry out a cross-case analysis. Whereas the teacher's answers were arranged by specific cases for in-depth study and comparison, which is defined as case analysis (Patton, 2015). In relation to the data obtained from the videotaped classroom observations, interaction analysis (McKay, 2006) was carried out (see Sánchez Centeno & Ponce, 2019, for the results of the interaction analysis). During the process of data analysis, we constantly kept an open mind to be alert to the emergence of new categories. This enabled us to gain a holistic interpretation of the data and a comprehensive understanding of the influences of the context on the teacher and students' beliefs about OCF.

4 Results and Discussion

4.1 What Are the Beliefs Held by EFL University Students About OCF and Their Emotional Reactions to It? (RQ1)

The answer to the first research question was drawn from the student's semi-structured interview data. The results were arranged according to the following themes: 1) students' beliefs about the role of errors and OCF in language learning, and 2) students' beliefs about the most effective OCF strategy.

As regards students' beliefs about the role of errors and OCF, the following examples illustrate the students' beliefs in relation to making mistakes and receiving feedback:

Excerpt 1

I have always liked being corrected because in that way I try to find a better way of expressing my ideas and I learn at the same time. [Siempre me gustó que me corrijan porque de esa

forma uno intenta buscar otra forma para decirlo y una mejor forma y va aprendiendo]. (Lucía, SSSI)

Excerpt 2

We learn from mistakes... one should always find a way to improve. If it is wrong, we are corrected so that we can get our meanings through. [De los errores viene el aprendizaje, siempre hay que buscar una manera de mejorar. Si está mal, nos corrigen para que lo digamos bien]. (Ana, SSSI)

Excerpt 3

If you do not make mistakes, you won't learn [Si uno no se equivoca no aprende]. (Valentina, SSSI)

When analyzing these data, we observed that the students hold the following beliefs: a) making mistakes was inherent in the language learning process, and b) receiving corrective feedback helps students progress: “We learn from mistakes (...) If it is wrong, we are corrected so that we can get our meanings through” (Excerpt 2); “If you do not make mistakes, you won’t learn” (Excerpt 3). These interrelated beliefs are two inseparable aspects of learning. Errors are inevitable and the presence of a more knowledgeable other, in this case the teacher, is necessary to provide OCF. The students’ voices led us to consider that their beliefs may prompt them to assume a positive attitude towards their mistakes and the provision of OCF. This might put them in an advantageous position where they learn from their mistakes rather than just avoiding them and feeling frustrated (cf. Ayedh & Khaled, 2011; Martínez Agudo, 2012).

When the students were asked about what they considered the most effective OCF strategy, the majority were puzzled as they were not aware of the different ways that teachers could use to provide OCF. Therefore, they were guided with prompts like: “Think about what your teacher does or says when you make a mistake.” They made the following comments:

Excerpt 4

I prefer that the teacher makes me think about my mistakes so I can discover them and self-correct. [Que te hagan pensar, entonces uno mismo, a partir de los conocimientos que ya viene teniendo puede realizar su propia corrección]. (Lucía, SSSI)

Excerpt 5

I believe it is great to be given the chance to think about our mistakes, because if the teacher gives you the right answer straight away, we might make the same mistake over and over again. [Creo que está bueno que nos hagan pensar para recordar ¿no? Porque si ahí nomás la profé nos da la respuesta, a lo mejor otra vez volvemos a tener el mismo error cuando pasa el tiempo]. (Carolina, SSSI)

Excerpt 6

I like when the teacher provides OCF on common mistakes produced by many students in the class. I also like when she uses the blackboard to explain. I like when the teacher provides the phonemic transcription instead of the repetition of the correct way of pronouncing a given word. [Me gusta cuando se corrige al frente de todos y me gusta mucho que usen el pizarrón, no que sea tan al aire. Me gusta que escriba la fonética de una palabra que no entendí o no sé cómo se pronuncia, más que me la repitan]. (Ana, SSSI)

As can be seen from the excerpts, the students believed that the teacher should not provide the right answer immediately after the mistake is made but make them think about it: “I believe it is great to be given the chance to think about our mistakes, because if the teacher gives you the right answer straight away, we might make the same mistake over and over again” (Excerpt 5). Besides, they believe that the teacher should provide longer and more detailed explanations. For example, Ana believes that the teacher should take her time to gather all the common mistakes produced by the class and then write them on the blackboard so that students will be able to see the mistakes and work on them. Ana emphasizes that she likes when the teacher “uses the blackboard to explain.” On the basis of the students’ comments, it could be inferred that they believed that output-prompting types of OCF (Ellis, 2009), such as clarification requests, elicitations, repetitions, metalinguistic explanations and paralinguistic signals, were the most effective. This can be seen in their eagerness to be given the opportunity to self-correct and produce the right form, instead of being given the answer directly without any explanation. It is important to highlight that none of the students could verbalize any of the OCF strategies.

Continuing with the students’ beliefs about the most effective way in which OCF should be handled in the EFL classroom, the participants agreed that OCF should be provided after the student has delivered the message, thus avoiding interruptions. Their comments were as follows:

Excerpt 7

*I prefer **the teacher to let me finish**, even if what I’m saying is wrong. Otherwise, I forget what I was saying or I get **confused**. [Prefiero terminar lo que estoy diciendo aunque lo diga mal, porque si no me voy del hilo y me olvido lo que voy a decir o me empiezo a confundir]. (Vanina, SSSI)*

Excerpt 8

*When I am speaking, I **wouldn’t like to be interrupted** every time I make a mistake because it is **tedious**, I would like to finish my idea. [Cuando estoy hablando, no me gustaría que me interrumpían cada vez que digo una palabra porque es un poquito tedioso, pero si es posible al finalizar oraciones]. (Lucía, SSSI)*

Excerpt 9

*When we are reading a text aloud and the **teacher keeps interrupting to provide feedback**, sometimes it’s a bit **frustrating**. [Cuando estamos leyendo un texto y ahí no más nos van corrigiendo sobre la marcha a veces esto es medio frustrante]. (Carolina, SSSI)*

As the comments show, the students believe that they should not be interrupted to receive OCF so that they will not lose their train of thought and they can express their whole idea. It seems that students interpret the teacher’s interruption as not being favorable for their L2 learning. This finding goes in line with Tasdemir and Yalçın Arslan (2018), who concluded that “the majority of the learners did not want their teachers to interrupt them while speaking, and they expected to have a chance to finish their oral utterances” (p. 12).

As can be seen, this group of students believed that errors are inherent in learning, that OCF helps students to progress, that the teacher should give students the opportunity to self-correct, that they should not be interrupted with OCF while speaking,

and that teachers should provide detailed explanations about their mistakes. The beliefs about the most effective types of OCF held by this group of students might also put them in an advantageous position where they can learn the target language through discovery and self-awareness. These findings are consistent with the results reported by Martínez Agudo (2012), Yoshida (2008) and Lasagabaster and Sierra (2005). Martínez Agudo (2012) found that most of the EFL students interviewed believed that they should be corrected after delivering their message. In addition, Yoshida (2008) stated that students considered self-correction to be more effective for learning than the provision of correct forms, and Lasagabaster and Sierra (2005) found that students preferred the teacher to take more time, provide longer explanations and use different types of OCF, so they could get more time for self-correction and engage in more effective learning.

An emergent theme were the emotions reported by the students when receiving OCF, some reporting favorable and some reporting unfavorable emotional states. This can be seen in the extracts from excerpts previously mentioned. In Excerpt 7, Vanina mentioned: "I prefer the teacher to let me finish, even if what I'm saying is wrong. Otherwise, I forget what I was saying or I get **confused**." In Excerpt Lucía commented: "When I am speaking, I wouldn't like to be interrupted every time I make a mistake because it is **tedious**." Carolina in turn said that when "the teacher keeps interrupting to provide feedback, sometimes it's a bit **frustrating**." Other comments were as follows:

Excerpt 10

***I don't feel bad**, it is better to get CF so that I can learn from it; otherwise, I will continue repeating the same mistake. It is better for me to get CF. [No me siento mal, es más, mejor que me lo marque así yo lo aprendo, si no lo voy a seguir repitiendo mal y voy a seguir con el mismo error, por eso, es mejor que me lo corrija]. (Micaela, SSSI)*

Excerpt 11

***I don't feel bad at all. I don't mind being corrected**, because I am here to learn. They are supposed to do so to help me improve my English. **If I were upset about receiving CF, I would have to stop attending classes**. [No, no me siento mal, digamos. O sea, no me molesta que me corrijan porque yo vengo a aprender, o sea que, se supone que están para eso, para ayudarme a progresar a corregirme. Si me molestara que me corrigieran... bueno, tendría que ahí nomás dejar de venir]. (Mariana, SSSI)*

Excerpt 12

***I don't feel bad**, I like improving. Sometimes **I feel a bit frustrated** when I forget and make a mistake that it has been marked before. I have one word that I keep saying it wrongly all the time. [No me siento mal, digamos, o sea. Me gusta siempre avanzar, me veo tal vez un poco frustrada cuando me olvido, porque muchas veces tengo una palabra que la digo mil veces y las mil veces la digo mal]. (Ana, SSSI)*

As we can see from the excerpts, some students experienced unfavorable emotions when receiving OCF, such as confusion, frustration and tediousness (Excerpts 7, 8, and 9). These emotions derived from the way the teacher provided OCF by, for example, interrupting students. In other cases, the emotional response was originated by the students' realization that the form in focus had not been incorporated yet (Excerpt 12). Other students consider feedback an integral part of L2 learning and

therefore experience joy and comfort in response to the ways in which the teacher provides feedback. For example, Micaela, Mariana and Ana did not report negative feelings associated with the provision of OCF (Excerpts 10, 11 and 12).

Previous studies have shown that students' beliefs and emotions intertwine in a non-linear way (Barcelos, 2015). Many authors have explained that emotions caused by OCF are dependent on how OCF is provided in the classroom (Ellis, 2017; Smith, 2010; Yoshida, 2010). Students sometimes find the criticism associated with OCF difficult to handle, which makes them resist or reject it (Ayedh & Khaled, 2011). In this study, students' unfavorable emotions were related not so much to this aspect, but rather to the teacher's interruptions when offering OCF. According to Mendez López (2016), OCF is one of the most influential causes of emotional experience in the language classroom. In this same vein, Ellis (2017) claims that corrective feedback "needs to be undertaken with care and tact to avoid negative affective response in students'" (p. 13). Therefore, being able to let our students express their beliefs and emotions about OCF can help us adjust our OCF practices and foster students' positive attitude towards them, which can help them capitalize on such pedagogic intervention.

4.2 What Are the Beliefs Held by an EFL University Teacher About OCF? (RQ2)

The answer to the second research question was based on the teacher's semi-structured interview data. The results from the teacher's interview were arranged in accordance with the following themes: (a) beliefs about the role Raquel attributes to the provision of OCF, (b) beliefs about the most effective ways of providing OCF, and (c) beliefs about the emotions OCF arouses in her students.

As regards the role Raquel assigned to the provision of OCF in L2 learning, she believed that providing OCF on students' mistakes was an important stage in this process. She expressed this idea as follows:

Excerpt 13

I think that if you don't correct, you might have productions that do not improve in a way, because you need to be corrected, I think that correction is part of learning. (Raquel, SSTI)

Raquel believed that not providing feedback implied that there would be less learning on the students' part since, as she comments, "correction is part of learning." This finding mirrors the ones reported by Garcia-Ponce and Mora-Pablo (2017), who found that the three participating EFL teachers "embrace the value of CF as a strategy for teaching and learning the target language" (p. 139).

Regarding Raquel's beliefs in relation to the most effective way of providing OCF on her students' L2 production, she honestly expressed not knowing which the most effective way could be. In fact, she admitted to never having considered this issue before and stated that she provided OCF in an intuitive way. She offered the following comment:

Excerpt 14

*I never thought about which would be the best way, **it is, like intuitively**. (Raquel, SSTI)*

The fact that Raquel was initially unable to articulate her beliefs about the most effective way of providing OCF might entail that she was unaware of them. This finding reinforces what Basturkmen (2012) claims, namely, that OCF can be characterized as an unplanned aspect of teaching, for which teachers tend to rely on automatic and generally unexamined behaviors. However, through the analysis of her answers to several other questions asked during the SSTI, it was possible to identify her beliefs. For example, Raquel believed that she should let students speak without interruption because, in her view, such practices could be counterproductive and discouraging for students. Despite this belief, she admitted that on some occasions she interrupted students to provide OCF while they were producing their oral messages:

Excerpt 15

*I know that sometimes **I interrupt, I try not to, but I interrupt**, as I've told you, I think that it can be [...] **not productive**. (Raquel, SSTI)*

As Raquel continued reflecting on the most effective way of providing OCF, she stated that she should guide her students in discovering their mistakes. She expressed this belief as follows:

Excerpt 16

***They should correct themselves and [I should] guide them** to achieve that aim of correcting themselves. (Raquel, SSTI)*

In the same vein, Raquel also believed that she should give students the opportunity to self-correct. She pointed out that, in order to learn from mistakes, students are supposed to discover the error on their own, with the teacher's guidance. She expressed this belief in the following way:

Excerpt 17

*I think that my underlying belief might be that **I want them to realize by themselves**. **I think that in order to learn from an error**, I really think that you have to discover the error yourself. (Raquel, SSTI)*

However, she believed that if students cannot identify their mistakes by themselves, the right answer should eventually be provided. She commented:

Excerpt 18

***I try they discover [the mistakes] by themselves**, the first try is to give them the opportunity to discover or to change something, if they can't, **the last resource would be to tell them**. (SSTI)*

The results obtained through Raquel's verbalizations of her beliefs about the most effective way of providing OCF corroborated the findings of other studies involving EFL/ESL teachers. For example, Basturkmen et al. (2004) found that the three participants in their research believed that students' self-correction should be

promoted. In addition, Garcia-Ponce and Irasema-Mora (2017) also discovered that teachers perceived self-correction to be beneficial for their students' L2 learning. Furthermore, Tasdemir and Yalçın Arslan (2018) concluded that EFL university teachers should guide and assist students to improve their self-correction skills by providing students with opportunities to correct their own errors.

Regarding the beliefs about the emotional response OCF might produce in her students, Raquel took a strong stand that excessive provision of OCF could affect students' participation in speaking activities because of the unpleasant emotions that could be generated. Two of her comments were as follows:

Excerpt 19

I strongly believe it (correction) may have an impact on (students') feelings[...] I think that if I corrected too much, if I was very demanding on their productions, they would quit. (Raquel, SSTI)

Excerpt 20

I think that if I overcorrect, it might have a negative effect. If you correct too much I think that they won't speak. It can affect their confidence, especially when they are struggling to speak. Speaking relies a lot on confidence, on being confident to speak (Raquel, SSTI)

Such beliefs coincide with those identified by Martínez Agudo (2012) and Elsaghayer (2014) who acknowledge that teachers should know when and how to correct errors and, especially, should consider students' sensitivity and personality. Similar results were reported by Méndez et al. (2010), Mori (2011), and Yoshida (2010) who concluded that the participating teachers' main concern are the emotional reactions of students in response to OCF.

On the whole, Raquel believed that the most effective way of providing OCF was to give the students the opportunity to self-correct (i.e., output-prompting types of OCF strategies), and let them speak without interruptions. In addition, Raquel also believed that, in order for students to learn from their mistakes, teachers should guide them to discover their own mistakes because, in this way, students would advance in their learning. Furthermore, she believed that students' emotions could be affected negatively if OCF involved extensive interruptions. Given the nature of the speaking skill, she insisted on not being too demanding in her corrections and not correcting in excess because this might provoke students' negative emotions. Raquel said: "Speaking relies a lot on **confidence**, on being confident to speak."

4.3 How Do Students' and teacher's Beliefs About OCF Interplay in the EFL Classroom? (RQ3)

Throughout the four videotaped observations a holistic picture of the nature of this specific class emerged. They revealed that the classroom atmosphere was always warm, supportive and tension-free, and that the lessons involved varied activities involving the four skills in different interaction types. Raquel's interaction with the students was cordial and affable. Her tone of voice was modulated and kept the

students attentive during the observed lessons. As for the students, it was possible to detect from the beginning who had a leading and self-confident personality, or who was shy and had to be called on to participate in the speaking activities. Nonetheless, they were polite and able to listen to each other's interventions attentively. The teacher-student rapport was fluid and respectful and all the students were given the opportunity to participate in the class activities. Raquel had adequate classroom management skills and together with the students created a great working climate. As Sánchez Centeno and Ponce (2019) asserted, "this type of classroom context, in which students feel more comfortable to speak, would allow EFL teachers to listen to students' oral productions and give feedback on their errors" (p. 35). This contextual information provides us with insights in relation to the relevance that building rapport and creating a comfortable classroom atmosphere has in creating favorable conditions for the provision and acceptance of OCF.

The group of students shared the belief that making mistakes was part of their language learning process and attributed great importance to the provision of OCF. For example, Ana commented in Excerpt 2: "We **learn from mistakes**(...) one should always find a way to improve. If it is wrong, **we are corrected** so that we can **get our meanings through**." Raquel also believed that the provision of OCF affected learning. In Excerpt 13 she pointed out: "I think that **if you don't correct you might have productions that do not improve** in a way, because **you need to be corrected**, I think that **correction is part of learning**." The comparison between student and teacher beliefs shows that both parties had a positive stance towards the role of OCF in L2 learning, both considering OCF as a kind of "booster." Given the nature of the speaking skill, a friendly atmosphere may help amplify students' confidence and generate pleasant emotions. Furthermore, if students feel safe, they are encouraged to produce language, negotiate meanings and, if they make mistakes, feel confident enough to try to self-repair their erroneous utterances with the help of the teacher's OCF. The convergence of beliefs between students and the teacher in this class might lead to a process of empowerment: for students to face the reception of OCF with a confident attitude, and for the teacher to be assertive in her OCF provision.

In relation to the most effective OCF strategies, the students' and teacher's beliefs converged entirely. All the students believed that the teacher should give them the opportunity to notice their errors and to self-correct. In other words, students expected to be given time to discover and reflect upon their mistakes rather than to be provided with the right answer. Lucía commented in Excerpt 4: "I prefer **the teacher makes me think about my mistakes** so I can **discover them and self-correct**." Coincidentally, the teacher believed that she should guide students to discover their own mistakes. As Raquel put it in excerpt 16, "**they should correct themselves** and **[I should] guide them** to achieve that aim of correcting themselves."

Along the same lines, Li (2014) explained that encouraging self-correction is more motivating and makes classes more dynamic and interactive. However, contrasting findings can also be found in the literature. For example, Da Silva and Figueiredo (2006) discovered that the teachers in their study believed that the best way of providing OCF to their students was a direct one, without giving any extra explanation. The teachers believed that their students should repeat the right model to

promote effective language learning. Some of the students shared these beliefs, but others indicated that it was better to be given the opportunity to find the error and produce a correct utterance on their own.

Another shared belief about the most effective OCF strategies was that students should not be interrupted while speaking, because they might lose their train of thought. Most students believed that if they were interrupted, it may be difficult for them to recover what they wanted to express. Therefore, they preferred to be allowed to finish the idea they were conveying and only then receive OCF. Carolina expressed this belief in Excerpt 9: “When we are reading a text aloud and the **teacher keeps interrupting to provide feedback**, sometimes it’s a bit **frustrating**.” Moreover, the students highlighted unpleasant emotions aroused when they were interrupted by the teacher, such as frustration, tediousness and confusion (Excerpts 7, 8, 9). These results are in line with Martínez Agudo’s (2012) findings, which pointed out that most of the interviewed students believed that they should be corrected after delivering their message. More importantly, he concluded that students’ attitudes towards OCF should not be ignored, since it could have a potentially harmful effect on their emotional states.

As for the teacher, Raquel was aware that she interrupted her students to provide OCF, but she admitted she was working on this, since she believed it affected the students’ flow of ideas and generated unpleasant emotions. She also believed that teachers should be sensitive when providing OCF in order not to threaten her students’ face and consequently ignite unpleasant emotions. In addition, Raquel believed that in order to develop the speaking ability, students should have high self-confidence. In consequence, she was aware that an excessive amount of OCF might lower this confidence and at the same time cause uneasiness and even students’ reluctance to participate in speaking activities. Smith (2010) claims that a teacher who is cognizant of the emotional impact that the provision of OCF can have on students’ ability to process and concentrate on language learning will be able to provide appropriate OCF types so that students can benefit from them and increase their self-confidence.

The fact that Raquel’s and her students’ belief clusters regarding the most effective ways of providing OCF were congruent ensured a safe and secure classroom atmosphere conducive to language learning. Such a positive interplay of beliefs about and emotions towards OCF as well as the tension-free classroom atmosphere observed could lead to effective teaching and learning processes and increase students’ motivation and teacher credibility. What is more, this can also lead to better outcomes as regards students’ development of L2 speaking skills.

5 Conclusions and Implications

The present study aimed at exploring the interplay between the beliefs held by a small group of students and their EFL teacher at a university level. The analysis of the data revealed that the students’ and the teacher’s beliefs about OCF interrelated in a congruent way. The students and the teacher believed that making mistakes was

an inherent part of the L2 process but also that the most effective OCF strategies were the ones that allowed learners to notice their errors and to self-correct, that is, output-prompting strategies. The teacher believed that the provision of OCF should not trigger uncomfortable emotions and generate a tense classroom atmosphere. This belief matched the students' emotional responses and their preferred OCF strategies. For this reason, OCF strategies should be avoided which involve constant interruptions or might lower students' self-confidence. Similarly, Ellis (2017) suggests that teachers should refrain from using OCF strategies which are a source of anxiety or result in the arousal of unpleasant emotions, such as embarrassment, frustration or anxiety, especially in class-fronted situations (Kamiya, 2016; Martínez Agudo, 2012; Nilsson, 2019; Yoshida, 2010).

The study has clear implications for EFL teachers at all levels as they need to consider the beliefs and emotions about OCF that are at play in the EFL classroom. In this respect, Kartchava (2016) asserts that the advantage of being aware of students' beliefs about OCF is that teachers might better understand how to handle OCF effectively. Besides, when students understand their own beliefs about OCF, it "will help them recognize how CF may benefit them and what they can do to learn from the supplied feedback" (p. 20). Besides, Zhang and Rahimi (2014) point out that it is imperative to raise students' awareness of the purpose, significance and types of correction to help them form a positive attitude towards OCF, and avoid situations in which they find it threatening or anxiety-inducing. Ellis (2017) adds that OCF needs to be undertaken with care and tact to avoid negative affective response in students. A variety of corrective techniques are available for conducting CF and teachers should make use of them. Being able to identify students' and teachers' beliefs and emotions concerning OCF, as well as reaching an agreement on how to deal with oral mistakes in the EFL classroom is the teachers' responsibility.³ This is a step forward towards better understanding how beliefs about OCF practices contribute to L2 learning.

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Appendix A: Semi-structured Student Interview Regarding OCF

1. Información demográfica

- a. Edad:
- b. ¿Estudiaste Inglés antes de ingresar a la Tecnicatura en Leguas? ¿Dónde?
¿Por cuánto tiempo?

³For a classroom proposal on how to deal with OCF in the EFL classroom, see Sánchez Centeno, A. (2021) <http://www.unirioeditora.com.ar/producto/beliefs-in-foreign-language-learning-listening-to-teachers-and-students-voices/>

- c. ¿Cuántos años hace que estás estudiando la Tecnicatura en Lenguas?
 - d. ¿Por qué estás estudiando esta carrera?
2. **Creencias sobre las Acciones Correctoras a la Producción Oral ACPO:** Me gustaría saber qué piensan sobre la forma en que te corrigen los errores que cometes cuando hablas en inglés.
1. ¿Qué tipos de errores te corrigen habitualmente en la clase de inglés?
 2. ¿Crees que hay otros errores que te deberían corregir además de los que acabas de mencionar? ¿Por qué?
 3. ¿Cómo preferís que te corrijan los errores cuando estás hablando en inglés? ¿Por qué?
 4. ¿Crees que es mejor que te corrija la profesora o un compañero? ¿Por qué?
 5. ¿Cómo te sentís cuando la Profesora te marca un error cuando vos estás hablando en inglés? ¿Por qué?
 6. ¿Crees que hay alguna relación entre cometer errores y aprender inglés? ¿Por qué crees esto?
 7. ¿Cuál crees que es la mejor forma de recibir correcciones cuando estás hablando inglés?
 8. Has notado que en algunas ocasiones la Profesora no corrige algunos errores, ya sea a vos o a tus compañeros ¿Por qué crees que ella hace esto?
 9. ¿Crees que se debería negociar en el aula la forma en la que cada alumno quiere ser corregido? ¿Por qué?
 10. ¿Algo que quieras agregar?

Appendix B: Semi-structured Teacher Interview Regarding OCF

1. **Teacher's background**
 - a. Age:
 - b. How many years of teaching experience do you have?
 - c. What's your teaching and academic background?
 - d. Why did you become an ESL teacher?
2. **Beliefs about OCF:** I would like to talk about your beliefs and classroom actions about the oral corrective feedback that you provide (or you do not provide) to your students in your lessons/ classes.

We operationalized OCF as the teacher's reaction to a student's erroneous oral production. They can consist of: (1) an indication that an error has been committed, (2) provision of the correct target language form, (3) metalinguistic information about the nature of the error, or any combination of these (Ellis et al. 2006).

1. Do you provide OCF to your students? Why?
 2. How do you usually provide OCF to your students? What does it depend on?
 3. Do you believe that OCF enhances or hinders student's language learning process? Why?
 4. What aspects do you believe that you should focus on when providing OCF to your students? Why do you think so?
 5. In your opinion, which is the most effective way of providing OCF to your students? Why do you believe so?
 6. Are you satisfied with the way you handle OCF in your classes?
3. **Beliefs about students' preferences on the provision of OCF**
1. Do you believe that your students want to receive OCF? Why do you believe that?
 2. Do you believe that your students prefer to receive OCF in a particular way? (Provide the examples if necessary: Every time they make a mistake? Once they have finished expressing their idea? Or they want to be interrupted?) Why do you think so?
 3. Do you believe that the way you provide OCF affects or has an impact on students' feelings? Why do you believe so?
 4. Do you talk to them about how they prefer to receive OCF? Why?

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Teacher Learning in Action: Reflection on Responses to an Evidence-Based Task on Teaching English to Young Learners



Melanie Ellis

Abstract This paper presents a response to the call for teacher educators to make their pedagogy explicit and offer their practice up for scrutiny (Johnson & Golombek, 2018). The teacher-educator author (TEA) conducted an action research study of the processes taking place during a postgraduate language teacher education course. A guided observation task was designed with a focus on early reading in English as a foreign language in primary school, which required teacher-learners to produce ethnographic notes that they subsequently wrote up as lesson descriptions. They then presented these in a seminar class which was recorded, transcribed and analyzed for critical incidents (Tripp, 1993) by the TEA. A rigorous analysis of critical moments from the class is conducted, with the aim of evaluating the role played by the observation sheet. In addition, extracts from lesson descriptions and reflective questions are studied for corroboration. The observation task, in combination with the wider series of activities, is found to offer affordances for teacher learning.

Keywords Language teacher educator · Pedagogical process · Primary L2 reading · Reflection · Observation · Dynamic system

1 Introduction

This paper considers whether, through the choice and design of a specific task and associated activities, it is possible to create opportunities for the teacher-learner (TL) participants on a postgraduate language teacher education program, to link theory with practice. The specific area of interest is the teaching/learning of early reading in English as a foreign language in instructed settings, with a focus on fourth-grade primary school learners, aged 9–10. The research described takes the form of a critical self-study in an action research framework.

The chapter first explains the motivation for the study and then presents the theoretical background, giving a brief overview of the development of early skills in

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reading, which was the focus of the observation task under scrutiny, relationships between reading in the first and second language (L1 and L2 respectively) in the case of young learners, and the role of the teacher in supporting reading skills. A review of the literature on the education of L2 primary teachers in L2 reading in English follows and the section closes by indicating the need for research into the pedagogy of teacher education. In the next section the study is introduced, it is set in context, and the instruments and the rationale behind them are described. In the results section, qualitative description is given of critical incidents identified in the lesson transcript, lesson descriptions and reflective questions. These are then analyzed and discussed from a dynamic systems perspective. The conclusion summarizes the findings and evaluates the process of self-study in this instance of language teacher education.

2 Literature Review

This study was motivated in two ways. First, the research in which I have been engaged indicates that a not negligible number of young people in Poland learning English in state schools are under-achieving in relation to core curriculum targets in reading in primary years (Ellis, 2015; Paczuska et al., 2014). The same large-scale study also showed that the dominant form of work in English lessons in the Polish language classroom is based on the coursebook (data from 2012 and 2014). A small-scale observational study of 20 lessons taught by 3 teachers in grade 4 in 2 schools, which I conducted in 2019 (Ellis, 2019b), indicated that the picture remains unchanged. The second motivation was social, with regard to the importance of reading in foreign language development in school, and pedagogic, as teachers have been found to play an important role in learners becoming effective readers (Blair et al., 2007). Both of these notions are expanded in the following subsections.

3 Theoretical Background

3.1 *Developing Early Skills in Reading*

Difficulty with reading at early stages of learning the foreign language has serious social implications, as it carries with it the danger of the learner becoming excluded. If the young pupil in their fourth year of learning English is still unable to read without struggling to decode (this will be discussed further below) and if the largest part of the lesson is based on exercises from the book which use written prompts, then that child may not be able to do the activities. Alternatively, children may strive to do the activity, but it takes them much longer than their classmates, as they have to pore over decoding the text. This may mean they do not have time to finish the exercise or may become demotivated and give up (taken from my grade 4 observation data).

The difficulty with reading is that one of the ways to improve it is through reading (Grabe, 2009, p. 11). If children become demotivated with reading activities, then they tend to avoid engaging in reading, which means that, rather than developing, their reading fluency deteriorates, thus worsening the problem. This is known as the “Matthew effect” (Stanovich, 1986), a downward spiral of the young person falling further and further behind in general academic achievement as a result of reading difficulties. Reading in the target language (TL) is additionally key, as it is important in developing overall L2 proficiency (Birch, 2007), so the child’s general L2 ability will suffer as a result of reading avoidance. I should make it clear that I am not dealing here with specific learning disabilities such as dyslexia, but with children who have not yet grasped what can be described as the mechanics of reading in English, the lower order skills, such as the ability to decode grapheme to phoneme (Grabe, 2009, 2014), which are explained further below.

Beginning to read in L1 English is a complex skill. The child not only has to develop phonological awareness of the relationship between sounds (phonemes) and print (graphemes), but also to learn the conventions of grapheme-phoneme correspondences (GPCs) in writing. The specific difficulty of the lower-order processing skills when reading in English is that the GPCs are not one-to-one and are not regular (Goswami, 2008), leading English to be considered to have a deep and opaque orthography (Katz & Frost, 1992). While there has been considerable controversy over how reading in L1 English should be taught (Castles et al., 2018), there is evidence that direct instruction in phonemic awareness, phonics, vocabulary and demonstrating strategies to support comprehension leads to more fluent and effective reading (National Institute of Child Health and Human Development, 2000).

Reading in L1 and in L2 English differs in two main respects for the young learner. First, before they begin to read in L1, children have had substantial exposure to the language and are usually fairly proficient speakers of the L1, while reading in L2 English is often introduced at a stage when the child has had restricted exposure, has limited L2 oral skills and a small linguistic resource. Second, languages differ in the depth of their orthographies (Turvey et al., 1984; Katz & Frost, 1992), with some languages having a shallow depth, meaning that the relationship between how the phoneme is written and how it is sounded is highly regular and one-to-one (Nasserji, 2014), as opposed to a deep orthography, where the grapheme-phoneme relationship is complex, as in English (Goswami, 2008). Consider, for example, the sound /f/ which may be rendered in writing as *f*, *ff*, *gh*, or *ph*, as in *fish*, *cuff*, *cough*, and *photo*. In English, although there are patterns that can be explained, there are a large number of words which are exceptions and which as a result must be learnt as “sight words,” such as *our*. For the child who starts to read a language with a shallow orthography moving to reading in L2 English presents a particular challenge, as the child will automatically apply the decoding skills used in their first language when trying to read English (Perfetti & Dunlap, 2008).

Researchers investigating L2 reading have suggested that reading skills in L1 reading may be associated with reading skills in L2 (Koda, 2007); yet evidence from studies with young learners suggests this is not necessarily the case. Nikolov and Csapó (2010), investigating the relationship between L1 Hungarian and L2 English

reading abilities in learners of grades 6 and 8 (aged 12 and 14) in Hungary, found that at grade 6 ability in L1 reading accounted for only 5% of the variance of scores in L2 reading in English, while in grade 8 the difference was not statistically significant, indicating that as the learner advances up the school, the effect caused by his or her ability to read in their first language, which is very small in grade 6, disappears by grade 8. The study found relationships between L2 writing ability and L2 reading skill. The diminishing effect of L1 reading ability as the learner progresses in school was also reflected in findings by Mihaljević Djigunović (2010), although differences were found in the degree of variance explained by L1 skills in earlier studies comparing Croatian and Hungarian students (Csapó & Nikolov, 2009; Mihaljević Djigunović et al., 2008). The DIALUKI study in Finland (Alderson et al., 2014) found that the best predictors of reading in L2 English in grade 4 primary were phonological awareness and lexical access speed. However, Alderson et al. (2016) found that it was other skills in L2 English (particularly knowledge of vocabulary) which were the strongest distinguishing characteristics between grade 4 learners who had stronger and weaker reading scores, although L1, cognitive abilities and some aspects of motivation were also associated. Melby-Lervåg and Lervåg's meta-analysis (2014), where they compared L1 and L2 readers, by contrast, identified "struggling readers" as falling into two groups: those with problems in lower order reading skills (decoding) and those with comprehension problems. This indicates that the difficulty in the second group is caused by limited L2 linguistic resources rather than a problem with reading as such; yet it should be noted that this study was not restricted to young learners.

There is a substantial literature (see Snow, 2002; Rasinski, 2017, for overviews), which shows that teacher-led interventions with L1 struggling readers can help children become fluent readers with time. The studies by Gorsuch and Taguchi (2008, 2010), and Taguchi et al. (2016) show that similar results are possible with L2 readers. In Poland, the doctoral study conducted by Struk (2018) demonstrated how an additional program to support reading in young early years L2 English learners increased lower order decoding skills and automaticity in word recognition. In other words, it seems that teachers can make a difference by working with learners for whom L2 reading is challenging. However, for teachers to be able to conduct such an intervention with L2 readers they need to have knowledge of differences between the L1 and L2 GPCs and conventions of the orthographies, in addition to skills in teaching lower processing skills. Several researchers have noted that there is evidence that teachers of English as a foreign language lack such knowledge (Ellis, 2019a; Kahn-Horwitz, 2015, 2016; Kwok-Shing & Russak, 2020; Zhao et al., 2015). Vaisman and Kahn-Horwitz (2019) found that it was teachers who had greater awareness of orthographic differences that engaged in more directed teaching of reading, for example of GPCs. Luo et al. (2020) suggest that the reason why Chinese teachers of L2 English lack adequate knowledge of concepts of phonological or phonemic awareness may be that their university teacher education courses do not specialize in preparation for teaching in primary schools. As a result, the TLs learn about developing reading skills with secondary school learners, rather than about introducing the basics of reading. In my own work (Ellis, 2019a) I found that teacher learners had limited declarative

knowledge of reading theories, in particular of lower-order reading skills and differences in orthographies, and, more importantly, very little procedural knowledge of how early reading in English could be taught, other than by exposure to print. The TLs were generally of the view that if a child could read in the L1 then there was no need to teach them how to read in English.

3.2 Educating L2 Primary School Teachers to Teach Reading in L2 English

Very little research has been conducted on the process of teaching early reading in English during language teacher education (LTE) courses. Kahn-Horwitz (2015) found a significant improvement in knowledge about orthography after a one-semester intervention on phonics and phonology in teaching English as a foreign language reading to L2 TLs in Israel who reported that the experience helped them develop their knowledge. Kahn-Horwitz (2016), in an experimental study, compared intervention and control groups for both in-service and pre-service teachers and found significant increases in orthographical content knowledge in both sets of intervention groups. Finkbeiner and Schuler (2017) described using excerpts from selected videos showing L2 reading strategies in use as prompts in helping TLs identify and analyze difficulties learners of L2 English were having with vocabulary and concepts in reading comprehension. Pavlak and Cavender (2019) described engaging TLs in field work with English language learners in the US from kindergarten to grade 2. TLs cooperated with teachers in the school to plan and implement small group reading lessons for struggling readers. Meunier et al. (2019) reported engaging TLs on a teacher education course for L2 Dutch in a project-based experience. TLs prepared a mobile app for use in a museum by beginner learners. The aim was to help the learners develop their reading strategies. Although the main focus of the project was for the TLs to develop digital skills, engagement in creation of the app required practical application of what they had learned in the university about reading strategies.

3.3 Research into the Practice of Teacher Education

There has been considerable concern that university-based teacher education courses lack sufficient connection with practice (Moon, 2016; Darling-Hammond et al., 2017). Work in contexts such as the Netherlands (e.g., Brower & Korthagen, 2005) has shown that increasing links between school and university positively affects teacher learning and increases teaching competences. Darling-Hammond (2016), noting like others (e.g., Cochran-Smith, 2005; Johnson, 2006; Johnson & Golombek, 2018; Kubanyiova & Feryok, 2015; Wright, 2010) that little is known about the

process of how teachers are in fact prepared, calls on teacher educators to investigate their teacher education practice and courses.

Freeman and Johnson (1998) called for a reconceptualization of teacher education courses, to move away from concern with the *what* of the LTE course to a focus on the *how* of the course room, asking such questions as (Freeman, 2001, p. 79): How do teachers learn? What is it that can be done to support them in this process? In order, therefore, to improve the quality of teacher education, there is a need for educators to make explicit the process of how they work, explaining and rationalizing their choices and decisions, and reflecting on the effects brought into play by the interactions. Johnson and Golombek (2018) declared that “LTE pedagogy must be intentional and goal-directed, and this requires that teacher educators make explicit their motives, intentions, goals, and ideologies when designing, sequencing, and enacting LTE pedagogy” (p. 6, preprint version). While this has been taken up in general education, particularly within the self-study movement, research on language teacher educator practice is scant (Peercy & Sharkey, 2020). This study aims to contribute towards filling this gap in the literature.

4 The Study

This study investigated an approach to bringing the university course room and the school experience closer by asking the teacher-learners (TLs) to carry out a field task in schools. They were asked to observe an L2 English class in primary school where reading was being taught using a guided observation sheet. The study addressed the following research questions:

1. Is there evidence that including an observation field task in the language teacher education (LTE) seminar helps the TLs connect theory to practice?
2. How does the guided observation sheet function as a tool for promoting critical reflection on early L2 reading?

4.1 Research Context

The study was conducted during the seminar for TLs who had chosen the methodology of English teaching specialization, which was part of a two year postgraduate teacher education program leading to an MA and a national qualification in English language teaching at a Polish university. It took place during the second half of the first year of the program, in spring 2019, and comprised 8 meetings held for 90 minutes every second week and totaled 16 hours. It was planned and taught by the researcher and was credit bearing, but not subject to grading or examinations. Information about the requirements for obtaining a credit was shared with participants in the first meeting of the course. TLs were concurrently taking part in three

courses on the psychology of teaching, and one on the methodology of the teaching of English among others. Each of these were taught by different members of staff.

The national curriculum framework for foreign language teacher education includes obligatory teaching practice in school at both undergraduate and postgraduate levels, which involves both observation and the teaching of lessons under the supervision of a school-based mentor. In the university in which this study took place there is no provision for university staff to visit the schools, or observe lessons during the 120 hour practicum in the postgraduate program, nor is there any direct contact with the mentor teachers, except by the program administrator. No teaching practice was taking place during the seminar described.

4.2 *Participants*

There were 10 participants, one male and 9 female, aged between 20–25 years (specific ages were not collected) in the group which took part in the study. The TLs were studying full-time, but 7 of them were also working as teachers of English, one in nursery school, two in private language schools and four as private tutors. Those participants who were teaching declared having between 1 and 3 years' experience. All the participants had completed a three-year undergraduate degree in English. All of them were Polish, with varying levels of proficiency in L2 English, at approximately level C1. The target level for the end of the two year program is C1+ on the *Common European Framework of Reference* scale. The LTE program is mainly English-medium, with the exception of classes in psychology, which are in Polish.

4.3 *Research Design*

I adopted an action research approach, following the cycle of plan—act—observe—reflect (Kemmis & McTaggart, 1988), using a multi-methods approach to data collection, with myself as the teacher educator/researcher. As action research was originally conceived as a way to find solutions to real-life social problems (Adelman, 1993), it seemed an appropriate research frame for work on the complex and dynamic design and implementation of an experiment in LTE.

The stance I take is that teacher learning is a complex system, where the TLs are nested within a university in which they are concurrently studying many different courses taught by a variety of different staff. In addition to this, some of them are also working as language teachers in different contexts. Each TL brings with him or her to the LTE course all of their previous learning experience, both as a language learner and from their undergraduate degree courses which included teaching practicum in schools. The socio-constructivist approach (Johnson, 2006) holds that knowledge is co-constructed through interaction, between participants, and with the educator, but also with different artifacts and through activities (Vygotsky, 1978), rather than being

transmitted. Thus, any encounter or task in the seminar room is mediated through the TL's experience; yet as it is a complex, dynamic system, there is no causal or linear reaction since each and every part of the system is sensitive to change and may react individually and differently. My role as the teacher educator is create opportunities for learning to take place, to monitor what occurs and mediate if I sense a "push" is needed for re-organization of the TL's personal system view of teaching and learning. Each one of us has agency in the process and this affects how we behave.

4.4 Research Instruments

The data was collected with the use of a guided observation sheet on the basis of which TLs produced written descriptions of lessons, the transcript of a lesson where they made oral presentations of their descriptions and provided written responses to a set of reflective question and a critical report I prepared. These are described in more detail below.

4.4.1 The Guided Observation Sheet

This tool was designed to produce a factual account, organized chronologically, of what happens during a lesson including L2 reading in primary school, from the perspective of both teacher and learners, including as much verbatim reporting as possible (e.g., what the teacher says, in the language in which it is said, learner responses, etc.). It also includes the timing of the lesson. A record of materials used and the board is made by taking photos, which are then attached to the description. The sheet also included factual questions (e.g., Did the learners ask any questions? What? What about? In English/Polish? If yes, how did the teacher respond?) and the TLs were tasked "to produce ethnographic notes which give a clear idea what happened in the lesson." Questions were blocked into sections headed *Before reading*, *As the reading starts*, *While reading* (subdivided into *Silent reading* and *Reading as a whole class*), and *After reading*. At the end, the TLs were asked to give an overall impression of the main focus of the reading, given the choice of "Learners were supported to develop their reading skills/Reading comprehension was tested." Finally, they were asked to "Note down two questions you would like to ask the teacher," find a suitable time to this and write down the answers afterwards.

On the basis of the observation and their notes, they were asked to write up a detailed description of the lesson, and submit it together with accompanying materials. This was a course requirement. This document was intended for two purposes. First, was to obtain reliable, ethnographic descriptions of lessons which contained reading, conducted in a range of state primary schools, with a preference for class 4, with the aim of creating a database to complement descriptions of 20 lessons, which I was concurrently observing and preparing in schools in another region. At the same time I wanted to engage the TLs in the role of researchers, collecting data in school,

using part of a procedure which had been implemented in a large-scale study on observation (BUNJO, 2012, cf. Ellis, 2015). It was hypothesized that engaging the TLs in an observation project would give them hands-on experience of school-based research, which could serve to help them as they considered how to design their own research for dissertation projects. I also anticipated, on the basis of comments from these and other TLs, that they had had little or no training in observing lessons and that guidance was needed to help them focus on what to look at. Next, I intended that the observation data would serve the TLs as material for critical reflection on how early reading is conducted in primary classrooms and designed the follow-up written lesson description task as a prompt to instigate this process. I hoped that this writing-up process would give the TLs opportunity to reflect-on-action (here the action being active observation of a lesson). It also offered them the possibility of linking theory to practice, through considering the theories of reading which they were studying during a second course in Academic Writing, which was running concurrently. I had selected academic texts on the theory of first and second language early reading as source texts about which they had to prepare summaries. Finally, I intended that writing ethnographic notes while observing live lessons could also be a technique they might adopt during the practicum in which they would participate in the following year. Decisions made about the design of the guided observation sheet were based on my own experience in writing ethnographic notes during lessons. In preparing the observation sheet, I visualized myself in a lesson and imagined what I look for and what I might see, preparing a set of questions intended to elicit the desired information.

4.4.2 Lesson Transcript

After the TLs had observed a class in school and written their descriptions, they gave presentations of the lessons they had observed during one of the seminar meetings. This was audio recorded with the participants' consent. The recording was then transcribed by the author.

4.5 Reflective Questions

The TLs were sent a set of four reflective questions one month after making their presentations and asked to send responses in writing. The first question asked them to explain briefly what aspects of reading they had observed being taught or practiced. Next they were asked to describe what they viewed as the greatest challenge in reading for the learners they saw. The third question asked them to describe what presented the greatest challenge for the teacher in terms of developing reading skills in the lesson they observed. The final question asked what approach the TL would take in teaching reading in grade 4 primary and what their focus of attention would be.

4.5.1 Critical Report

Throughout the process of designing and producing the instruments I kept note of my intentions and of what drove my decision-making. During the presentation lesson I made notes, to which I added reflections immediately after the end of the class. During and after reading the lesson descriptions and reflective questions I also kept notes. While transcribing the lesson, I began the process of cross-referencing, turning to the written lesson descriptions for clarification if needed. I then re-read all the data many times, adding new thoughts and reflections to my notes. Next I began the process of analysis, identifying critical incidents in the lesson transcript, lesson descriptions and reflective questions which I interpreted as moments when there was evidence of the TL learning about/becoming aware of the L2 reading process. Finally, I compiled a critical report for myself in which I evaluated the action research cycle. During the preparation of this report I identified the guided observation task as being a key point for the TLs in the process. This motivated me to focus on this task when writing up the research.

4.6 Procedure

In this section I will first give a short overview of all the action undertaken and then focus on one part, explaining reasons for the selection. The overview aims to situate the selected part firmly in context and offer a sense of the whole. The following stages were involved:

1. Preparation of forms for obtaining informed consent for participation in the research from TLs.
2. Information given to the group about the observation project and their consent obtained. TLs consented to the use of questionnaire data and lesson descriptions in my research as well as to the recording of presentations and class discussion, but unanimously declined to take part in interviews.
3. Information collected from TLs on their knowledge and beliefs about the early teaching of reading. This was done in the form of a print questionnaire with open-ended questions, distributed during a seminar class and completed at home. It was to serve as baseline information on their explicit and procedural knowledge of early FL reading and assumptions and beliefs about the topic.
4. Analysis of the questionnaire.
5. Preparation of guided observation sheet to assist TLs in preparing a detailed descriptive account of an English lesson in primary school which included reading. This was done concurrently with 3–4 above.
6. Selection of a lesson transcript and appropriate excerpts and support materials to serve as introduction to the observation task. Planning of the lesson to implement this.

7. A volunteer TL prepares letter to schools requesting permission for TLs to conduct the observation task. The letter is co-edited, the final version is submitted to university authority for official stamp and signature, and then distributed to TLs.
8. TLs obtain permissions, conduct the observation task, complete written lesson descriptions and prepare presentations.
9. TLs in seminar class present their lesson descriptions. A discussion follows. The whole of the class is audio-recorded with the TLs' consent.
10. TLs submit written lesson descriptions, which is a course requirement. These are later read and analyzed by the author.
11. The reflective questions sheet is prepared. Four weeks after presentations this is sent to TLs electronically. This is a course requirement.
12. Answers to the reflective questions are received electronically and analyzed.
13. Recording of TLE class with presentations is transcribed.
14. Iterative reading of transcription takes place. Critical incidents (Tripp, 1993) are identified. Excerpts from transcription are selected.
15. Cross-referencing of data is done. TLE discussion transcript and lesson descriptions are matched and compared with reflective questions. Iterative reading occurs. Individual TLs are tracked across the data set.
16. Reflection-on-action takes place and as a result the critical report is prepared which provides the focus for future action. This also happens concurrently with points 12, 14, 15, 16 and 17.
17. Preparation of action plan, which involves both reflection-in-action and reflection-on-action.
18. Consideration of what can be reported, how, to whom, and for what purpose.

For the purposes of this chapter I have chosen to focus on how the guided observation sheet functioned, drawing on evidence from data taken from the lesson descriptions prepared by the TLs on the basis of the LTE class transcript made when the TLs presented their lesson descriptions to the group and from the reflective questions (points 8–11 above). This choice was made as in my reflection-on-action (point 16) and the preparation of the critical report I identified the design of the guided observation sheet as having had a pivotal role in what followed.

It should also be added that the process of making ethnographic notes was explained to the TLs during a seminar class, using research artifacts: photos of materials used in the lesson, including the board, the teacher's lesson plan, an excerpt from a written transcript of the lesson, a set of ethnographic notes made by a trained teacher-observer during the lesson. By way of introduction, the TLs looked at the reading text from the coursebook and discussed in pairs how they would incorporate it in a lesson, before presenting their ideas to the group. These were discussed, with questions for focus and clarification asked by the teacher educator (TEd, myself). Next they saw an excerpt from a transcript of the audio recording of the lesson and discussed it. Finally, they read the ethnographic notes produced by the observer. At the end of the class, I briefly explained the procedure of how the 2012 observation research had been conducted, mentioning that each lesson had been seen by two

observers, one of whom had produced the ethnographic notes. The reason for having two observers I told them, was to reduce subjectivity and increase the reliability of the data. The TLs were made aware of data protection legislation and warned not to include children or the teacher in any of the photos, to explain the procedure to the teacher before the lesson and to be discreet about taking the pictures.

4.7 Analysis

Within the reflective stage of the action Research cycle I use Farrell's (2016, in Farrell & Kennedy, 2019) reflective framework designed for the TESOL teacher. This comprises 5 levels: "philosophy, principles, theory, practice and beyond practice" (p. 4), where the first three levels focus on the person-in-context of the educator, considering their personal theories, belief system (both personal and professional), and the choices they make about how to implement these in a congruent way in their work. The practice level adopts the reflection-in-action stance during the lesson, followed by a reflection-on-action Schön (1983, 1987) stance post hoc. The final level, beyond practice, interpreted for the setting of the LTE course, concerns the wider implications and outcomes for the TLs as they work with their own learners. I chose this framework as allowing for the complexity of the process of LTE within a complex dynamic system.

In analysis of the research data (described below) I used Tripp's (1993) notion of critical incidents. A critical incident is an interpretation of the significance of an event. To take something as a critical incident is a value judgement we make, and on the basis of that judgement comes the significance we attach to the meaning of the incident (p. 8). I looked for evidence in the data that showed critical thinking about the process of early L2 reading was taking place. The interpretation of whether this was in fact the case is mine alone, which is a limitation of this study. This is not a design flaw, however, but the result of the TL participants exercising agency and declining to take part in interviews, during which I had planned to investigate the critical incidents from the perspective of the individual TL concerned. As mentioned above, none of them gave consent and so the verification process is limited to tracing individual responses between oral narratives and written accounts made by the same person.

5 Results

I would like to evaluate the functioning of the Guided Observation Sheet according to two of the purposes identified above. As a prompt for the production of detailed ethnographic notes it worked extremely well. The lesson descriptions produced provide clear and detailed accounts of the observations, as can be seen in the following example:

Extract 1: Lesson description

10.57 – The teacher speaks in English and asks the students to open their student books (English Class A1) on page 56. Then, she tells them to look at the comic story at the top of the page: “Look at the pictures. What is the story about? What do you think?” A boy at the back yells: “O super bohaterach! [Polish: heroes]” “Yes, about superheroes!” the teacher confirms and asks him to speak English next time. She asks the students to copy the title of the story into their notebooks as the topic of the lesson. Next she instructs them to look at the page again and listen carefully to the recording of the story. (TL1)

A fact which emerged when the TLs presented their lesson descriptions in class was that 8 of the 10 participants had visited the school in a pair. This re-emerged in the process of writing my critical report. I could find nothing in my notes to explain this and realized (from the transcript) that I had omitted to ask them why. I realized on reflection I may have inadvertently made an impression on the TLs during the introduction to the ethnographic procedure. Reflecting-in-action, this indicates the profound potential of undertaking such rigorous introspection of one’s work. Some of the TLs exercised agency and carried out the task with a partner. However, each of them produced their own notes, which when they were compared subsequently, are qualitatively different. Interestingly, the two TLs who observed on their own produced the briefest written descriptions, seeming to indicate that collaborating on the task produced a thicker description.

Evaluating the second main purpose for which the observation sheet was prepared, that is that it would serve as material for critical reflection on how early reading is conducted in primary classrooms, my feelings are more reserved. The data from which evidence can be drawn are the transcript of the class when presentations were made and the reflective questions responded to at the end of the process by the TLs. On studying the transcript, I was struck by critical incidents I identified as “missed opportunities to mediate,” of which one example follows, with the critical moment in italics:

Extract 2: Presentation of lesson descriptions. Critical moment 1

TL3: First of all the teacher organized them into 4 groups of 3 students, so she divided them into 4 groups and she selected how they would be divided and then each group got a different book* and then they couldn’t open it, they had to predict what it’s going to be about, just from the cover and the title...

[*note: *Don’t call me sweet!*; *Alan’s Big Scary Teeth*; *Where the Wild Things are*; *Dinosaurs love Underpants*, authentic children’s picture story books]

...and so they were brainstorming for about 3-5 minutes and then the teacher asked them to open the books and read one by one in those small groups the text and she didn’t translate anything or explain, *there wasn’t in fact any pre-reading just this guessing...* (a description of the next activity follows).

Looking at this extract I am filled with frustration that I did not intervene at this point and mediate. I would like to have asked the question: “What do you think the purpose of the guessing was?” with the aim of scaffolding the teacher towards discovering the idea that predicting the content of a text before reading helps children to create a schema for the story which they are going to read and so supports their

understanding. I remained silent and missed an opportunity to guide that TL to a potentially vivid understanding of the abstract concept of schemata. Yet this is not a failing of the observation sheet in itself, but a failing of the pedagogy-in-action, at a moment which “reflecting-on-action” indicates as a time for mediation. The sheet had successfully elicited potential material for reflection, but the educator let it slip by.

Here is a second critical incident, from the same description, which followed shortly after the one above:

Extract 3: Presentation of Lesson descriptions. Critical moment 2

TL3: And when they were reading it they were sometimes simultaneously translating- if they read a sentence, they were like, they translated it to their peers and sometimes [giggles] it was completely, it was quite funny sometimes

TEd: Was there any conversation going on about what they thought it meant between members of the group?

TL3: Yes, there was a word *rude* and they translated it as “rudy” [Polish], so red-haired, and they thought it was the rudy dinosaur, the red-haired dinosaur, or something like this [TEd: Ah!] so there were a lot, maybe not a lot, but there were some situations like this [TEd: *so creative!*]

Reading my comment (in italics) in the transcript I was very cross with myself at yet another wasted opportunity. Why, I asked myself, did I not help the TL to unpack where the “rudy” problem was coming from? They had been reading about decoding presenting problems for young learners in English because of the differences in orthographies and writing a summary of a text from Grabe (2014) in the academic writing class and here was a real-life example witnessed by this TL in action, which she interpreted as an issue with “translation.” The learners had in fact applied decoding from their L1 Polish and appeared unaware of the rules of English orthography for u-e combinations. They had sounded each letter individually, producing a two-syllable from /'ru:de/, which they then approximated to the Polish word *rudy*, rather than applying the “silent e” rule for English and saying /ru:d/. With hindsight, however, I recalled a reflection-in-action decision made during the class that I would not intervene, as I wanted to remain neutral as far as was possible, so as not to inhibit the presenters. I consciously limited myself to asking factual questions, aimed to help the TLs present their descriptions as coherently as possible.

Towards the end of the transcript, after all the presentations had been completed, I asked the question “Any learners that are having trouble with reading aloud?” which elicited the following exchange:

Extract 4: Presentation of Lesson descriptions. Critical moment 3

TL4: I think I noticed they had problems with pronouncing *our* because like *o-ur* [approximately /ɒ/u:ə/]

TEd: that's because they're looking at it and they're doing it from- they're sounding the letters, so they're doing /ɒ/ /u:/ /ɹ/ [sounding as they would be in Polish].

TL4: Oh yes! [intonation indicates this has reminded her of something]

Rather than mediate, I switched into transmission mode. On the basis of the response by the TL, she appears to be recognizing something. In short, there is evidence that the observation sheet has the potential to serve its purpose of prompting critical reflection on how early reading is conducted in primary classrooms, but in these excerpts from the transcript it is clear that in order to achieve this, additional mediational support is needed, which in these critical incidents is sadly lacking.

Let us turn then to the Reflective Questions to see if any evidence can be found there which might be attributed to the guided observation sheet. The following extract is taken from responses to the second question.

Extract 5: Response to one of the reflective questions

Q2. What in your opinion was the greatest challenge in reading for the learners you saw? Explain your answer with reference to what you observed.

TL5: In my opinion, the greatest challenge that the learners had to face was reading in a foreign language and dealing with unknown vocabulary. I am afraid that some learners may have difficulty reading in their mother tongue so reading in English is much more challenging for them. Another problem is that spelling and pronunciation are not consistent with one another in English. For this reason many learners may struggle to remember the correct pronunciation of different words in spite of the fact that their teacher pronounces them several times in class. Finally, some students are too shy to ask about the meaning of a particular word even when the teacher asks: "Is there any word you don't understand?"

TL5 has identified two problems: a problem with reading and a problem with language, lexis specifically. The TL suggests that the reading problem may have its source in poorly developed L1 reading skills, which amplifies the difficulty of L2 reading. Differences in L1 and L2 orthographies are highlighted as a second difficulty with reading and a reference is made to the teacher's response in the lesson, which is to repeatedly say written words aloud for the learners, a strategy the TL suggests is unsuccessful. The final point made is a socio-cultural reference, indicating that the teacher's request for learners to say which words they do not understand is inhibiting for some learners, also portraying it is not an effective, or inclusive, strategy. It is not clear whether this is based on the observation, or whether perhaps it is a response grounded in personal learning experience.

If we draw on this as evidence to evaluate the observation sheet, it would appear that when combined with this reflective question it has achieved its purpose. The TL is able to identify and analyze a variety of challenges occurring in an early reading activity. When read in conjunction with the lesson description and the relevant part of the transcript from the presentation, it can be seen that this TL has gone beyond simply re-writing extracts and shows evidence of deeper consideration. It would appear that reflection-on-action (here interpreted as the actions observed during the lesson) on the topic of early L2 reading is taking place.

6 Discussion

In this section, I discuss the research questions together, holistically. To return to the context of this study, we have a group of young people with varying experience of language teaching. The points they share in common are that they are all “products” of the state education system of which the schools they visited are part. They carry with them their own experiences and memories of learning English in similar classrooms, although their language learning did not necessarily exclusively take place in school. They have completed undergraduate LTE programs which included 120 hours of school experience in primary classes. Alongside the course, of which vignettes are described here, they are following the same program and attending the same classes. Beyond this they diverge. A key factor, I believe, is that three of the TLs are not currently engaged as teachers. In addition, the teaching experience which the others have and the contexts in which they work differ greatly. I draw attention to this, as it is through the prism of their “persons” that they observe, engage in and interpret the lesson they observed. Although they all used the same frame, set out in the guided observation sheet, this was simply an artifact with which they interacted, and it is clearly to be expected that each of those interactions will be different because of what the participant brings to it, their perceptions of it and of the task, and because of the nature of the school, the classroom, the teacher and the learners they encountered when using it.

The next point I would like to make is that, given the limited amount of teaching experience these TLs have, and the fact that the field experience using the guided observation sheet was restricted to a single lesson, I had high expectations of what I hoped they might manage to achieve. When I reflect that the notions of lower order processing skills in reading were new to them, and, in addition, that a few short weeks prior to the field task they had had no declarative knowledge of differences in depths of orthographies, this was new territory for them. However, when it comes to the differences between Polish L1 and English L2 in terms of decoding, they did have years of personal experience, although none of them, when asked, could actually remember how they learned to read in English. As with any skills which are highly automatized, intense introspection is needed to recall and unpack how that process came into being. In addition to all this, in what I expected from the lesson description presentation class, I had unconsciously compounded two aims: for the TLs to provide rich descriptions of reading lessons, and for them to be able to identify, analyze and theorize from critical incidents. I also expected that those incidents I perceived as critical, which with my personal agenda were related to problems learners had with decoding in L2 English reading, would be the same as the ones which the TLs would identify. On reflection, this was completely unrealistic.

I have taken a stance where I believe that the LTE course room is nested within a dynamic system, and that what happens within it is also dynamic, so it is important that in attempting to answer the research question I do not expect some causal relationship between the event of the field task and the response in the TLs. To be congruent, the question needs to be viewed in a dynamic systems frame. When a

dynamic system is in a state of flux, two of its characteristics are unpredictability and instability. It is from this apparent chaos that, over time, the component parts settle once again into a period of relative stability. If, therefore, the aim of the field task was to collect material which would build reflection on something which was new and relatively unfamiliar to the TLs, then the task itself had to potential to unsettle the system. When one's own system of assumptions, beliefs and prior learning is challenged, and in addition one is in an unfamiliar situation, one is part of a vortex of experience, comprised of a wealth of potentially confusing incoming data. "Creating order" out of such information is highly demanding. It would follow, therefore, that simply the process of taking detailed ethnographic notes and suspending judgement while doing so is a cognitively demanding task in itself. In setting the task, I had also failed to unpack my automatized skills as an experienced ethnographer and forgotten the effort such a task entailed for the beginner. Similarly, during the presentation lesson, I expected that the TLs would be listening critically to the presentations (critically in the sense that they would be analyzing them), where in the event I think, on reflection, that they were more likely trying to make sense in the vortex. This was partly exacerbated by the fact that most of the lesson descriptions were made as oral narratives, largely without visual support.

What would seem more realistic under the circumstances for these teachers-in-a-process-of-becoming are signs of what Kubaniyova and Feryok (2015) describe as "emergent sense-making in action" (p. 436). Burns et al. (2015) talk of a process when "thinking becomes in relation to rather than about" (p. 597). Thus, if we return to the red-haired dinosaur episode (see Extract 2), we could interpret the TL's identifying this as "translation," as "sense-making" in progress. Out of the "chaos" of new data unsettling the system, the TL successfully identifies a significant moment, a moment which resonates with her in some way. She finds it amusing and memorable. It has made an impact and is disturbing the equilibrium. What she is not yet able to do is to understand what is happening, in terms of being able to theorize from it, but the fact that she has identified it is, in itself, an important event. Korthagen (2016) speaks of *phronesis*, "practical theory that helps teachers perceive important 'clues' in classrooms and offer them as a basis for their actions" (p. 320). If, as Farrell's (2016) fifth stage of reflection urges us to do, we look beyond the LTE course room, it is exactly identifying moments such as this in the classroom which are the first step in the teacher being able to intervene, mediate and scaffold his or her learners to develop their reading. At this stage of these TLs' development, *phronesis* is a more realistic goal than theorizing-from-action, because it is this skill in the particular context of difficulties with decoding written English that has the potential to cause the teacher to make the greatest difference with their learners for the future.

In the same vein, if we return again to the extract taken from the reflective questions and consider that what the TL writes has "gone beyond" what was written in their lesson description, or was contained in that TL's own presentation, we in fact have no way of knowing what it was which enabled the TL to take that step and reflect more deeply. Could these broader reflections not also have come from being a participant listening to the presentations of others, which included the red-headed dinosaur moment, or the mispronunciation of *our* described by another colleague,

accompanied by my own “teacherly” explanation? The guided observation sheet and the associated process of collecting data and writing it up appear to serve as a stimulus in a complex process, but there were many moments which could have been trigger points which caused a system shift. In this context then, it would appear more appropriate to consider the whole system of events described in the procedure as having provided affordances for teacher learning. Amongst these were what Johnson and Golombek (2018, p. 2, preprint) describe as “mediational spaces,” where the teacher educator could (but in this case did not) have initiated a dialogic process of scaffolding the co-construction of “target” concepts or awareness.

Finally, returning to PLD critical moment 3 on the pronunciation of *our*, I considered again the “Oh yes!” response of the TL, which appeared to signal recognition of something. With any cognitive challenge there comes an enlightenment moment, a sudden realization of what is happening, a joining of the pieces of the puzzle. I have no evidence to prove that this was in fact what was happening and can only suggest this as a subjective interpretation. If this was in fact the case, then this captures a trigger moment as the TL becomes conscious of “something” which I hope led, or will lead, to *phronesis*.

7 Conclusion

In conclusion, I suggest that it is the combination of the guided observation sheet, the field task associated with it, the requirement to produce a written description of the lesson and the opportunities afforded by the presentations class, in addition to the indirect input received from the texts on reading in the academic writing course, plus the many and varied interactions arising during the whole process that provided spaces within which teacher learning may have taken place. Given the chance, I would use this set of activities again, but incorporate the TL’s collaborative version of the field task, if it were practically feasible, for the increased possibilities it affords.

I have endeavored throughout this paper to make my assumptions, theories and process explicit. Conducting this rigorous self-study has been a revealing process from which I have become aware of much which will be helpful in planning for further action, as is usual in action research. I hope that in this description I have indicated ways in which teacher educators might introspect in their own contexts on selected topics within their own programs. For the future, were I to undertake such a study again, I think I would try to collaborate with a “critical friend” to whom I could describe, or talk through what is happening, while it is in progress, rather mainly than reflecting-on-action, as has been the case here. It would add a more objective perspective. I regret that the TLs did not consent to be interviewed, which has left study open to charges of lack of triangulation, but had to abide by their decision. Despite this, I believe it has been possible, on the basis of extracts from the data, to capture signals which suggest that these events were causing ripples in the minds of the teacher learners, and, perhaps, even a moment when a pebble dropped into the pool and some understanding about early L2 reading began.

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