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Nourollah Zarrinabadi
Mirosław Pawlak *Editors*

New Perspectives on Willingness to Communicate in a Second Language

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New Perspectives on Willingness to Communicate in a Second Language

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ISSN 2193-7648 ISSN 2193-7656 (electronic)
Second Language Learning and Teaching
ISBN 978-3-030-67633-9 ISBN 978-3-030-67634-6 (eBook)
https://doi.org/10.1007/978-3-030-67634-6

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

To my students in Isfahan

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About the Editors

Nourollah Zarrinabadi is a lecturer at the University of Isfahan, Iran. His areas of interest include psychology of language and psycholinguistics. He is specifically interested in researching motivation, willingness to communicate, and language mindsets. His articles have been published in various journals such as *System*, *TESOL Quarterly*, *Teacher and Teaching*, *RELC* and *Innovation in Language Learning and Teaching*.

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Introduction

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Keywords Willingness to communicate · Applied linguistics · Language learning

Since its introduction to the second language (L2) learning and teaching by MacIntyre and Charos (1996), willingness to communicate (WTC) research has become of the highly studied topics within the field of second language acquisition (SLA) and applied linguistics. Many researchers have tried to examine different theoretical and empirical underpinnings of the WTC model by MacIntyre et al. (1998). Scholars tried to examine L2 WTC from different theoretical perspectives and employed different research methodologies to unravel the factors that facilitate or hinder learners' intentions to communicate suing L2 (see Zarrinabadi & Tanbakooei, 2016 for a review). There are, however, several important questions about L2 WTC that have remained unanswered. This volume includes a diverse range of novel theoretical and methodological viewpoints applied to the study of WTC in L2. In the rest of this, we briefly describe the studies included in this edited volume.

In Chapter "Second Language Willingness to Communicate as a Complex Dynamic System", Nematizadeh and Wood view WTC as a complex dynamic system through examining the definitions of WTC proposed in the literature and conceptualizing the basic properties of complex dynamic systems. Dynamically-informed investigations of WTC are then examined for their methodologies and results, and the properties characterizing complex dynamic systems and WTC are identified and discussed. The chapter concludes with a discussion of future directions in WTC research.

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_1

In Chapter "Case Studies of Iranian Migrants' WTC Within an Ecosystems Framework: The Influence of Past and Present Language Learning Experiences", Denise Cameron reports on a qualitative and longitudinal investigation into the willingness to communicate (WTC) of Iranian migrants in their past Iranian English classrooms, in their present New Zealand pre-university classrooms, and in the community outside. By means of questionnaires, observations, stimulated recall, and multiple interviews with these learners and their classroom teachers, the question is addressed as to whether their past learning experiences affected their present WTC, and which elements of classroom and community context facilitate or inhibit their readiness to speak. In the process of this investigation, the relevance of dynamic systems theory and the usefulness of an ecological framework is explored in order to describe the nature of their WTC, ranging from the micro context of the classroom to the macro context of the wider society of Iran and New Zealand. Factors which affect their past English language learning experiences in Iran were family influence, type of school, and teacher expertise, whereas now in New Zealand their relationships with their classmates, opportunities to speak in and out of class, and the effect of different types of curriculum are revealed.

Gertrud Tarp, in Chapter "Building Dialogue Between Cultures: Expats' Way of Coping in A Foreign Country and Their Willingness to Communicate in A Foreign Language", focuses on student mobility and English as a foreign language and argues that L2 WTC in languages other than English is an understudied issue. This chapter is based upon a study of expatriates' (expats') WTC in German as a foreign language in naturalistic settings. This study is an attempt to listen to expatriate voices and to look for trends in how they experience their sojourn abroad, intercultural communication and foreign language learning. The study was carried out in Germany and the following groups were addressed: expatriates working and/or studying in Germany, all members of the network "Expats in Germany". The methodology applied comprises a quantitative and a qualitative approach. The findings show that using English as a lingua franca influences expatriates' German language communication. In addition, the expatriate situation in terms of cultural immersion strongly enhances their willingness to communicate in German dependent on expatriate age, education, gender, language skills, occupation and country of origin. The study argues for the importance of paying attention to individual and societal factors in foreign language learning and communication.

Baran-Lucarz, in Chapter "The Mediating Effect of Culture on the Relationship Between FL Self-Assessment and L2 Willingness to Communicate: The Polish and Italian EFL context", reports a mixed-method study conducted among Italian and Polish learners of EFL, which aimed to verify the assumption that the strength of relationship between self-assessment of FL skills and L2 WTC is determined by the cultural background of the students. Data gathered with the use of three questionnaires—a FL Self-Assessment Measure, Measure of WTC in the FL Classroom and Measure of WTC outside the FL Classroom show that the Italian participants not only assessed their level of English subskills significantly higher than the Polish students, but also that they were more willing to communicate in both settings. Moreover, the results suggest that the Polish participants were more concerned about

their level of English when speaking in the TL than the Italian learners. While in the case of the Polish respondents, moderate to strong relationships between self-assessment of English skills and WTC both in the classroom and naturalistic setting are reported, in the case of the Italian participants, the correlations are either weak or non-significant. Most of the differences between the paired correlations computed for particular subskills and L2 WTC for the Polish and Italian participants are statistically significant. The differences are further supported by qualitative data.

Negah Allahyar, in Chapter "What Does Students' Willingness to Communicate or Reticence Signify to Teachers?", argues that there is a growing concern about the potential biases in teacher perceptions of WTC and reticent students' characteristics and abilities. This chapter draws upon the attribution theory to shed light on the way teachers make sense of learners' WTC and reticence and to explain the causes of WTC and reticence through the lens of teachers. To explore the perceptions of English teachers, six Iranian teachers' perspectives are examined. The semi-structured interviews are the instruments for data collection over six months. The thematic analysis shows that teacher participants hold a negative view of the reticent students. They attribute reticence to more student internal causes within the student's control and willingness to communicate to more external, teacher controllable causes. The chapter ends with implications for teacher education in the Iranian as well as similar English language contexts.

In Chapter "Positive Predictive Value of Extraversion in Diagnosing L2 WTC", Ewa Piechurska-Kuciel argues that WTC in a foreign/second language (L2 WTC) is now considered an influential variable underlying the second and foreign language learning processes. It is also perceived in terms of a fundamental goal of second language education, because its higher levels of willingness result in a greater desire to practise oral communication, bringing about successful language learning. According to the pyramid model of L2 WTC, it is rooted in personality which produces both distal and enduring influences on a student's verbal behaviour. It can thus be expected that extraversion, a personality dimension identified with energy and enthusiasm, characterised by sensitivity to reward and sociability, is tightly connected with WTC. Indeed, recent empirical research tends to demonstrate that personality (e.g., extraversion) is directly related to L2 WTC, self-perceived proficiency and language anxiety (immediate antecedents of WTC). However, studies have been undertaken in which no direct effect of personality (extraversion) on L2 WTC can be confirmed. The research carried out for the purpose of this chapter demonstrates a modest predictive value of extraversion for L2 WTC levels, caused by a direct impact of this personality trait on the interpersonal nature of a learner's readiness to communicate in a foreign langue. Its indirect effect, exercised by influencing the immediate WTC antecedents (self-perceived levels of foreign language skills and language anxiety), is also revealed.

In Chapter "On the Effect of Using A Flipped Classroom Methodology on Iranian EFL Learners' Willingness to Communicate", Zarrinabadi, Khodarahmi, and Shahbazi report on a study that investigates the effect of using a flipped classroom strategy for facilitating WTC among Iranian EFL students. Zarrinabadi et al.'s quantitative

and qualitative data analysis show that using a flipped classroom strategy can significantly influence learners' WTC. Flipped classroom influences WTC by motivating learners, making language learning enjoyable, and decreases anxiety. They conclude the chapter with some suggestions for further research.

In Chapter "Examining the Dynamic Relationships Between Willingness to Communicate, Anxiety and Enjoyment Using the Experience Sampling Method", Khajavi, MacIntyre, Taherian, and Ross examine the dynamic relationship between WTC, foreign language anxiety, and foreign language enjoyment using experience sampling method. Results of the study show significant amount of variability in all three variables over time, both within weekly sessions and from one week to another. Moreover, moving correlations among the three variables show the correlations between WTC and enjoyment are remarkably consistent, strong, and positive, while moving correlations between WTC and anxiety, and anxiety and enjoyment are inconsistent and majority of them are negative.

In Chapter "The Opportunity to Communicate: A Social Network Approach to L2 WTC and Classroom-Based Research", Gallagher and Zarrinabadi introduce a social network approach to the study of L2 WTC. They first describe the key tenets of social network theory. Then they argue that different aspects of the theory can be applied to explain L2 WTC. In so doing, they focus on the notion of opportunity in WTC and try to analyze it from a social network approach. Gallagher and Zarrinabadi finally argue that theoretical integration of a network approach into L2 research would allow researchers to further develop, refine, and re-conceptualize longstanding concepts related to groups, classrooms, social categories, and individual differences.

In Chapter "Teachers' Immediacy, Self-Disclosure, and Technology Policy as Predictors of Willingness to Communicate: A Structural Equational Modeling Analysis", Amirian, Rezazadeh, and Rahimi-Dashti investigate the structural relations between teacher immediacy, teacher self-disclosure, teacher technology policy, and intermediate EFL students' WTC. The results of structural equation modeling show that teacher immediacy, self-disclosure, and technology policy positively predict students' WTC. The findings highlight that passing on information about yourself in the classroom as a teacher and reducing the distance between the teacher and the students can play an important role in students' WTC in the classroom. In addition, the use of technology in classroom contexts can increase positive attitudes toward learning and eventually develop students' participation and willingness to talk. The authors suggest that future experimental and qualitative studies can determine the ways in which these teacher variables can affect students WTC.

The chapter by Sen and Oz (Chapter "Vocabulary Size as a Predictor of Willingness to Communicate inside the Classroom") focuses on the relationship between learners' vocabulary size and willingness to communicate in a second language (L2 WTC) inside the classroom in English as a foreign language (EFL) setting. The study applies a quantitative research paradigm to shed light on the relationship between vocabulary size of the learners and their willingness to communicate inside the classroom. It presents the reviewed literature about vocabulary and vocabulary size with a focus on individual differences along with L2 WTC. Personal, psychological and educational factors influencing WTC and its predictors are touched on to

provide insight into the topic. The method and findings of the study are presented, and the findings demonstrate that vocabulary level of the participants significantly predicted their WTC inside the classroom. The chapter then discusses the findings of the study in the light of previous research. It provides implications for language teachers, pre-service language teachers, curriculum designers and teacher trainers to create awareness on the relationship between vocabulary knowledge and willingness to communicate. It also calls for further research for a better understanding of the relationship between learners' vocabulary knowledge and L2 WTC.

In the final chapter, Nourollah Zarrinabadi outlines five ways in which research on L2 WTC can be continued. Zarrinabadi build on recent developments in psychology and SLA to recommend different suggestions for future research.

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Second Language Willingness to Communicate as a Complex Dynamic System

Shahin Nematizadeh and David Wood

Abstract The widely-cited work of MacIntyre et al. (Mod Lang J 82(4):545–562, 1998), which uncovered the underlying layers of willingness to communicate (WTC), engendered a growing series of studies within the field of second language acquisition (SLA). Ever since, a number of perspectives have been adopted to conceptualize this construct including the theory of planned behaviour (MacIntyre et al. 1998; Zhong 2013), the theory of action control (MacIntyre & Doucette 2010), ecological systems theory (Cao 2011; Peng 2012), social identity theory (Miller and Pearson 2013), and sociocognitive theory (Cao 2014). More recently, however, dynamically-informed SLA research has gained ground and, therefore, a growing line of inquiry, mainly instigated by the innovative work of MacIntyre and Legatto (2011), has viewed WTC from a complex dynamic system (CDS) perspective. With a principal focus on the phenomenon of change, this theory mainly accounts for the changing nature of WTC, as opposed to the more traditional conceptualization of it as a stable trait-like predisposition (McCroskey and Baer 1985). The dynamic nature of WTC has now been firmly established through a number of studies (e.g., Pawlak and Mystkowska-Wiertelak 2015) and even though the application of this theory to WTC research is only in its infancy, a handful of studies (MacIntyre and Legatto 2011; Nematizadeh and Wood 2019; Wood 2016) have demonstrated its enormous potential in exploring countless unchartered territories. The present chapter will, therefore, adopt an evidence-based approach to viewing WTC as a complex dynamic system.

Keywords Willingness to communicate (WTC) · Complex dynamic systems (CDS) theory · Second language (L2)

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_2

1 Introduction

Quantitative and correlational studies have been the dominant research paradigms when investigating psychological traits and social phenomena, mainly owing to interpretation of the constructs in terms of clear-cut and unambiguous numerical values as well as the generalizability of the results. WTC has not been an exception. From the emergence of the construct of *unwillingness* to communicate by Burgoon and Burgoon (1974) and Burgoon (1976) to the pioneering work of McCroskey and Baer (1985) on WTC, McCroskey and Richmond's (1991) cognitive view of the variable, MacIntyre's (1994) investigation of the underlying layers of WTC, until a very recent work of Khajavy et al. (2016), quantitative techniques have been very widely employed. Such a research paradigm tends to view a given construct as a stable, trait-like characteristic with no likelihood of change over time or across contexts. In addition, investigations of this sort have mainly opted to explore the external correlates of WTC, rather than leaning in to have a more comprehensive look at the underlying layers. The heuristic model of L2 (second language) WTC proposed by MacIntyre et al. (1998), however, put the variable into a new perspective. This work essentially brought to light the construct's *multilayered* nature as well as its variability over time and across situations, which, from our viewpoint, are reflective of multiple properties associated with CDS. The model draws on enduring and consistent characteristics such as personality and moves up to more transient, situated factors such as one's desire to engage in communication in an *unpredictable situation* to discuss a likely *unfamiliar topic* with a *stranger*. Given this, making a decision tends to be highly complex and dynamic.

This chapter is organized around four major sections. We set out to examine three definitions of WTC proposed in the literature, conceptualize the theory of CDS and its basic tenets, review dynamically-informed studies of WTC along with the methodologies employed and key CDS properties characterizing WTC. The chapter concludes with a brief discussion of future directions.

2 Conceptualizing the Construct of Willingness to Communicate

As stated earlier, McCroskey and Baer (1985) introduced the concept of WTC in association with first language performance and perceived it as a "personality-based, trait-like predisposition which is relatively consistent across a variety of communication contexts and types of receivers" (p. 6), while acknowledging its situation-dependent nature. Several years later, in their seminal work on WTC, MacIntyre et al. (1998) argued that first language (L1) WTC may not be truly representative of an individual's WTC in an L2, referring to a study by Charos (1994) that had empirically indicated it as such. With an emphasis upon L2 WTC and its situational dynamicity, MacIntyre et al. (1998) defined L2 WTC as "a readiness to enter into discourse at a

particular time with a specific person or persons, using a L2" (p. 547). They further proposed a heuristic model of variables influencing WTC, inspiring a number of studies (Cao & Jiaotong, 2012; Kang, 2005; Khajavy et al., 2016; Nematizadeh, 2019; Wen & Clément, 2003; Yu, 2011). This heuristic model highlights the situational nature of WTC and accounts for multiple layers of variables that underlie WTC, all leading to L2 use. The layers comprise attributes such as social and individual factors (intergroup climate and personality), affective-cognitive factors (intergroup attitudes, social situation, and communicative competence), motivational orientations (interpersonal/intergroup motivation and self-confidence), situations antecedents (desire to communicate with a particular person and state self-confidence), and behavioral intentions (willingness to communicate) and all are manifested through L2 use.

Not long after this, Kang (2005), having studied the situational fluctuations of L2 WTC qualitatively, proposed his preliminary model of situational WTC and his definition of the construct: "an individual's volitional inclination towards actively engaging in the act of communication in a specific situation, which can vary according to interlocutor(s), topic, and conversational context, among other potential situational variables" (p. 291).

A closer examination of the definitions proposed by McCroskey and Baer (1985), MacIntyre et al. (1998), and Kang (2005) reveals the situation-dependant dynamicity and complexity of the construct. More specifically, WTC appears to be a complex phenomenon by virtue of a multitude of factors that determine an L2 speaker's decision to risk leaving safety zone and engage in communication. It is, by the same token, dynamic, in that the very same factors may affect an L2 speaker's decision to engage in communication. It therefore seems plausible to view WTC as a complex dynamic system.

3 Complex Dynamic Systems Theory

Originating in the fields of biology, mathematics, chemistry, and physics, CDS theory was initially applied to the study of language development and cognitive science by Thelen and Smith (1994), who established a set of principles to define such systems. They suggested that CDS are open and dynamic, comprise interacting subsystems, constantly change, and self-organize to adapt to new environments. They also asserted that the strength of the interactions among the subsystems changes over time, as do the impacts that they exert upon each other. Rather than adopting a macroscopic approach, the dynamic systems approach requires a researcher to focus and engage in a closer observation of phenomena.

> As we turn up the magnification of our microscope, we see that our visions of linearity, uniformity, inevitable sequencing, and even irreversibility break down. What looks like a cohesive, orchestrated process from afar takes on the flavor of a more exploratory, opportunistic, syncretic, and function-driven process in its instantiation. (Thelen & Smith, 1994, p. xvi)

CDS have typically been associated with such concepts as change, dynamicity, and evolution. van Geert (1994), for instance, conceptualized CDS as a set of variables that mutually interact and influence each other over time. The changes of the subsystems might also shape the external behaviour of the system in interaction with other systems. On the other hand, the interactions of a system with external influences/systems may also affect the states of its subsystems and alter the system's subsequent behaviour. Such internal and external interactions bring about change within the system, rendering it complex, dynamic, and nonlinear; a behaviour that is highly characteristic of second language systems. The pioneering work of Larsen-Freeman (1997) tapped into the similarities between CDS and SLA, which was later supported by further SLA-related studies (de Bot et al., 2007; Larsen-Freeman & Cameron, 2008). Subsequently, a number of empirical studies adopted a CDS perspective to examine SLA phenomena such as fluctuations in approach/avoidance motivation (MacIntyre & Serroul, 2015), L2 self (Irie & Ryan, 2015; Mercer, 2015), motivation, anxiety, and self-efficacy (Piniel & Csizér, 2015), and the developmental patterns of motivation (Hiver, 2015), just to name a few.

Just like any other system, CDS are characterized by a number of properties that have applied to the study of WTC. The following section outlines these properties.

4 Key Properties of Complex Dynamic Systems

Using a more analytic approach, we attempted to study how these properties may translate into WTC research. In approaching the properties, we will draw on the classification proposed by de Bot et al. (2007) who identified four basic characteristics of CDS manifested by SLA, including:

1. Sensitive dependence on initial conditions.
2. Variation/change in and among individuals.
3. Complete interconnectedness of subsystems.
4. Presence of attractor states.

Dependence on initial conditions. The notion of initial conditions grew out of the concept of the *butterfly effect* initially introduced by Lorenz (1963), suggesting any small change within a system or its subsystems may trigger subsequent changes elsewhere in the system. The initial point of measurement by a researcher thus represents the initial condition(s) of a system and marks an important milestone in the ways the system processes tend to develop in the upcoming stages.

From a research methodology perspective, the initial condition or state of a phenomenon under investigation could complicate the measurement of it. Learner-related factors such as their L1, L2 proficiency level, age, and essentially all the individual differences (IDs) could shape the initial condition of L2 learners and learning. Further, initial conditions may be dependent on whether a researcher picks the right time to measure a phenomenon (Larsen-Freeman & Cameron, 2008). The initial condition may be a reliable predictor of how the WTC system functions during communication. Whether or not an interlocutor is at high levels of WTC when engaging in a communication task can potentially influence the communication behaviour that emerges afterwards.

Change. Change is the central concept of CDS (de Bot et al., 2007) and has also been referred to as variation, variability, or dynamicity in the literature. In the context of CDS, change could be essentially characterized by three features: nonlinearity; self-organization; idiosyncrasy.

Nonlinearity. In climate science, despite meteorological breakthroughs, forecasting the pattern(s) of climatic conditions has proved nearly impossible, demonstrating the nonlinearly of climate behaviour. Another illustration of nonlinearity could be the classic example of a sand pile, where sand is added to the pile to the extent that it leads to an avalanche, which occurs in an unpredictable manner. Overall, not only do the subsystems dynamically change over time and at irregular intervals, but the changes take place in a nonlinear fashion (Waninge et al., 2014), which explains why dynamic systems exhibit erratic behaviour, typically hard to predict. This also implies that there are no readily predictable cause-effect relationships among the subsystems in CDS and their changing states may not be simply attributed to a single cause. In a nonlinear system, "effect is disproportionate to the cause" (Larsen-Freeman, 1997, p. 143), whereby the effect settles at varying levels of strength in relation to its cause. Larsen-Freeman (2015) further notes any cause is followed by an effect, but predicting the time and the extent of the effect is not reliable.

There are quite a few factors that help explain the nonlinear behaviour exhibited by dynamic systems, however, the system's sensitive dependence on an earlier state and the interconnectedness amongst the subsystems are two main causes triggering nonlinearity in CDS (de Bot & Larsen-Freeman, 2011). In addition, constant interactions with the external environment contribute to the nonlinearity of dynamic systems. More specifically, the more frequently components of a system interact, the more unpredictable the patterns of behaviour which emerge.

Self-organization. As stated earlier, constant interactions among subsystems require them to continuously adapt to any new condition as a result of the feedback received from previous conditions or surroundings. This feature of CDS is referred to as self-organization (de Bot et al., 2007) or reorganization (Larsen-Freeman, 2012). Mitchell (2003) defines self-organization as "any set of processes in which order emerges from the interaction of the components of a system without direction from external factors and without a plan of the order embedded in any individual component" (p. 6).

The self-organizing property of dynamic systems makes them challenging to measure due to their constantly changing states. Heylighten (1989) maintains that gaining complete information of how a system operates is barely possible due to internal self-organizing activities. In other words, while data is being collected on a specific state of a system, it may simultaneously be moving towards another state, thereby making it challenging to fully identify or track its state.

Idiosyncrasy. Change and development within dynamic systems are characterized by their idiosyncratic or distinctive behaviour, which is another form of variability in CDS. Given that a dynamic system consists of many subsystems that are in constant but varying interaction with their surroundings, and that individual cognitive systems operate in unique fashions (van Geert, 2007), it could be argued that individual trajectories of development and change vary to a certain extent.

Interconnectedness. Dynamic systems are comprised of a set of variables or subsystems that are interconnected, or there is an interplay between the variables constituting a dynamic system. These subsystems are further made up of smaller subsystems, all of which interact within their own group and at different layers. Therefore, any change in a subsystem may result in further changes elsewhere in the system, demonstrating how subsystems are interrelated. Such interconnected interactions pose a challenge to explaining the changes in or the subsequent behaviour of a system. Another challenge posed by this interconnectedness of CDS is attributing the changes to a single cause/variable (Larsen-Freeman & Cameron, 2008) while a collective force and a combination of factors are at play.

Attractor states. Another important property that characterizes CDS is the formation of *attractor states* or preferred states. Unlike the other properties of dynamic systems reviewed thus far, attractor states involve some degree of stability. An attractor state may be defined as settlement of a system into a unique point of equilibrium over time (Haken, 2006), or "the state the system prefers to be in over other states at a particular point in time" (Steenbeek et al., 2012, p. 66). Newman (2009) argued that attractor states involve "a critical value, pattern, solution or outcome towards which a system settles down over time" (p. 21). As an illustration, Hiver (2015) refers to a group of learners who begin a course with differing initial conditions and are influenced by a number of external (e.g., teacher, classmates, or context) or internal factors (e.g., L1, L2 proficiency, etc.) throughout the course. However, after a period of collective adaptation, we expect some degree of stabilization that emerges in discernible patterns of behaviour and the system transitions into a more cohesive state. Attractor states are not permanent due to the constant influence of environment on the system but may be insensitive to small perturbations (van Geert, 2007). As opposed to attractor states, there are *repeller states* that refer to transient periods of perturbations, which a system tends to avoid.

Paradoxically, formation of attractor states is not random and takes place as a result of interactions, change, or self-organization. Hiver (2015) contends that systems do not accidentally settle in attractor states, but any system, in quest of some stability, self-organizes into an attractor state, which may be a result of the feedback it receives

from the environment and external sources, or the interactions amongst subsystems (Boschetti et al., 2011).

As has been discussed, the key properties of change, dependence on initial conditions, interconnectedness of subsystems, and formation of attractor states characterize the dynamic systems. In the following section, we will look at a handful of recent studies that have focused on dynamics of WTC and whose findings point to the ways in which WTC resembles a complex and dynamic system. The discussion of each study begins with a review of its methodology and proceeds with a discussion of the observed CDS properties. Table 1 provides a concise summary of the studies reviewed.

Complex Dynamic Systems and WTC: Methodologies and Findings

Even though investigating WTC from a CDS perspective has only recently gained ground, the few studies conducted have shown that WTC retains characteristics of a dynamic system, with some of them directly adopting a CDS perspective and some observing properties characterizing CDS (Kang, 2005; MacIntyre & Legatto, 2011; Mystkowska-Wiertelak, 2018; Mystkowska-Wiertelak & Pawlak, 2014; Nematizadeh & Wood, 2019; Pawlak & Mystkowska-Wiertelak, 2015; Pawlak et al., 2015; Wood, 2016).

An early qualitative investigation of WTC was pioneered by Kang (2005). Looking specifically at situationally-constructed WTC, Kang employed semi-structured interviews, video-taped conversations and stimulated recall tasks with four non-native speakers. By triangulating the entire dataset, he found that situational WTC emerges as a result of interaction between situational (topic, interlocutor, and context) and psychological (excitement, responsibility, and security) variables.

While this study did not adopt a CDS perspective, it observed the dynamic nature of WTC even in short spans of time and with the same interlocutor. For one thing, a feature observed in this study was the joint role of three interacting psychological variables that co-led to the emergence of situational WTC. This joint interaction resembles, to a certain extent, the interconnected feature of CDS whereby a number of underlying layers influence and interact with each other. Kang goes further and makes a comparison between the psychological variable of *excitement* as opposed to interest, arguing that the former emerges dynamically out of a given situation and fluctuates during communication, while considering interest as an enduring characteristic. Situational WTC that emerges from a given context could interact with trait WTC, causing situational WTC to display unpredictable or nonlinear behaviour.

It could perhaps be argued that the first formal investigation of WTC through a CDS perspective was conducted by MacIntyre and Legatto (2011). The authors devised an idiodynamic methodology (MacIntyre, 2012a) to investigate WTC's shifts. The method involves video-recording a participant during a communicative task and, subsequently, having them view their recording and rate a communication construct such as WTC using a Windows-based computer application on a moment-by-moment basis. The researcher and participant engage in a stimulated recall interview shortly after wherein the participant explains the fluctuations of the construct illustrated through a bitmap graph captured by the application. The retrospective

Table 1 Studies reviewed

Studies	Main topic of investigation	Methodology	Data collection and instruments	CDS properties observed
Kang (2005)	Dynamic emergence of situational willingness	Qualitative	Semi-structured interviews, videotaped conversations, and stimulated recall	Change, nonlinearity, unpredictability, interconnectedness
MacIntyre and Legatto (2011)	A dynamic system approach to willingness to communicate	Idiodynamic methodology (qualitative & quantitative)	Idiodynamic software, video-recordings, stimulated recall interviews	Change, initial conditions, interconnectedness, attractor states, self-organization
Mystkowska-Wiertelak and Pawlak (2014)	Fluctuations in WTC	Qualitative and quantitative	Self-ratings and questionnaires	Change and dynamicity,
Pawlak and Mystkowska-Wiertelak (2015)	Dynamic nature of L2 WTC	Qualitative and quantitative	Self-ratings, audio recordings, questionnaires, follow-up interviews	Change, dependence on initial condition, idiosyncrasy, interconnectedness
Pawlak et al. (2015)	Nature of classroom WTC	Quantitative and qualitative	Self-ratings, questionnaires, and a teacher's comments	Dynamicity & unpredictability, complexity, sensitive dependence on initial conditions, idiosyncrasy
Wood (2016)	WTC and L2 fluency	Idiodynamic (qualitative and quantitative)	Idiodynamic software, video-recordings, stimulated recall interviews	Dynamicity & complexity, interconnectedness, sensitive dependence on initial conditions
Mystkowska-Wiertelak (2018)	WTC fluctuations	Quantitative and qualitative	self-reports of WTC, lesson plans, questionnaires, semi-structured interviews	Dynamicity, sensitive dependence on initial conditions, interconnectedness, attractor states
Nematizadeh and Wood (2019)	Cognitive and affective dynamics of WTC & L2 fluency	Idiodynamic (qualitative and quantitative)	Idiodynamic software, video-recordings, stimulated recall interviews	Dynamicity, complexity & interconnectedness, attractor states

feature of the stimulated recall interview allows researchers to look further into the participants' mental processes (e.g., cognitive, affective, etc.) while performing the tasks.

Having students complete communicative tasks on eight different topics, MacIntyre and Legatto observed varying initial conditions in WTC mainly due to the participants' varying levels of familiarity with the topics. Participants displayed greater tendency to speak about the topic most familiar to them and evinced less interest in the topics they did not know much about. This would, consequently, determine how willing they were to approach the task. As an illustration, the researchers noticed some participants abandoned an oral task early on as they found the topic/task unfavorable (initial condition), despite their ability to carry through when presented with different topics. This highlights the significance of task/topic in an L2 communication task as a predictor of WTC, and on a broader scale, how contextual factors of this sort determine interlocutors' inclination to avoid, approach, or engage in communication. Furthermore, the phenomenon of change consistently characterized all the participants' ratings of their WTC, demonstrating how a previous state transforms into a subsequent state; that is, how a system gets perturbed and self-organizes into another attractor state. Additionally, the data indicated the interconnectedness property of dynamic systems, with affect, cognition, and linguistic factors interacting and influencing each other. For instance, whenever the cognitive processing for vocabulary retrieval failed, WTC declined, illustrating an interplay between cognition and affect. Formation of attractor states was also observed whenever a participant perceived himself capable of doing the task; that is, the system self-organized into a period of stability, whereas in the case of another participant, the attractor state was perturbed due to topic shift, resulting in a significant drop in WTC levels. In brief, WTC can settle into an attractor state when linguistic, social, cognitive, and emotional systems operate successfully to facilitate communication. However, struggling to retrieve vocabulary due to linguistic or cognitive breakdowns could perturb the attractor state of WTC, which could result in an interlocutor's abandonment of the task.

While the idiodynamic method appears to elicit information from the participants that is invisible to a researcher, it is not flawless. An issue seems to be the fact that the idiodynamic method can only capture a fairly limited amount of data and the communicative tasks need to be short. The longer the communicative tasks are, the heavier the demand on the participant's memory and the more likely the participant is to forget the causes of a shift in WTC. Another drawback is that this method does not lend itself to classroom-based research. Therefore, any study using this method would have to simulate a classroom setting and would be considered laboratory-based, believed to be incapable of capturing authentic data. Lastly, unless multiple observations are made, the collected data can only account for a single communicative situation and thus will not be generalizable to other communicative contexts.

Mystkowska-Wiertelak and Pawlak (2014) looked at WTC fluctuations through participants' self-ratings every 30 s during five-minute monologues and dialogues, as well as follow-up questionnaires. The authors first compared the effect of tasks (monologue and dialogue) using paired-sample t-tests and found that participants

were more willing to speak during monologues than during dialogues. The authors attribute this statistically significant difference to a number of factors, including participants' independence in leading the discussion, decision on the topic, and greater control over tasks. The results of WTC ratings and questionnaires, including items on WTC, classroom WTC, frequency of communication, perceived competence, and communication anxiety, were then compared using Pearson correlation tests, and statistically significant correlations were found between WTC in English and perceived competence, and between classroom WTC and frequency of communication. One important limitation of this study was its laboratory-based nature that does not capture authentic WTC, and, as the authors acknowledge, disturbing the participants every 30 min is unnatural.

Mystkowska-Wiertelak and Pawlak (2014) acknowledge the dynamicity of WTC, and some of their findings could be explained by the properties of CDS. For instance, participants in this study demonstrated varying initial conditions depending on the task type they engaged in. They tended to be more willing to talk at the outset of monologues and unwilling at the outset of dialogues. This initial condition in WTC levels did not last long as the participants ran out of ideas during the monologues, which lowered their WTC. Participants, however, gained WTC when engaged in an interactive dialogue. The perturbation to the initial levels of WTC and how it changed during the communicative tasks could be explained by the theory of CDS in that phenomena do not retain stable conditions and undergo change for a myriad of reasons.

Pawlak and Mystkowska-Wiertelak (2015), in a mainly qualitative study with a quantitative component, studied WTC changes through having advanced learners of English carry out an impromptu dialogue in pairs lasting for less than 10 min. During the dialogues, the participants were prompted to self-rate their WTC level every 30 s using a beeping sound. Subsequently, they attended interviews and completed questionnaires inquiring about the reasons for WTC shifts.

While this study did not adopt a CDS approach, Pawlak and Mystkowska-Wiertelak observed a number of characteristics resembling those of CDS. For one thing, the researchers found that initial levels of participants' WTC determined who would initiate the conversation, highlighting the importance of one's initial condition in rendering one willing or unwilling to communicate. Looking at the figures illustrating participants' self-ratings of their WTC, consistent variability and change characterised the WTC ratings and emerging patterns of WTC changes tended to be idiosyncratic to each participant. These changes also took place due to interactions among linguistic (e.g., lack of lexical knowledge), cognitive (e.g., failure of lexical retrieval), and affective factors (e.g., anxiety). These dynamics in WTC closely resemble the interconnectedness property of CDS. The authors further acknowledge that learners' WTC during communicative task was affected by a multitude of influences, suggesting the complexity of the construct, and that these influences are "intricately interwoven, interact in unpredictable ways and are often themselves in a state of flux" (p. 8), all of which characterize CDS. As an illustration, lack of lexical resources (linguistic) resulted in high levels of anxiety (affect) that in turn lowered WTC levels. In addition, when individuals were invited to express their opinions,

discuss their views, or were simply interested in the topic of discussion, their WTC rose and remained stable as long as the speaker had ideas to carry on. The whole dynamics here resemble the formation of an attractor state.

Pawlak et al. (2015), in an attempt to investigate patterns of change in WTC and dig deeper into the contextual and individual factors shaping WTC, conducted a mixed-methods study in a classroom context. The researchers recruited 60 advanced students of English in four different intact groups and used WTC self-rating grids (every five minutes), questionnaires (including open-ended and closed items), and teacher observations to study WTC shifts and patterns during conversation classes.

The researchers acknowledge that the WTC behaves like dynamic systems, mainly due to unpredictable, multi-level interactions between the contextual and individual variables. Variability in individuals' WTC was observed in all the four groups and the tasks employed, whereby magnitude and degrees of variations were idiosyncratic to each group. It is also argued that such variations were observed as a result of interactions between factors such as topic, tasks, and learner-related variables. Additionally, the researcher found it impossible to identify a common pattern in the WTC fluctuations across the four groups, with dramatic differences in the initial conditions of WTC that determined the subsequent shifts in the system, suggesting idiosyncrasy and dependence on the initial condition features of CDS.

Wood (2016) used the idiodynamic method to investigate the interaction between WTC and L2 speech fluency with four intermediate-level ESL students. More specifically, participants engaged in a monologic picture description task while being videotaped. Participants then viewed their recordings and rated their WTC moment by moment. The final step involved a stimulated recall task, where the researcher looked into factors that had triggered shifts in WTC. Wood made quantitative analysis of the temporal measures of speech (e.g., speech rate, mean length of runs, etc.), some of which were then analysed in relation to the corresponding self-ratings of WTC. Wood drew on MacIntyre's (2012b) concept of wave to explain the concepts of change and variability in WTC.

Having reported four types of interaction, Wood concluded that the key properties of CDS characterise WTC and the interaction between WTC and fluency is complex and dynamic as a result of different cognitive, affective, and linguistic factors. More specifically, the shifts in WTC were triggered by factors including cognitive skills of speech production (e.g., item retrieval), linguistic competence (e.g., vocabulary and uncertainty about accuracy), and affective state (e.g., self-monitoring, negative self-assessment, or anxiety). The cognitive, affective and linguistic variables, as subsystems of WTC, were found to influence one another, causing perturbations to the system (WTC), demonstrating the system's interconnectedness as a key principle of CDS.

Wood observed that WTC dropped as a participant did not receive positive feedback from their interlocutor or felt uncertain about structural accuracy, or failure to retrieve a lexical item, which appears to be a common reason for lowered WTC in this study. By the same token, one of the participant's WTC improved when he managed to communicate what he meant and perceived his lexical items as being appropriate. Wood also reported cases where drops in WTC lasted until subsequent utterances

were produced by the participants, hinting at the dependence on initial conditions property of CDS. In addition, interconnectedness among the underlying layers of speech production including linguistic knowledge, cognitive processing capacities, and affective factors were observed to improve or lower WTC.

Another study by Mystkowska-Wiertelak (2018), with a qualitative and quantitative design, explored the classroom-based WTC fluctuations of a single participant during a speaking course. The researcher used five-minute self-reports of WTC, which were cross-referenced with detailed lesson plans, as well as questionnaires and semi-structured interviews. The study also looked at the contextual and individual factors that contributed to WTC shifts.

Mystkowska-Wiertelak (2018) observed the dynamic nature of WTC on varying time spans including during single tasks/activities, individual classes and throughout the entire semester. The author attributed the dynamicity of WTC to the contextual variables including topic, task, and interlocutor. It also appears that since the participant of this study had extensive lexical knowledge, he would welcome warm-up activities focused on this linguistic dimension, which improved his WTC for the rest of the lesson. This exemplifies an interconnected interaction between the linguistic (lexical knowledge) and contextual variables (task/activities), which emerged in the form of high WTC. We could further argue that the participant's WTC, which improved because of his interest in the vocabulary-focused instructions, set the tone for the rest of the lesson, testifying to dependence on the initial condition feature of CDS. Another illustration of dependence on initial conditions was observed during the participant's interactions with other interlocutors, whereby his WTC was shaped by the proficiency level of the interlocutors as well as the degree of their engagement in the task. Moreover, the researcher reports a period of stability in WTC levels mainly because of the participant's positive impression of the tasks' usefulness, paving the way for an upcoming positive and stable level of WTC, which, from a CDS perspective, resembles an attractor state.

Nematizadeh and Wood (2019) looked at the cognitive and affective dynamics of WTC in interaction with temporal measures of speech, drawing on Segalowitz's (2010) dynamically-informed framework of fluency, which accounts for interactions among a number of influences, including WTC. This study also employed the idiodynamic method along with a qualitative component to monitor WTC shifts during a communication task with four participants. The participants engaged in a simulated one-on-one, mostly monologic communicative task while being recorded. They were subsequently asked to view their video recordings and self-rate their WTC levels moment by moment. The bitmap graphs generated by the idiodynamic application were then used to guide the subsequent stimulated recall tasks where participants explained the rises or falls of their WTC.

The authors interpreted their findings through a dynamic systems perspective, demonstrating how this interaction retains features of CDS. The participants' self-ratings of their WTC consistently demonstrated the shifting and dynamic nature of the construct, mainly occurring as a result of the participants' constant self-monitoring of speech. The ongoing interactions between the cognitive, affective, and linguistic

systems that shaped WTC during communications not only demonstrated the interconnectedness feature of the CDS, but also was a main reason for the fluctuating behaviour of WTC. Lastly, an attractor state emerged in one of the participants' data when she discussed her daily personal experience. Possessing support ideas was the main reason why the participant remained willing to talk as long as that personal experience was the subject of discussion.

5 Future Directions

With only a handful of studies viewing WTC as a CDS, quite a few avenues remain to be explored to bridge the existing gap in the WTC literature, draw more concrete support and evidence for previous research, and devise more refined research methodologies. First of all, while we are convinced that the correlational studies would offer a great deal of intuition about the nature of WTC at a specific time, they can only capture "a snapshot of the processes" (MacIntyre, 2007). We therefore encourage future WTC researchers to employ dynamically informed research designs, which, as demonstrated, have the potential to uncover the complex and dynamic processes underlying the variable. Despite the growing interest in WTC research employing a CDS approach has opened up conversations about the dynamicity and the complexity of the construct, the existing literature on WTC dynamics does not appear to have captured a comprehensive image of it. Furthermore, the results produced by the existing studies should be confirmed by further investigations. For instance, MacIntyre and Legatto (2011) report the interconnectedness feature of CDS in WTC, but provide inadequate evidence as to how this is realized and how WTC is shaped or influenced by such an interconnected interaction within its subsystems. Additionally, methodologies devised thus far are at a disadvantage with regards to the micro-timescale adopted and the contexts investigated. The reviewed studies have mostly monitored WTC shifts on micro-timescales ranging from moment by moment (MacIntyre & Legatto, 2011; MacIntyre & Serroul, 2015; Mercer, 2015; Nematizadeh & Wood, 2019; Wood, 2016), 30 s (Pawlak & Mystkowska-Wiertelak, 2015), or five minutes (Mystkowska-Wiertelak & Pawlak, 2014; Pawlak et al., 2015). Hence, future research needs to look at the changes more longitudinally as change within the context of L2 learning occurs over longer spans of time. Macro-timescales, coupled with micro investigations, should shed further light upon the yet-to-be-explored dimensions of the variable. Another initiative to take with WTC research pertains to the frequency of data collected. Single data collection procedures such as the idiodynamic method discussed in this chapter tend to provide very limited insight. Therefore, we encourage future WTC researchers to adopt methods that capture several observations to monitor the consistencies and inconsistencies across differing data collections as well as varying communicative contexts.

6 Conclusion

It has been argued that the concept of change has not been a major concern when researching SLA, and researchers have tended to focus on an end-point product, overlooking the processes of change and development (Larsen-Freeman, 2015). However, as has been demonstrated in this chapter, the nature of individual differences such as WTC tends to be dynamic and thus their interactions with other constructs or language learning skills fluctuate. In support of this, Saldaña (2003) suggests that "dynamics cannot meaningfully be understood merely by examining two fixed points in time, but rather we need to explore processes of changing, looking not at 'from-till' but at from-through" (p. 8). Despite the fact that quantitative research, as the most prevailing WTC research method, has uncovered several factors shaping WTC, it does not seem to have adequately informed investigation of the underlying processes and ways events unfold during communication. The theory of CDS employs a microscopic approach that allows researchers to observe underlying subtle processes such as dynamicity, complexity, and many other features characteristic of dynamic systems. With this in mind, the theory CDS appears to have much more to contribute to WTC research, explaining why it has been regarded as a theoretical and methodological paradigm shift (van Geert, 2011).

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Case Studies of Iranian Migrants' WTC Within an Ecosystems Framework: The Influence of Past and Present Language Learning Experiences

Denise Cameron

Abstract This chapter reports on a qualitative and longitudinal investigation into the willingness to communicate (WTC) of Iranian migrants in their past Iranian English classrooms, in their present New Zealand pre-university classrooms, and in the community outside. By means of questionnaires, observations, stimulated recall, and multiple interviews with these learners and their classroom teachers, the question is addressed as to whether their past learning experiences affected their present WTC, and which elements of classroom and community context facilitate or inhibit their readiness to speak. In the process of this investigation, the relevance of dynamic systems theory and the usefulness of an ecological framework are explored in order to describe the nature of their WTC, ranging from the micro context of the classroom to the macro context of the wider society of Iran and New Zealand. Factors which affect their past English language learning experiences in Iran were family influence, type of school, and teacher expertise, whereas now in New Zealand their relationships with their classmates, opportunities to speak in and out of class, and the effect of different types of curriculum are revealed.

Keywords Willingness to communicate · Dynamic systems theory · Ecosystems · Context · Case study

1 Introduction

Since the development of the L2 willingness to communicate construct by MacIntyre, Dörnyei, Clément, and Noels in 1998, a variety of psychological factors which enhance or diminish an individual's desire to speak in a second language have been investigated as to whether they are fixed or fluctuate according to contexts such as time, place, or social environment. More recently, the principles of dynamic systems theory (DST), which provide "an ecological theory" to describe "a moving tapestry

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_3

of interacting systems" (Larsen-Freeman, 2016a, p. xi), have been seen as an appropriate way to analyse the WTC phenomenon (e.g., Elahi Shirvan & Taherian, 2016; King, 2016; MacIntyre & Legatto, 2011).

2 Literature Review

Initially, particularly in L1, WTC was regarded as an enduring, trait-like disposition, but more recently it has been recognised as dynamic with both transient and enduring characteristics. MacIntyre has defined WTC as "the probability of initiating communication, given choice and opportunity" (2007, p. 567), and described it as a composite variable reflecting the multiple and sometimes conflicting influences on target language communication. In a more detailed recent account, Yashima et al. (2018) describe the precursors of L2 WTC (p. 132): "Context, including topic, group-level affective state, ambience, other students' reactions, and exquisitely contingent processes interact to trigger fleeting, momentary psychological reactions that include feeling self-confidence and a desire to communicate at a particular moment with a particular person (or persons)—this is the definition of WTC and the final psychological step prior to L2 use".

2.1 WTC and L2 Acquisition

Second language acquisition (SLA) researchers in the last two decades have emphasized the importance of WTC in the L2 as a vital component of modern language instruction (e.g., MacIntyre et al., 1998; MacIntyre & Legatto, 2011). Communicative competence alone may not result in actual L2 communication in or outside the classroom. However, "L2 learners with a high level of WTC are more likely to use L2 in authentic communication and facilitate language learning" (Kang, 2005, p. 278). Research into interaction-driven second language development (e.g., Gass, 2003; Mackey, 2002) also argues for the benefits of learning through engagement in meaningful interaction with others, emphasising the point that "learners have to talk in order to learn" (Skehan, 1989, p. 48).

Although in 1998, MacIntyre, Dörnyei, Clément, and Noels collaborated in the creation of a heuristic model which related specifically to the *combination* of variables which contribute to WTC, many empirical researchers since that time have endeavoured to isolate *individual* contextual factors which enhance or reduce WTC (for recent reviews of WTC research, see Akdemir, 2016; MacIntyre et al., 2019; Shao & Gao, 2016; Zarrinabadi & Tanbakooei, 2016; Zhang et al., 2018). However, Dörnyei et al. (2015) have now suggested that a more holistic approach is necessary to investigate factors affecting SLA rather than "examining the relationships between well-defined variables in relative isolation" (p. 1). Their proposal is for the application of complex dynamic systems principles.

2.2 Dynamic System(s) Theory and WTC

Although various researchers have concluded that WTC is a 'dynamic' phenomenon (Cao, 2011; Kang, 2005; Mystkowska-Wiertelak, 2016; Peng, 2014), dynamic systems theory (DST) has only recently been applied to the construct (King, 2013; Mulvaney, 2015; Yashima et al., 2018).

As an explanation of how and why the WTC construct should be regarded as a dynamic system, MacIntyre and Legatto (2011) conclude there are changes over time wherein each state is partially dependent on the previous. Therefore, a learner's WTC is likely to be affected by their WTC on a previous occasion in another context, whether immediately before, or at some stage in the past. There is also an interconnectedness between the linguistic, social, cognitive, and emotional systems which produce WTC. When these systems function harmoniously together, WTC can be seen as an *attractor* state, whereas interference, such as when there is a deficiency in language or the affective state of the speaker is compromised, can cause a *repeller* state and communication is abandoned. Non-linearity or threshold effects (the so-called *butterfly effect*) may explain why even small changes in WTC at times have considerable impact on communication, or at other times only minimal consequences.

2.3 Ecological Framework and WTC

Although both Dörnyei (2009) and Larsen-Freeman (2012) have suggested that finding an appropriate methodology for researching complex dynamic systems is not straightforward, the ecosystems model may be one means of *describing* and *analysing* a dynamic operating system such as WTC.

Ecology as a general concept refers to the "study of the relationships between all the various organisms and their physical environment. It's a complex and messy field of study about a complex and messy reality" (van Lier, 2002, p. 144). In other words, it describes the complex interaction between individuals and their surrounding environmental characteristics. Context is central to the investigation and "is the focal field of study" (van Lier, 2002, p. 144).

A range of cultural contexts have now been studied in relation to WTC (e.g., Japan, China, Korea, North America, Europe, Turkey, and Iran) but the focus has largely been on the micro-context of the classroom. The complete micro-, meso-, exo-, and macro-levels of the framework have only rarely been applied in WTC research, such as in investigations by Peng (2012), Cao (2011), and Elahi Shirvan and Taherian (2016).

Thus, Peng (2012) refers to Bronfenbrenner's (1993) nested ecosystems model when placing the EFL (English as a foreign language) classroom in her WTC study at the *microsystem* level; learners' past experience and activities outside the classroom

which affect their WTC at the *mesosystem* level; curriculum design and course assessment at the *exosystem* level; and finally, the educational and sociocultural context in China at the *macrosystem* level (see Fig. 1).

According to Cao (2011, p. 469): "An ecological view requires exploration of how each component in a context relates to the others". She investigated the interrelationship of variables interacting with situational WTC in class, as well as the interdependence of teachers, learners, their micro classroom context and macro institutional environment. Thus, the perspective was naturalistic and holistic. She found it to be a useful way to explain the dynamic nature of the situational classroom WTC construct.

In the Iranian context, Elahi Shirvan and Taherian (2016) used the nested ecosystem model to confirm Peng's (2014) and Cao's (2011) findings in regard to Chinese students (in China and New Zealand respectively) that individual, environmental, and linguistic factors influence WTC in an interconnected manner. Elahi Shirvan and Taherian (2016) recognised, however, the specific influence of the Iranian

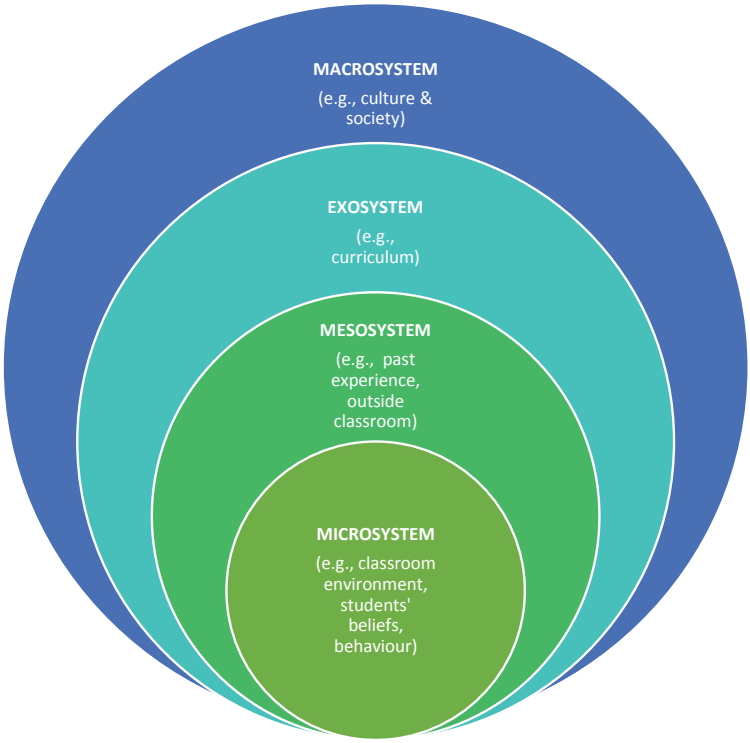

Fig. 1 Ecosystems framework for WTC. *Note.* Adapted from Cao (2009), Peng (2014), van Lier (2004)

education system and culture at the three upper or outside levels of the diagram (meso-, exo-, and macro-), which affected the WTC performance of the participant students in the micro-system of the classroom.

Therefore, for this study I took an ecological perspective, as I was not only describing a dynamic process within the classroom *micro-environment*, within which the learners are studying now (in New Zealand), but also examining the *meso-context*, within which the learners have studied in the past (in Iran). It has been suggested that such past L2 learning experiences, particularly if they are negative, can have an effect on the present WTC of learners (see Liu, 2005; Lyons, 2014; Peng, 2012). In fact, Yashima et al. (2018) have described WTC as a "phenomenon that can … be conceptualised on different timescales" (p. 119). Traditionally, however, as a result of the use of standard WTC questionnaires, subjects have only been asked about theoretical present or future willingness (McCroskey & Richmond, 1987; MacIntyre et al., 2001).

At this *meso-level*, I also documented activities *outside* the classroom, both in Iran and New Zealand, and their contribution to the participants' WTC. Although some researchers have focussed on learners' utilisation of the target language beyond the classroom and incorporated questions on this aspect of WTC in their questionnaires or interviews (see Cao, 2011; Gallagher, 2013; Peng, 2014), it seems an especially important area to investigate in the context of migrants learning the language of the community in which they are permanently settling.

Moreover, I examined the curricula in Iranian and New Zealand English language schools at the *exo-system* level and explored the general influences of Iranian and New Zealand culture and society at the outermost *macro-level* of the ecological framework. The influence of curriculum and culture on classroom WTC has been discussed in the context of Iran in a range of articles published in English in the last decade (e.g., Ghonsooly et al., 2012; Khany & Mansouri Nejad, 2016; Mokhtarnia, 2011; Sadat Farhang et al., 2016; Tavakoli & Davoudi, 2017; Yaghoubinejad et al., 2017), and the general conclusion seems to be that they are important factors to be taken into consideration. In the New Zealand context, the few studies published on WTC so far (see Cameron, 2013, 2015; Cao, 2009; Zhong, 2013) have made reference to the effects of the wider society and educational environment on their participants' willingness or unwillingness to communicate in class and signalled that this area needs further investigation.

To sum up, by adopting an ecosystems framework this longitudinal multiple case study highlights the interplay between WTC variables and the learners' past and present social, cultural, and academic contexts, with the overarching question: To what extent is the WTC of Iranian migrant learners of English in New Zealand a dynamic phenomenon both inside and outside the classroom and when viewed as a past and present experience over an extended period of time?

As a focus for my study, I framed four research questions as outlined below.

2.4 Research Questions

1. Which individual and contextual factors do Iranian learners regard as influential on their willingness to communicate in the English language classroom context in Iran? And in New Zealand?
2. How do Iranian learners perceive any variations in their WTC from their English classes in Iran to their English classes in New Zealand?
3. How do Iranian learners perceive any variations in their WTC from their English classes in New Zealand from one semester to another?
4. Which individual and contextual factors do Iranian learners regard as influential on their willingness to communicate outside the classroom in Iran? And outside the classroom in New Zealand?

3 Methodology

3.1 Approach and Design

The nature of the research questions posed above lent itself to the use of a methodological approach which answers "how" and "why" questions (Yin, 2009). Therefore, case studies as empirical enquiries which can provide such descriptive and interpretive data are recommended as appropriate for investigations of this nature, in order to examine a real-life phenomenon in depth in a particular context and over a particular length of time (Yin, 2009). The construct of WTC as experienced by this group of Iranian learners in the contexts of New Zealand and Iran, inside and outside the classroom and over a period of 8-18 months, could be regarded as such a phenomenon.

The use of an ecological approach also provided a source of what Kramsch and Steffensen (2008, p. 25) term "ecological validity". In other words, the study examined the participants' WTC behaviour not only in their immediate *classroom* environment, but also in their larger *social and cultural contexts* both in New Zealand and Iran. Such an exploration of all the possible contexts in which learners may find themselves is the key to the ecological approach to research recommended by van Lier (2005) and Kramsch and Steffensen (2008).

3.2 Instruments

Data were generated using an application of four different collection methods to the learners, teachers, and Ph.D. student participants. They were multi-purpose as each instrument provided data to answer one or more research questions. It should be noted that learner interviews and questionnaires were in the English medium as

their level of English was high enough to understand and speak well and they were encouraged to ask any questions if they did not understand.

3.2.1 Questionnaires

The first was a questionnaire for the learners. This was an instrument adapted from Cao and Philp's (2006) WTC scale, comprising items answered using a 5-point Likert scale, which provided data as to the different communication contexts in which the learners felt most WTC. These data also provided an overall WTC rating. Open ended questions were added to provide another source of information on the learners' perceived variations in WTC from Iran to New Zealand and from one semester to another in their New Zealand English classes. Demographic information was also sought to establish age, gender, length of time in New Zealand, duration of English study in Iran and New Zealand etc. This questionnaire was administered twice to the same learners, at the beginning of both the first and second semesters to track any changes in their WTC from their first into their second semester, and for some participants a third semester.

At the end of each semester, the classroom teachers of the learners were asked to assess the learners' level of WTC using the same items as the learners' questionnaire. They were also asked open ended questions in which they could comment on the learners' WTC as observed by them in class.

3.2.2 Observations

As a second source of data, an observation schedule was used by the researcher/observer in the participants' English classes to track the learners' WTC behaviour in class by noting how often learners demonstrated WTC by, for example, answering the teacher's questions, taking part in pair or group discussion etc. Field notes were taken by the researcher to describe classroom events as they occurred and establish the context of the WTC displayed. Recordings of the learners' spoken contributions were made to provide another source of data. These observations took place twice over a period of 2 semesters. On each occasion, learners were observed individually for a period of one hour of class time.

3.2.3 Stimulated Recalls

Stimulated recalls were the third method used. Immediately after each observation, the learners were interviewed by the researcher in order to discuss their reactions to the written data collected by the observer and the recordings of their spoken contributions to class. They were asked to comment on and give possible reasons for any varying levels of WTC. These stimulated recall interviews took place twice over a period of 2 semesters.

3.2.4 Interviews

Semi-structured interviews conducted by the researcher provided a fourth method of collecting data. As a result, the learner participants were interviewed individually by the researcher at the beginning of each semester. Interview questions were prepared by the researcher in advance, but additional topics such as those related to WTC and learners' past and present English language learning experiences arose during the interview and were explored further (see Appendix for pre-set questions). A third follow up interview of two of the learners was conducted during their next semester class, 18 months after the beginning of the study, to track any changes in their WTC as they progressed to mainstream university classes. These two learners are the participants discussed in this chapter.

Interviews with the participants' classroom teachers were conducted at the end of each semester to enable them to comment more fully on their learners' WTC. Iranian teachers of English, now resident in New Zealand as Ph.D students, were also interviewed to corroborate the student participants' past English language learning experiences. They were asked to describe their impressions of learning and teaching English in Iran. These interviews provided comparative data.

3.3 Data Analysis and Trustworthiness

Although almost all the data collected in this study were qualitative, there was a small quantitative element incorporated in the questionnaires and observations. However, the data in the form of written answers to the open-ended questions in the questionnaires, observational notes, the transcriptions of the stimulated recalls, and interview recordings were all analysed qualitatively.

Therefore, as the stimulated recalls and interviews took place over the course of the study, the audio recordings were manually transcribed and carefully checked. No corrections, however, were made to the grammar in an effort to convey some aspects of the oral nature of the communication, and to allow the participants to convey more of their 'voice' than mine (Duff, 2008). The participants were also emailed copies of the transcriptions for feedback and amendment if they wished, as a means of *member checking* (see Duff, 2008). However, they did not suggest any amendments or object to the use of these data.

When all the raw data related to a participant had been collected, a framework was created with empty sections for the inclusion of themes related to the learner's WTC. As an ecological approach had been taken in the design of this study, Bronfenbrenner's (1993) four ecosystems (micro-, meso-, exo-, and macro-) were used as a descriptive framework for the data. Relevant data from the teachers' questionnaires and interviews and the observation data collected by the researcher/observer were also added to the individual student's framework. Therefore, the use of the ecosystem model as a framework provided "a consistent and systematic view of context and a clear connection between person and context" (van Lier, 2005, p. 205).

To ensure that the largely qualitative study was 'trustworthy', I used *crystallisation*, that is, a wide variety of methods, data sources, viewpoints, and times, in order to increase its credibility; *prolonged engagement* in the field (18 months); *peer debriefing*, for example, asking colleagues for their reactions to coding of data; *intercoder reliability* checks; and *member checks* with the participants to verify the accuracy of the data (see Patton, 1990).

3.4 Context and Participants

The research site for the study was a New Zealand university in 2015–2016, although the three consecutive classes attended by the two learner participants (Golnaz and Tina), who are discussed in this chapter, were pre-university and at an IELTS level of approximately 5.5. They were fulltime learners enrolled for semester periods of 4–5 months. Their classes covered the four skills of speaking, listening, reading, and writing, but this study focussed on their willingness to communicate in the speaking aspect of their course, as this was more easily observable. These two learner cases were able to be interviewed and observed over a period of 18 months and 3 class levels, which fulfilled the longitudinal recommendations of dynamic systems and ecological theorists (e.g., Larsen-Freeman, 2016b; van Lier, 2004). They were also contrasting cases in some aspects of their English learning experience in Iran, and length of time in New Zealand (Yin, 2009). They formed part of a larger Ph.D. study comprising 10 learner participants and 10 teachers in total (Cameron, 2020). The demographic information of the two learner participants is tabulated below (Table 1).

Three of the participants' class teachers were also interviewed as well as three Iranian English teachers, now Ph.D. students at the same university, who provided background information as to the nature of English language instruction in Iran.

In accordance with the requirements of the university's ethics committee, the participants were informed of the nature and purpose of the research and invited to take part in the project. Their participation was voluntary and their confidentiality assured. The study was not part of the learners' classwork or assessment programme.

The reason that I chose to focus on Iranian students of English in New Zealand was that, in contrast to the reported 'reluctance to speak' of Iranians studying English

Table 1 Participants

Code name	Gender	Age	Time studying English in Iran	Length of time in New Zealand*	Time studying English in New Zealand*
Golnaz	Female	34	7 years (public)	4 years	4 years
Tina	Female	40	7 years (public and private)	11 years	4 years

*By end of study

Note. Pseudonyms have been used for all the participants in the study to protect their confidentiality

in Iran (Ghonsooly et al., 2012; Papi & Abdollahzadeh, 2012), Iranian students in my English classes, generally speaking, could be relied on for their willingness to communicate orally in classroom interaction activities. Therefore, I was interested in investigating the possible reasons for these differences in WTC from the Iranian to the New Zealand context. Iranian students were also selected as they made up a substantial group in the mixed nationality classes at this university and all had had English language learning experiences in Iran before migrating to New Zealand. In fact, Iranian students' numbers are increasing exponentially all over the world, especially at Ph.D. level (Ardavani & Durrant, 2015). In addition, the findings of my previous studies (Cameron, 2013, 2015) into the WTC of Iranian participants from the same university suggested that this area of research was worthy of further in-depth investigation.

Learner Case Study 1—Golnaz

Golnaz is an Iranian female student originally from the south of Iran. At the beginning of the study (S1, 2015), she was 33 years old and had been in New Zealand for 3 years. She came by herself to join her two brothers who had arrived 12 years before. She had studied English in Iran for 2–3 hours per week as a compulsory subject for 5 years during the two post primary levels of government schooling: junior high school and high school. She taught kindergarten for 2½ years before coming to New Zealand. She then enrolled in a pre-university English course for 3 years with the intention of studying to be a teacher.

Learner Case Study 2—Tina

Tina is also an Iranian female student who comes from Abadan in the south west of Iran. She was 39 at the beginning of the study and is single too. She had been in New Zealand for longer—10 years—and came to join her brother's family. More recently, her elderly father had also come to live with them. She began learning English in Iran as a teenager and studied the language for 7 years. Unlike Golnaz, she attended private English classes in language institutes and then went on to train as a nurse at university. She worked in New Zealand in retail for 8 years and then returned to study English in a pre-university English course for 3 years. She initially expressed her wish to complete a certificate in the mental health area but felt under pressure from Golnaz to join her in enrolling for an education degree.

Both learner participants discussed in this chapter were granted permanent residence in New Zealand as a result of family members being given asylum here. This situation could have influenced their motivation to learn and communicate in English, as a return to their country of origin was unlikely. They also had their fees paid for English classes through a government scholarship scheme.

4 Results and Discussion

In the interviews and questionnaires, some of the most important factors mentioned by the two participants as influencing their WTC were their class activities, speaking opportunities in and out of class, and the curriculum both in Iran and New Zealand. These factors will be discussed below within the level of the ecosystem to which they seem to be most relevant. However, these levels are inevitably intertwined, and ultimately it was the effect of the various aspects of these contexts on the learners' WTC which was under examination. The microsystems and mesosystems for each learner were analysed individually, followed by the exosystems and macrosystems, which had shared features for both learners as they had a common country of origin and migration.

4.1 Microsystem

At this level of the ecosystem, students' attitudes, beliefs, and behaviour in their New Zealand classroom were investigated. Cognitive, affective, and linguistic factors were involved as well as classroom environment, teaching methods and the type of tasks and activities carried out by the learners. Group work was a key feature which influenced their WTC according to the two participants in this study.

Group Work/Interaction with Classmates

In the case of Golnaz, she felt the opportunity to work in a group fostered her WTC. She scored herself as 'always willing' to participate in pair and group discussion. However, when observed in two of her classes, both according to the researcher and her class teachers, she chose always to sit with another Iranian student or students. Nevertheless, when required to work with a mixed nationality group to make a class presentation, she found it '*very useful*'.

> ***Researcher***: *'What were the best things to help you speak in this class?'*
>
> ***Golnaz***: ***'****I think group is very good because people talk about some ideas and I catch everything about them and because everyone have different ideas about everything and it helped me to know about some information that I don't know about it'.*

Finally, in the mainstream undergraduate course she acknowledged that she no longer had much opportunity to speak English and so again chose to work with Tina and Marjan, another of her Iranian classmates: *'If we choose someone else especially New Zealanders, it is better to communicate together, but when we are same language, always we talk in like Iranian language…'*.

Golnaz, therefore, is an example of a learner with trait WTC for L2 group work in general, but who is strongly affected by situational contexts such as whether she or the teacher chooses her partners; and affiliation motives such as feeling obliged to work with members of her nationality/language group.

Tina was Golnaz's classmate throughout the course of this three semester study and although she accepted that *'it's good advantage to be with other people'* who you have to speak English with, her customary place in class was first next to Asal (another Iranian student), and then when she left, Golnaz. She found it helpful '*because when we don't know what is going on, we ask each other in our language to explain for each other*'. When she reached the undergraduate level class, she was only able to communicate online with other native English speakers, which she found '*embarrassing',* because it was hard for her to write comments on their work, and they even criticised her grammar errors. Thus, although she and her teachers described her as a willing participant in group work, in practice she gravitated more to speakers of her language. As a result, her notional WTC was modified by actual classroom circumstances.

The role of WTC in classroom group activities has been under examination for some time. Intergroup motivation and affiliation occupied Layer IV of MacIntyre et al.'s (1998) model, and later versions of WTC scales such as MacIntyre et al.'s (2001), Cao and Philp's (2006), and Peng and Woodrow's (2010), all examined levels of learners' WTC within group situations. Whereas in MacIntyre et al.'s (1998, p. 547) view, this WTC was a relatively "stable and enduring" influence, other researchers have revealed dynamic fluctuations in WTC as a result of topic, interlocutors, or group members (e.g., Cao, 2011; Eddy-U, 2015; Gallagher & Robins, 2015; Kang, 2005; Mulvaney, 2015; Riasati & Rahimi, 2018; de Saint Léger & Storch, 2009; Yu, 2015).

It is worth noting that very few WTC studies have focussed on students learning English in L1 English-speaking countries, except for short Study Abroad experiences or in monolingual groups. In the present study, Golnaz and Tina as migrants to New Zealand were generally in a situation where they had to communicate with their classmates in English when working in a group, unless they chose their same language partners for the reasons outlined above. In DST terms, however, communicating in their L1 was a more powerful *attractor* state unless the teacher or other external circumstances created a situation where using the L2 was unavoidable.

4.2 Mesosystem

In terms of nested ecosystems, the mesosystem includes both the past English language learning experiences of the participants in Iran as well as their out-of-class use of English now in New Zealand.

4.2.1 Iran

Such factors as were discussed in regard to the New Zealand classroom microsystem (i.e., the students' attitudes, beliefs, and behaviours) also featured in discussions about the learners' Iranian class experiences. In order to understand the language

learning background in Iran of the two participants in this study, it is important to comprehend how they perceived their experiences in this context. In their view, the amount of time and pedagogical importance given to spoken English in Iran affected their level of WTC.

Speaking Opportunities in Class

A key feature of English language provision in the last few decades in Iran has been the growing proliferation of private English language institutes with a greater focus on communicative language teaching methods and the use of Western-produced text books (Rahimi & Nabilou, 2011; Razmjoo & Riazi, 2006; Riazi, 2005). In contrast, state schools persisted with the grammar translation method and government-produced texts with Western cultural references removed (Ahmadi Darani, 2012). This situation continued until 2013 when new textbooks began to be introduced to state schools with more emphasis on communication (Kheirabadi & Alavimoghaddam, 2016), although Western cultural norms were not included (Sadat Farhang et al., 2016). The use of English as a teaching medium and the employment of native English-speaking teachers were also uncommon practices (Narafshan & Yamini, 2011). It is debateable whether this was a serious disadvantage in a country where students might never use English in a conversation with a native English speaker or travel overseas to an English-speaking country (see Akbari, 2015), but for the students in this study who immigrated to in New Zealand, it was a handicap when they first arrived.

Tina is an example of an English language learner who was studying in the period immediately after the Revolution of 1979. However, even at that time her parents realised the value of extra classes, so she attended a private institute as well. '*You know how parents they like to push us study more, getting extra class, extra learn English*'. Her criticism of the public school lessons was: '*I think I didn't like it* [English] *because of grammar. I didn't like grammar and I never thinking one day I can speak English*'. However, summer classes in the private institute were '*more fun and drawing and talking about learning, sing a song, I mean name of fruit, some things interesting. Not just grammar*'.

Golnaz had a similar experience to report when asked whether she spoke English in her Iranian school classes: *'Just Farsi but for the grammar or everything just we use it like "This is our book", not speak English'*. When I asked her whether her speaking had improved since she had been in in New Zealand English classes, she stated: '*Yeah in here because in Iran I didn't speak English any more'*.

Such descriptions of the language teaching situation in Iran at the time when these participants were English language students (the 1980s and 1990s), are borne out by Iranian researchers such as Vaezi (2008, p. 54), who suggested that Iranian students and teachers of English, particularly in government schools, were disadvantaged by "a lack of resources and little contact with the target language", in spite of their high levels of motivation. Even now, this feeling of demotivation still applies to both students and teachers in Iran, according to Yaghoubinezhad et al. (2017). In fact, Elahi Shirvan and Taherian (2016) reported similar results at this mesosystem level for the Iranian student participants in their more recent study. Therefore, an

educational context of this type may well have an effect on learners' motivation to speak English, and indeed both of these participants reported a much higher level of WTC in their present New Zealand classes.

4.2.2 New Zealand

At the mesosystem level, the participants were asked about their opportunities to demonstrate their WTC outside the classroom environment in the wider New Zealand social environment. In this case, Tina and Golnaz had rather different experiences.

Activities Outside Class

Although both Tina and Golnaz lived with their immediate families in New Zealand, Tina had more contact with English speakers outside her home and university classes because of her church membership. *'Actually, every Friday night, every fortnight, we catch up all together, so it is good, good for communication skill, it's good'*. However, in her communication with God she likes to use Farsi: '*…because it needs to concentrate when you want to pray so you like your mother language to pray, not concentrate on word and what you gonna* [say]'. Moreover, at home: '*I live with my father and my sisters and brother so yeah all the time we talking our own language at home*'.

Golnaz, on the other hand, recognised the importance of having contact with English speakers: '*I think if I have a friend with a different language, it's very good for me to talk English with her and improve my speak…*', but sadly she did not have any such opportunities. She was now able though to operate in a functional way in New Zealand society: '*I can go outside and do something to buy and everything I can do with myself because now it's easier than before when I came to New Zealand'*.

In Auckland, where these learners live, the Iranian community is small (approx. 2500), so there are no enclaves in which business, shopping etc. can be conducted entirely in Farsi, unlike the much larger local Chinese community (approx. 119,000), who, if they wish, can operate largely in their own language (see Zhong, 2013). Therefore, the Iranian participants' WTC in English in the community is essential for everyday life. Moreover, it has been suggested by Edwards and Roger (2015) that increasing L2 self-confidence and therefore WTC stems from the language learner's successful interaction with the target language community.

The situation of the participants in this study as adults and permanent migrants to an English-speaking country has only rarely been investigated in relation to WTC inside or outside the classroom environment (see Derwing et al., 2014; Edwards & Roger, 2015; Zhong, 2013). Most WTC studies have focussed on younger learners in EFL or Study Abroad situations, whose commitment to learning the language is possibly short-term and less crucial for their integration into the society in which they are temporarily living (Dörnyei, 2005; Oxford & Shearin, 1994). Migrants, on the other hand, have an *investment* to settle into life in the new country (Norton, 2011; Simpson, 2016).

4.3 Exosystem

The exosystem level of an ecosystem comprises settings which affect the person/people involved, but in which they have little or no say, for example, curriculum, evaluation, teacher employment, and educational policy making.

4.3.1 Curriculum in Iran

A key feature of English language teaching in Iran for the last four decades has been the difference between the curriculum and methods offered in public and private schools (see Sadeghi & Richards, 2015; Zarrinabadi & Mahmoudi-Gahrouei, 2018).

a. Public Schools

At the time that Tina and Golnaz began their English studies in Iran (1980s and 1990s), English was taught as a compulsory subject at intermediate and high school level for 6–7 years. Locally produced textbooks had no cultural content related to English speaking countries and were based on Situational Language Teaching principles with a prime focus on grammar and reading and audio-lingual type drilling methods (Ghaffarzadeh Hassankiadeh, 2013). Speaking and writing were not tested extensively and still do not form part of the National University Admission Examination (Elahi Shirvan & Taherian, 2016; Foroozandeh & Forouzani, 2015).

In my interview with Mina, an Iranian Ph.D. student in in New Zealand, with both English learning and teaching experience in Iran, she stressed that: '*The basic thing about Iran English classes is that they are all very, very, focussed on the final exams. So this means there is not going to be much speaking*'.

It was suggested by Iranian researchers, Narafshan and Yamini in 2011, that if "students in Iran cannot speak English (not even a sentence) after learning English for seven years in school … The government, the families and the schools should change their attitude" (p. 186). They proposed that more communicative methods and authentic textbooks be used, and that English should be regarded as more than just an exam subject to allow students to pass into university. In 2013, new English teaching texts commissioned by the Ministry of Education were introduced to state schools to provide a more 'communicative' approach. However, it can be seen from recently published articles by Iranian academics and practitioners that, due to large classes and inadequate teacher training, these texts, while fostering more interaction in English among students, have not provided an answer to Iranian students' lack of WTC (see Foroozandeh & Forouzani, 2015; Yaghoubinejad et al., 2017).

b. Private English language Institutes

In contrast, private language institutes in Iran have continued to use American or British texts and it was a recurring theme in the interviews I conducted with my participants that if they wanted a more communicative approach to English language learning, attendance at these institutions was essential. Mina and Sahar, who had been English teachers in Iran and now were Ph.D. students in NZ, made the following comments:

> ***Mina**: 'I don't know the reason why, but the thing is you never learnt anything, I'll be very honest with you, from English classes at school, nothing, but you learned a lot from private schools…There is a huge gap between these and I don't know why'.*
>
> ***Sahar**: 'So they pushed the students, everybody from the smallest to the oldest to speak in English'.*

The interviewees also remarked on the employment of some non-Iranian teachers in private schools and how they found it increased their interest.

> ***Tina**: 'Normally they* [the teachers] *were some people from, who live overseas…so I had a chance to have an Indian teacher. That was interesting for us because we learn different things'.*

This enabled the class to be totally conducted in an English medium. According to Sahar: '*We had to speak English in the environment, everywhere, Farsi was forbidden*', although she also commented that she found native speakers '*a little bit not patient, not patient enough*'.

Without curriculum-fostered efforts to provide opportunities for Iranian students to communicate orally in public schools, their WTC in English will remain theoretical rather than actual, and parents who can afford it will continue to push their children to enrol in private classes.

4.3.2 Curriculum in New Zealand

When the participants in this study migrated to in New Zealand, they experienced a considerable change in English teaching curriculum and pedagogical practices. According to Ker et al. (2013):

> The prevailing model of language teaching in NZ could best be described as eclectic, albeit with a strong continuing influence from communicative language teaching, frequently combined with a content-based (thematic) course design. While published materials are used, the drive for authenticity and relevance to NZ leads many teachers and institutions to produce their own. (p. 232)

In addition, native English-speaking teachers are the norm and the language of the classroom is predominantly English, with only a few Farsi speaking classmates among a wide range of different nationalities. Moreover, in New Zealand, teachers trained in CLT methods tend to regard students who are willing to communicate in a more favourable light.

Researcher: *'So just generally how important do you think willingness to communicate is for students to progress?'*

Dianna (teacher): *'As they progress through the university they will have to improve their oral skills to communicate with lecturers, fellow students and pass speaking assessments… From a teacher's point of view, students who have good WTC are easier to deal with, they take a more active part in the class and enhance class cohesiveness'.*

4.4 Macrosystem

At this level, the overarching social, educational, and cultural systems of Iran and in New Zealand that influence the participants' WTC at the microsystem level of the classroom and the mesosystem outside the classroom were examined.

4.4.1 English Language Education in Iran

It is impossible to separate education, in this case language education, from the prevailing historical and social climate of a country, particularly Iran, which has experienced major upheavals in the lifetimes of the students and Iranian teachers in this study. According to Riazi (2005), English language teaching was popularised in the time of the Pahlavi Dynasty (1925–1979), and it became more common for foreign experts to work in Iran as well as for Iranian students to travel overseas. Universities were established, and the literacy rate gradually increased. "English was the major second language of the country and was included in the curriculum of both schools and universities" (Riazi, 2005, p. 106).

After the Islamic Revolution of 1979, curriculum changes took place which attempted to erase Western ideas and replace them with Islamic values. English was maintained as a second compulsory language, but more status was attributed to Arabic as the language of Islamic thought (see also Borjian, 2013; Mokhtarnia, 2011; Zarrinabadi & Mahmoudi-Gahrouei, 2018). Nevertheless, English has remained compulsory (now for seven years) at junior and senior high school and is needed for entry into university, although the skills of reading and writing English are emphasised more than oral communication.

On the other hand, an important alternative source of English language learning developed from 1992 onwards, when satellite TV became widely available (Barraclough, 2001). Even though attempts to ban it were made by the government, Iranians were now able to watch hundreds of overseas programmes and listen to radio stations, many of which were broadcast in English. The opportunity for listening to and watching English native speakers, which was unavailable in state-run English language programmes, made it possible for motivated leaners to improve their English communication skills and to be exposed to Western culture in a more entertaining way (although it is still officially illegal).

Tina was at school at this time in Iran and made enthusiastic use of this new technology: '*Yes I watch lots of movie because we had satellite so I often, I watch movies and I didn't understand what they're saying but I still like it'*.

With the advent of the Internet in 1995 (Fathi, 2014) and access to email, contact with native speakers and non-native speakers of English all over the world allowed Iranians to share ideas and use English for authentic purposes (see Zarrinabadi & Mahmoudi-Gahrouei, 2018). Tina was an early adopter: '*Yeah I remember we didn't know even how to use internet so I get a class to teach me…because I didn't know how to use English for those, yes'*.

Sahar (an Iranian Ph.D. student in NZ), as a younger woman than Tina, was able to take advantage of the internet's growing resources for motivated learners of English:

> *'When I started using computers and the internet I was so interested to test my own English, so at that time I used to go to chat rooms, five friends from different countries. I can remember I had a friend from America, two or three from European countries. I don't remember the exact countries, but I had native speakers and the people who used English as a foreign language. It means every day, second language not foreign language'*.

Nevertheless, Akbari (2015) still maintains that: "The main obstacle for learning English is that there is no environment that makes [Iranian students] familiar with the original language" and "there is no active role for English outside the classroom" (p. 395). This may be changing, however, as there are increasing numbers of Iranian students in overseas universities who may return to Iran eventually, overseas companies operating in Iran which use English as a lingua franca and need Iranian employees who speak the language, and an increase in tourism and investment (Sahar, personal communication). Therefore, greater exposure to and availability of online resources can only speed up the internationalisation of Iran, as with all other countries around the world, and increase the need for English as a global language (see also Sadat Farhang et al., 2016; Zarrinabadi & Mahmoudi-Ghahrouei, 2018). Unfortunately, at present, global politics and the isolationist attitudes and behaviours of Western powers such as the United States still continue to put barriers in the way of Iranians wanting to improve their contact with the English-speaking world.

Acculturation to New Zealand

When migrants arrive in their chosen country of residence, their ability to socialise and WTC can be strongly affected by how they are received by the existing population at the macrosystemic level.

Attitudes to Migrants—Recent Developments/Statistics

New Zealand is a small country of 5 million people (at June 2020) and is made up of three main islands in the South Pacific Ocean, which lie west of Australia. Although it has had a history of migration since the country was first settled by Polynesian peoples in the thirteenth century, and then by Europeans in the early nineteenth century, it has not experienced large waves of immigrants since then. In fact, numbers have been carefully controlled, and with its geographical isolation, it

has been able to avoid the problems of amnesty seeking refugees arriving by boat, as is the situation in Australia at present. Since the 1970s, it has accepted refugees but in strictly limited numbers (only 750 per year) via the UNHCR (The UN Refugee Agency) scheme, plus a small number of visitors who apply for asylum on arrival in New Zealand. The two participants of this study were given residence as family members of previously accepted refugees.

Most migrants to New Zealand prefer to settle in Auckland, the largest city by far (approx. 1.7 million residents), which, until the recent Covid 19 related ban on international arrivals, had been receiving up to 600 new settlers per week. Housing, transport, employment, and education are now under serious pressure, and a previously favourable attitude to migration has, according to a recent poll (Gower, 2016), become less tolerant, with 60% of all New Zealanders calling on the government to cut immigration.

Unfortunately, these types of attitudes can be reflected in the way immigrants are treated by the general population. Although Tina had met English speaking friends through her church membership, Golnaz, after 3 years of residence, still reported that she had no friends outside her home and her Iranian classmates. Both women will probably be seeking a job after graduating and be faced with a diminishing employment market. Thus, their opportunities to demonstrate their WTC in English will be limited.

If the polls truly reflect New Zealanders' (Kiwis') changing attitudes to migrants, these two women and other new settlers in the future may not be received so warmly. WTC can only be fostered when interlocutors in the community are receptive and welcoming. As Norton (2006, p. 96) has proposed: "While adult ESOL language learners may strive to make a productive contribution to their new societies, unless the host community is receptive to their arrival, they will struggle to fulfil their potential". This is not an area of research which has been greatly explored as most WTC studies are classroom-based or conducted in EFL environments. Zeng (2010), however, has examined the situation from a Canadian point of view and revealed the importance of societal acceptance and its positive effect on migrants' WTC.

4.5 Variations in WTC

From Iran to New Zealand

As far as these two students were concerned, it was the lack of opportunity to speak English inside their Iranian public school classroom (as discussed above), and to practise what they had learnt outside the classroom in Iran which affected their WTC, despite the growth in available technology. Tina described her motivation as having increased through the necessity of communicating in the English-speaking country to which she had migrated.

> ***Researcher**: 'And what would be the reasons for that* [the increase in your WTC between Iran and New Zealand]*?'*

***Tina**: 'Over there they are very serious about learning English…and sometimes we learn some things, we never use it. Never…But here you learn what you need every day so…'*

***Researcher**: 'So it makes you much more motivated to speak.'*

***Tina**: 'Yes'.*

Golnaz had a similar viewpoint:

'It's very better [in New Zealand] *because when we go to shop, or … when we watch TV, they always speak English, … but in Iran all don't speak English, and just in the class and finish, or some movies in the satellite they watch or speak in English'.*

In New Zealand (from Semester 1—Semester 3)

During the 18 month duration of the study, these two students, Golnaz and Tina, experienced three different classes. The first two were fulltime English language classes, whereas the third was an undergraduate Diploma in English course, open to all students, not just L2 English speakers. As the curriculum became more formal and academic, Golnaz felt her WTC decrease at the same rate as her opportunities to speak to her classmates.

***Researcher**: 'So do you do much speaking … in any of your* [Diploma] *classes?'*

***Golnaz**: 'Depends, sometimes cause always we have to do our homework and focus on our essay and we don't have enough time to speak or just we have to write and research for our essay'.*

Tina described a similar drop in her WTC as an increasing number of students in her classes were native or near-native speakers of English, and she felt the challenge to keep up academically.

***Tina**: 'Actually I am sort of less willing to communicate because … it's big class sort of conference style and lots of native speakers over there'.*

To sum up, in response to RQ1 and RQ4 which investigated the factors considered by the students as having an important influence on their WTC, their relationships with classmates, opportunities to speak English in and out of class, and the effect of different types of curriculum were among the themes which recurred. Other variables unique to their past learning experience in Iran such as family influence, type of school, and exposure to native speaker teachers were also mentioned.

As for the two changes in context explored in RQ2 and RQ3, the difference between learning English in Iran and in New Zealand led to a change in the students' situational WTC due to the contrast in teaching methods and in-class and out-of-class environment, whereas the changes in WTC between their three different classes in New Zealand were affected more by the demands of a formal academic curriculum, which led to a decrease in their WTC as the result of a reduction in actual or perceived opportunities to speak English. In terms of the surface 'waves' and underlying 'currents' of WTC as theorised by MacIntyre (2012), both Golnaz and Tina described themselves as being highly willing to communicate in English throughout their language learning history—a deep motivational current—but they

were at times inhibited by waves of reluctance caused by the curriculum and classroom environment experienced both in Iran and in their most recent classes in New Zealand.

Both students, however, described their strong motivational current to continue studying.

> ***Researcher**: 'So you have still got that drive to keep going. So what do you think it is that keeps you going all these years … through your study?'*
>
> ***Tina**: 'Oh I really like study and especially since I started again, I think it's very help me emotionally…it's sort of satisfy me every semester when I see I pass…'.*
>
> ***Golnaz**: 'I think when we have a goal in our life, we can, when we have an aim, we go to* [university] *and keep our studying…'.*

In fact, both students then enrolled for a Bachelor of Education. Interestingly Tina initially had other plans but was prevailed upon by Golnaz to enrol for the same course in order to maintain the mutual support that they had provided for each other throughout the previous three years of study.

5 Conclusion

5.1 Contributions to the Field of Knowledge

In this chapter, the results of an in-depth, longitudinal, qualitative investigation into the WTC of two Iranian migrants to New Zealand have been discussed. Factors which they considered to be important for their personal willingness or unwillingness to communicate, both in Iran and New Zealand, have been identified and discussed at their appropriate level in a nested ecosystems model. The usefulness of this model for WTC research is that it emphasises the *holistic* nature of migrant students' WTC or unWTC (see Dörnyei et al., 2015; Yashima et al., 2018). A myriad of factors arising from both past and present educational and personal experiences in their country of origin and their country of migration all contribute to the likelihood of whether these students will participate orally inside or outside the classroom on any given day. These are the "personal, social, and situational experiences that drive or inhibit WTC", as referred to by MacIntyre et al. (2011, p. 85). Viewed through the lens of dynamic systems theory, there are strong interconnections between the linguistic, social, cognitive, and emotional systems which produce WTC (MacIntyre & Legatto, 2011). Therefore, L2 WTC can be justifiably described as being subject to dynamic fluctuations, rather than being a purely stable trait as was previously conceived in earlier literature, particularly that related to L1 WTC.

Previous researchers have endeavoured to isolate various factors which combine to affect a learner's WTC. However, a more holistic approach which describes WTC as an interaction between an individual and their surrounding contextual characteristics may be more appropriate for these cases, because from a complexity perspective

"we cannot separate the learner or the learning from context when we measure or explain SLA" (Larsen-Freeman, 2012, pp. 79–80). Thus, the picture has been broadened rather than a completely new one painted. The largely qualitative approach of this study cannot measure the comparative strengths or correlations of individual variables as SEM modelled studies have in the past. However, the 'stories' of the two cases chosen here for in-depth investigation provide valuable insights for other researchers and teachers in terms of understanding the unique learning context which each individual student brings to the learning process as a result of his or her differing experience and history (Larsen-Freeman, 2012).

5.2 Pedagogical Implications

The findings of this study also encourage teachers to view their students as individuals, possibly with an already existing history of language learning, which may affect their participation in their current classroom. It has revealed differences in the students' present and past WTC as a result of their levels of exposure to CLT (Communicative Language Teaching) methods and approaches, since, according to recent researchers, CLT methods are still not widely practised in Iran (Hassaskhah et al., 2015; Yaghoubinejad et al., 2017). In addition, the Iranian students in this study are permanent migrants to New Zealand, which means that their motivation and WTC are likely be different from those of learners who are studying English for academic and vocational purposes in previous studies conducted in EFL contexts, and from Study Abroad students who are returning to their country after a short period of time. In terms of generalisability, many educational institutions around the Western world have English language classes for permanent migrants so this study may contribute to their understanding of the WTC of such students, and Iranians in particular.

In practical terms for teachers, Gregersen and MacIntyre (2014) have produced an action plan and a range of classroom activities which can enhance WTC by bolstering self-esteem, encouraging group work, dealing with hesitancy, and increasing self-perceived competence by focussing on successful past learning experiences. Appropriate and sensitive use of error correction and motivational strategies to reduce student anxiety and create a positive classroom atmosphere have also been identified as facilitating WTC (Zarei et al., 2019, Zarrinabadi et al., 2014). It is an even greater challenge to foster students' WTC in the community outside the classroom and encourage their participation in the wider target language society (Mystkowska-Wiertelak & Pawlak, 2017). Teachers, who are also members of this culture, have a responsibility to show concern for their students' needs and recognise "the complexities inherent in their daily lives" (Simpson, 2016, p. 178). Materials chosen and activities undertaken in the classroom need to reflect the real world as much as possible to reduce the gulf between what happens in the more sheltered environment of the school or university and the demands of demonstrating WTC 'on the outside'. Unfortunately, the increasing emphasis on developing 'academic skills' at

the university attended by the participants in this study reduced their opportunities for improving their oral communication and left them with little free time to expand their circle of English-speaking acquaintances.

5.3 Limitations

As with my previous studies into this area of research (Cameron, 2013, 2015), the sample size was small and generalisability to other contexts is problematic. However, the longitudinal nature of the approach and the inclusion of other viewpoints (i.e., teachers and Iranian Ph.D. students) increases the trustworthiness of the findings. Other qualitative case studies in this area have had a similar design (see Cao, 2009, 2013; Kang, 2005; Peng, 2011, 2012, 2016; Subtirelu, 2014; Yashima et al., 2018; Zhong, 2013). However, each piece of research, whether quantitative or qualitative, adds a further contribution to the eternal conundrum for teachers, which is: "What is the nature of students' WTC and how can it be nurtured both inside and outside the classroom?"

5.4 Future Studies

Further research into the WTC of migrants, in particular, is now needed in other parts of the world, whether in English or other languages, as globally migration has become a very prominent issue in many countries, and satisfactory resettlement including the acquisition of the target language of the new country is vital. Other less well explored areas of research into WTC are: the roles teachers play in their students' WTC and effective strategies they use to enhance this behaviour; students' WTC outside the classroom, particularly in ESL (English as a second language) environments; longitudinal studies of WTC tracked over years rather than weeks or months; cross cultural comparisons of groups of students' WTC in different parts of the world (e.g., Iran and China; Pakistan and Korea; New Zealand and Japan); and a focus on the positive emotions which influence WTC (e.g., excitement, enjoyment, satisfaction, interest, and flow) rather than just the negative such as anxiety and reluctance to speak.

Appendix

Semi-structured Interview Questions* (Indicative) *for Students

1. How important is it for you to learn English?
2. How good are you at learning English?

3. What do you think your English level is like? What about your speaking skill in particular?

In Iran

4. Did you learn English in Iran?
5. How long for?
6. At primary, secondary or tertiary level?
7. Was your teacher in Iran a native English speaker?
8. How motivated were you during this language course?
9. How much did you like learning together with your classmates in this course?
10. How would you describe your personality in class (quiet or talkative, relaxed or tense)?
11. How competent do you think you were to communicate in English during this course?
12. How did you feel about speaking English in class?
13. How did you feel about answering the teacher's questions?
14. How did you feel about the teacher's corrections of your English?
15. How did you feel about the other students' ability to speak English?
16. How did you feel about their reactions towards you when you spoke English?
17. In what situation did you feel most comfortable (most willing) to communicate: in pairs, in small groups, with the teacher in a whole class? Why?

In New Zealand

18. How motivated were you during this language course?
19. How much did you like learning together with your classmates in this course?
20. How would you describe your personality in class (quiet or talkative, relaxed or tense)?
21. How competent do you think you were to communicate in English during this course?
22. How did you feel about speaking English in class?
23. How did you feel about answering the teacher's questions?
24. How did you feel about the teacher's corrections of your English?
25. How did you feel about the other students' ability to speak English?
26. How did you feel about their reactions towards you when you spoke English?
27. In what situation did you feel most comfortable (most willing) to communicate: in pairs, in small groups, with the teacher in a whole class? Why?
28. How would you describe the biggest differences for you in your willingness to communicate in English now that you are learning English in NZ instead of Iran?

(Questionnaire adapted from Cao & Philp, 2006).

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Building Dialogue Between Cultures: Expats' Way of Coping in a Foreign Country and Their Willingness to Communicate in a Foreign Language

Gertrud Tarp

Abstract During recent years there has been an increasing focus on student mobility and English as a foreign language. Willingness to communicate in a foreign language (L2 WTC) other than English is an issue less discussed. This chapter is based upon a study of expatriates' (expats') willingness to communicate in German as a foreign language in naturalistic settings. It is an attempt to listen to expatriate voices and to look for trends in how they experience their sojourn abroad, intercultural communication and foreign language learning. The study was carried out in Germany and the following groups were addressed: expatriates working and/or studying in Germany, all members of the network "Expats in Germany". The methodology applied comprises a quantitative and a qualitative approach. The findings show that using English as a lingua franca influences expatriates' German language communication. In addition, the expatriate situation in terms of cultural immersion strongly enhances their willingness to communicate in German dependent on expatriate age, education, gender, language skills, occupation and country of origin. The study argues for the importance of paying attention to individual and societal factors in foreign language learning and communication.

Keywords Expatriate voices · Intercultural awareness · English as a lingua franca · The influence of English · Willingness to communicate in a foreign language (L2 WTC)

1 Introduction

The concept of expatriate (expat) has widened with the increase in free movement of workforce and studies in Europe. Statistics show a growing number of expats in Western Europe, e.g., in Finland (Dervin & Machart, 2015) and an increase in the number of mobile students worldwide (Beaven & Borghetti, 2016; OECD, 2015). Often expat life is considered beneficial and valuable for the expats involved.

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_4

In this study expats comprise foreigners studying and/or working in Bavaria, Germany, all members of the network "Expats in Germany". By focusing on individual actors, the aim is to uncover expats' discourse about their sojourn abroad, including their images before leaving their home country and their construction of new images of life abroad. It is an attempt to look for trends in expat experience especially focusing on challenges and opportunities when being an expat, on the development of intercultural awareness and on expats' willingness to learn and communicate in a second language (L2 WTC) other than English. Theories on intercultural dialogue, mobile students and L2 WTC other than English (Zarrinabadi & Abdi, 2011; Zarrinabadi & Tanbakooei, 2016) form the basis of the study. The results are especially supposed to contribute to the knowledge base on factors influencing L2 WTC other than English, which is calling for further research. In the following relevant literature will be briefly reviewed.

2 Literature Review

Most of the research carried out so far focuses on student mobility in higher education and student preparation and expectations. The question of intercultural dialogue as defined by the Council of Europe has been widely discussed in connection with study abroad and migration. The concept of expat has especially been subject to research from a business point of view, while expats' intercultural awareness and their L2 WTC are issues less discussed. The argument in this paper is that a multitude of factors influence the way expats experience their sojourn abroad and L2 WTC. In order to set the ideas above within a more detailed framework, this section expands on intercultural dialogue, the concept of expat, L2 WTC and cultural immersion.

2.1 Intercultural Dialogue

For many years, in the field of foreign language education, the focus has been on developing intercultural student competence and awareness. One of the important definitions concerning learning to live together originates from the Council of Europe considering intercultural dialogue important in a Europe consisting of multicultural societies. Accordingly, intercultural dialogue is to be understood as:

> A process that comprises an open and respectful exchange of views between individuals and groups with different ethnic, cultural, religious and linguistic backgrounds and heritage, on the basis of mutual understanding and respect. It requires the freedom and ability to express oneself as well as the willingness and capacity to listen to the views of others. (Council of Europe, 2008, p. 9)

Ganesh and Holmes (2011) argue that the Council of Europe's definition of intercultural dialogue does not fully reflect the complexity of dialogue as a process within

its own context (Council of Europe, 2008, p. 10). The expectations of study abroad and intercultural dialogue may be challenging for students and to a certain extent related to the individual student. Talking about intercultural dialogue is especially relevant in a world with a high degree of student movement. There are different reasons why they move such as economy, a useful leg-up in the labor market and a complex net of social networks (Benjamin & Dervin, 2015). According to Beaven and Borghetti (2015: Editorial) the focus is on positive outcome on the part of institutions responsible, families and students. They agree that for students there are academic, cultural, linguistic and professional benefits. Study abroad provides students with opportunities of reflection and analysis and with the concepts of identity, socialization and culture. However, there are arguments against these benefits.

Härkönen and Dervin (2015) state that talking just about learning languages and getting to know cultures is something that's mentioned in very many applications. An argument is that it is "a "must" for my generation" although only a small percentage study abroad (Härkönen & Dervin, 2015, pp. 109–110). Normally study abroad is considered as a career boost although there are conflicting studies on the effect, and employers do not seem to pay much attention to international experience in the recruitment process (Beaven & Borghetti, 2015). According to Dervin and Machart:

> The success of academic mobility is sold by institutions and supra-national entities such as the EU but let us bear in mind that only 2% of the world student population is able to move and that even amongst movers not everyone has the same opportunities in terms of length, programme and destination. (2015, p. 8)

Mobile students in higher education are often considered as privileged movers with shared discourses, aims and images. The question is whether pre-departure expectations of students are according to decision-makers and whether students may be disappointed due to wrong preparation (Härkönen & Dervin, 2015). The fact is that mobile students are often children who experience a high level of international mobility while they are growing up. They are relatively economically privileged and move due to their parents' career choices, typically in the corporate, diplomatic, military, religious (missionary) or NGO sectors. Their family's previous experience abroad influences mobility facilitated by social networks (Benjamin & Dervin, 2015). Mobile students are called "global nomads" and "privileged movers". Useem and Downie (1976) coined the term "Third Culture Kids" as a sociological concept for the study of white, American expatriate children growing up in the decolonized India of the 1950s. The term has been much discussed and regarded as problematic because the literature treats culture as static and unreflexive of the changing socio-historical context. In addition, mobile students have a different status in today's globalized world being subject to major changes among others within foreign language communication and migration.

2.2 Expatriates

The reason for focusing on expats in this study is that expats form a specific group of people of increasing importance particularly in the Western World. From a business point of view there are two main types of expats: first, self-initiated expatriate expat-preneurs and second, company-assigned expatriate transitioned expat-preneurs (Paik et al., 2017, p. 51). The type of expat depends upon whether expats move abroad with a new venture opportunity or with a preconceived entrepreneurial purpose (Vance et al., 2016). So far research on expats has especially focused on their cultural competences, cross-cultural adjustment and the implications of being an expat (e.g., Haslberger et al., 2013; Hippler et al., 2014; Paik et al., 2017). Research shows that it is difficult to generalize about expat adjustment since there are a number of variables influencing how they experience the world and form their identity. Since this study focuses on expats' L2 WTC other than English, the above expat literature is beyond the scope of the study.

2.3 Willingness to Communicate in a Foreign Language Other Than English

One of the consequences of accelerating globalization and cross-cultural interaction is that there has been an emphasis on the significance of developing learners' proficiency to communicate with speakers of different languages. Research within the field of L2 WTC shows that there is an influence of individual and context-depending factors and factors inside and outside the classroom.

Willingness to communicate in L2 can be conceptualized as "a readiness to initiate discourse with specific person(s) at a particular time, using an L2" (MacIntyre et al., 1998, p. 547). The focus is on the learner's decision to voluntarily speak the language when the opportunity arises (MacIntyre, 2007; MacIntyre et al., 2003). Dörnyei (2005) draws attention to individual differences in the linguistic and non-linguistic outcomes such as motivation, aptitude, language learning strategies, language anxiety, and others. MacIntyre and Doucette (2010) focus on three variables within L2 WTC: perceived competence, hesitation and anxiety. In this connection Munezane (2016) has constructed an ideal self for L2 WTC including motivation, confidence and goal setting. As to L2 WTC as a personality trait, MacIntyre et al. (2002) find that gender and age influence L2 WTC. Other factors influencing L2 WTC are motivation, anxiety and identity, while communication competence and anxiety have the strongest influence (Baker & MacIntyre, 2000). So personal factors seem to be quite essential for L2 WTC, and learners' success in engaging in communication may largely depend on the degree of learners' willingness to communicate in the target language (L2).

According to Zarrinabadi and Tanbakooei willingness to speak is both related to context and person and thus partially situationally-influenced and a personality-type trait (2016, p. 30). It is emphasized that contextual factors influence L2 WTC, and that L2 WTC is a situational construct (MacIntyre et al., 1998). In this respect, Peng (2012) has carried out research investigating factors influencing willingness to communicate in EFL classrooms in China. Peng states that "Chinese EFL students' classroom L2 WTC is socioculturally constructed as a function of the interaction of individual and environmental factors, both inside and outside the classroom" (2012, p. 211). Peng argues that students' attitudes to communication-oriented activities in the classroom vary. Resistance appears to arise when some activities are not aligned with student expectations, or more precisely, when students perceive little learning in those activities. Also MacIntyre et al. (2001), Zarrinabadi and Abdi (2011) determine that there is a significant relationship between L2 WTC inside and outside the classroom and language learning orientations. Consequently, the interrelation among a wide range of factors explain why some persons communicate in an L2 while others, although they have the foreign language proficiency, may be less communicative. It turns out that some of these factors are more consistent than others and therefore difficult to influence.

2.4 Cultural Immersion and Willingness to Communicate

Some studies focus on foreign language learners' interaction with the environment and cultural immersion. An expat situation comes close to total immersion in a foreign culture. Consequently, it is important to adopt a dynamic rather than a static cultural perspective to avoid stereotyped assumptions. It is essential not to lose sight of "variation (of culture) at local or individual levels" (Ushioda, 2009, p. 218). In their qualitative studies of L2 WTC, MacIntyre et al. (2011) reveal that L2 WTC is context-dependent and will change based on how learners interact with their environment. Denies et al. (2015) state that the situated nature of L2 WTC is considerably under-represented within Europe. Studies have been carried out in classroom settings focusing on societal willingness to communicate in a foreign language. MacIntyre has carried out research in Canadian settings and Yashima in Far Eastern settings (Denies et al., 2015, pp. 721–722). It is argued that L2 WTC can be influenced significantly by cultural norms. Therefore, L2 WTC studies should extend beyond North America and Asia, not only to Belgium (Denies et al., 2015, p. 735). In this respect, Europe is an obvious context to study L2 WTC since learning at least one foreign language besides your mother tongue is highly valued in the European compulsory school system. Zarrinabadi and Tanbakooei state that "Although considerable research has been conducted on L2 WTC, it can be claimed that L2 WTC research is still in its infancy" (2016, p. 42). The importance of L2 WTC is further emphasized by Richmond and Roach:

> Willingness to communicate permeates every facet of an individual's life and contributes significantly to the social, educational, and organizational achievements of the individual. (1992, p. 104)

Obviously increasing cross-cultural interaction has accentuated the importance of enhancing learners' proficiency and willingness to communicate with people from various cultural backgrounds and of illuminating ways of doing so. The present study is an attempt to contribute to the knowledge of L2 WTC by listening to expat voices.

2.5 Purpose of the Study

The present study is an attempt to look for trends in expat discourse about living abroad including elements influencing their L2 WTC other than English. The aim is also to uncover expats' images before leaving their home country and their construction of new images of life abroad. The study looks into the relationship between expat age, gender, education, occupation, language skills and country of origin in order to uncover elements influencing their intercultural awareness and willingness to communicate in German. The research questions are:

RQ1 How do expats experience their sojourn abroad?

RQ2 Which techniques do they use to cope in a foreign country?

RQ3 What is their attitude to communicate in a foreign language other than English?

The study is grounded in the assumption that the approach to sojourn abroad is linked to each individual expat. For this reason data are grounded in how expats voice their experience abroad and their self-reports. The intention is not to suggest resolutions to any sort of intercultural conflict or misunderstanding, but rather, in more general terms, to reveal the multiplicity of actors and the complexity of processes at play in intercultural communication. The aim is to contribute to the shifting common understanding of intercultural communication, not as a process occurring between two cultures, but as a more complex account of the role of individual agency. It is to build a bridge between research and actual lived experiences and to relate practice to theory. To get access to expat voices from different angles a grounded theory approach was applied comprising quantitative and qualitative data collection as explained in the following section.

3 Methodology

The aim is to use a research methodology which highlights the inside perspective and which acknowledges the importance of the individual in the present situation. Grounded theory (e.g., Charmaz, 2006; Creswell et al., 2007; Glaser & Strauss, 1967; Strauss, 1996; Tarp, 2006; 2011) is suitable for that purpose since it aims to accept the

individual expats as agents belonging to different categories (Strauss, 1996, pp. 21, 30). Grounded theory enables the researcher to obtain multilayered, complex and rich data because the categories constructed are grounded in data based upon an inductive, bottom-up approach. The mixed method approach (e.g., Creswell & Plano Clark, 2007; Plano Clark, 2019; Tashakkori & Teddlie, 2003) allows the researcher to benefit from the strength of the two main paradigms and to rule out the weaknesses of one methodology by complementing it by the other method (Zarrinabadi & Tanbakooei, 2016, p. 36).

The negative aspects of using a grounded theory approach are that the categories constructed will be subject to constant change and will be in constant flux. It may not be possible to generalize the categories to other settings, especially not settings relating to other subjects. Furthermore, it might be argued that the researcher makes a subjective interpretation affected by his/her race, gender, etc. Ways of meeting that criticism are for researchers to disclose more about their occupation, view and commitment and to disclose the opportunities and constraints in their relationship with the research field in question. This means that researchers have to be aware of their own interpretation and images of unfamiliar groups.

My positioning in the field is as a researcher with knowledge of expat life from being a mentor for expats in Denmark and from being in contact with expats in Germany for a number of years. These experiences gave rise to my wondering about expat attitudes to learning and communicating in a foreign language other than English and about their ways of coping in a foreign culture. I started considering how to collect data and thus get access to their experiences in order to understand their behaviour from an inductive, bottom-up perspective.

3.1 Participants

The participants can be described as a random selection from an expat population. 62 out of 96 participants between 20 and 64 years old from various European and non-European countries completed the questionnaire. All the participants were members of the local section of the network "Expats in Germany" in April 2016. The participants were told that they were participating in a study of expats in Germany, and that it was not compulsory to answer the questionnaire. Totally there were 39 female and 23 male expats. The age distribution was 24 expats: 20–29, 24 expats: 30–39 and 14 expats: 40 and above. Four expats had a high school education, 24 had a BA, 29 an MA and five a PhD. Three expats were without a job, 12 were students, 33 were salaried employees (white collar jobs) and 14 were managers. 48 expats attended a German language course and 14 did not. 22 expats were native English speakers and 40 were not. 20 expats had German as their first foreign language, 32 had English as their first foreign language, eight had a third language as their first foreign language, and two native English speakers did not speak a foreign language.

3.2 Data Collection

Data for the study derived from a questionnaire (Appendix) distributed to 96 participants between 20 and 64 years old from various countries. The questionnaire was shared through the SurveyMonkey link on the Bavarian expat platforms "Munich International Platform" and "Toy Town", part of the network "Expats in Germany". The following groups were recruited for the study: expats working and/or studying in Germany in April 2016. German was not the mother tongue of any of them. The quantitative findings were supplemented with qualitative findings in terms of expat attitudes and proposals. The questionnaire was in English and divided into four sections: closed questions, open questions, former expat statements and options. The closed informative questions covered age, gender, origin, education, occupation and language skills. The open questions focused on images, challenges, opportunities and advice to future expats. Statements originating from former expat interviews in Germany were used to rate expat level of agreement. Expat options were used to rate communication contexts. For the statements a 6-point scale was used (1 = disagree; 2 = disagree somewhat; 3 = neutral; 4 agree somewhat; 5 = agree; 6 = not applicable). For the options a 5-point scale was used (1 = not at all; 2 = low; 3 = medium; 4 = high; 5 = not applicable).

Willingness to communicate included activities in private, on the job and in the classroom. It was a question of authentic situations apart from the aspects of classroom communication mentioned by the expats. The study was not designed to enable a quantitative analysis from which clear conclusions can be drawn about the impact of specific variables. The approach brought some limitations due to the many variables, so it would be difficult to make generalizations. The aim was to make clear trends related to expat experience as to intercultural awareness, foreign language learning and communication.

3.3 Data Analysis

The qualitative analysis was an inductive process of coding for thematic categories and/or specific themes emerging from the data. It was an iterative process involving reading, coding and revising the codes. In the analysis specific markers were identified related to attitudes, language skills and communication. The criteria that participants cited more frequently than others as the key to successful sojourn abroad were: German language skills, openness and positive attitude to living in a foreign country. The opportunities mentioned focused on increased intercultural awareness, learning a foreign language, getting new work experience and travelling, and the challenges focused on language skills, intercultural adaptation and socialization. The advice given clearly focused on willingness to learn and communicate in German as a condition for coping as an expat in Germany. Other criteria were rarely mentioned

such as the possibility to cope by using English as a lingua franca although English appeared from the quantitative analysis as an essential determinant.

The quantitative analysis showed expat attitudes to former expat statements concerning socialization, foreign language learning and communication. The figures were related to the eight basic categories: age, European/non-European origin, gender, education, occupation, German language classes, native English speaker/non-native English speaker and first foreign language (as presented in detail in Tables 2, 3, 4, 5, 6, 7, 8 and 9). The analysis also showed expat attitude to specific options concerning foreign language learning and communication (as presented in Tables 1, 10 and 11). The outcome indicated to which degree L2 WTC was subject to the above variables. In the following sections the results based on the questionnaire are depicted followed by further explanation.

4 Results

4.1 Images of the German Culture and Intercultural Awareness

The first research question concerned how expats experience their sojourn abroad. The answer was related to expat images of the German culture before and during their sojourn in Germany showing expats' level of intercultural awareness and their impression of communicating with the Germans. Images to be understood as the expats' perception of the German culture. Intercultural awareness is a change in attitude to the German culture, and it is defined as "realization of one's own and valuing of others' meaning, beliefs and behaviours" (Byram, 1997, p. 35). To facilitate the understanding for the expats, cultural instead of intercultural awareness was used in the questionnaire.

Table 1 Context of communication: *Where has your German cultural awareness increased the most?*

	Low or not at all (%)	Medium or high (%)
At work	13	88
When socializing with other expats	42	58
When socializing with other Germans	52	48
When studying informative material about the German culture	7	93
When reading German literature	29	71
When comparing your own culture and the German culture	41	59

Expat images of the German culture or perception of the others before coming to Germany especially included words such as "strict, cold, well-organized, conservative, everything in order, disciplined, neat and clean". Expat construction of new images after living in Germany for some time included both positive and negative words. Several expats clearly demonstrated increased intercultural awareness dependent on factors such as level of preparation and period of time spent in Germany. Some expats did some research before coming, which helped them construct a realistic image:

> Prior research ensured that I wouldn't have any negative surprise. (Expat No. 42, Origin: Brazil, Gender: M, Age: 29)

Others had a vague idea of the German culture. For that reason, they had nothing to compare with, but still they respected the culture and thus increased their intercultural awareness:

> Initially I thought it would be relatively easy to meet friends, interact with others and talk to strangers as it is in the Caribbean and the US (where I lived for 3 years), however, the culture was very reserved, the people were quite to themselves. It was different but I understood that it was their culture. (Expat No. 74, Origin: Trinidad, Gender: M, Age: 21)

The time aspect was mentioned as an important factor. It took time to become familiar with the German culture and to feel integrated. However, not all expats changed their attitudes and images:

> First 3 years in North Germany were quite a cultural shock, had difficulty to integrate and understand the mentality, the silence, the games, the jokes, the "straightness". Last 5 years in Bayern, I seem to integrate and understand the mentality much better than I ever did in my home country. (Expat No. 13, Origin: Greece, Gender: F, Age: 34)
>
> My grandmother was German so I had an impression of strict exact people. Actually it is very similar, very hard to make friends with very strict exact people, especially in the office. (Expat No. 15, Origin: US, Gender: F, Age: 63)
>
> Impression before I moved to Germany: Germans are conservative, they have strict rules, they always "follow the book". Current impression: no change. (Expat No. 88, Origin: Vietnam, raised in Denmark, Gender: F, Age: 40)

The construction of images of the German culture was not only related to time but also to place:

> I always thought Germans are cold and abrupt. In Berlin, where I lived for half a year, this proven true. However, in Bavaria, they are livelier, perhaps due to their different upbringing. Bavaria is a pleasant place to live despite of the German strict rules which are plenty. (Expat No. 26, Origin: Spain, Gender: F, Age: 38)

Both images of the German culture and cultural awareness were influenced by different factors appearing from Table 1, which shows that especially work, reading informative material about the German culture and German literature increased expat cultural awareness. Socialization with Germans and other expats as well as comparison with own culture also increased their intercultural awareness.

4.2 Socialization and Adaptation

The second research question concerned which techniques expats use to cope in a foreign culture. The answers were especially related to socialization, adaptation and confidence. Socialization to be understood as interaction with other expats and/or Germans, adaptation to be understood as attempts to fit into the German culture, and confidence to be understood as trust in own language skills. Some expats emphasized the advantage of socializing with the Germans in order to develop their own social skills and German language proficiency:

> I appreciate my social skill that I was not paying attention to before. (Expat No. 37, Origin: Turkey, Gender: F, Age: 28)
>
> Chances to improve my German through talking to people. Opportunity to learn German culture. (Expat No. 55, Origin: England, Gender: M, Age: 20)

Both socialization with the Germans and adaptation to the German culture was a time-consuming process:

> Honestly I didn't have much in the way of expectations, I thought it would be "less open and friendly" than people are in America and this is what I have found to be true, at least until you have known someone for a while they seem a little apprehensive to open up. (Expat No. 5, Origin: USA, Gender: F, Age: 28)
>
> Positive impression at first, now I am so blended in here that nothing seems "different" to me anymore. (Expat No. 77, Origin: USA, Gender: F, Age: 25)

The above statements were further illuminated in the quantitative analysis. In order to clarify how part of the questionnaire was analysed, details will be given concerning each subcategory: age, country of origin, gender, education, occupation, German language class, native English speaker/non-native English and first foreign language.

4.3 Basic Categories Influencing Expat Reactions

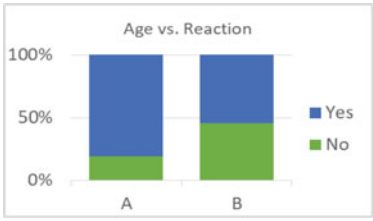
Among the 62 participants, 43 or 69% reacted to the statement, *I practice my German when I socialize with the other students because for me, that is how I improve my German.* The low number might be due to the relevance of the statement since not all the expats had access to other students in their daily life.

Among the 43 participants, 29 or 67%, i.e. close to 7 out of 10, reacted positively showing a partial or full agreement, and 14 or 33% reacted neutrally or negatively showing a partial or full disagreement. Here the two types of reactions are denoted 'yes' and 'no' respectively.

To see their influence on the reaction, the eight basic categories mentioned above were divided into subcategories. This allows setting up a contingency table between the category and the reactions. The total numbers of participants were too small for a statistical test for possible dependence.

Table 2 Age-groups influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction Age group	No	Yes	Total
A 20 - 29	4 19%	17 81%	21 100%
B 30 -	10 45%	12 55%	22 100%
Total	14 33%	29 67%	43 100%



4.3.1 Age

The category 'age' was divided into two subcategories: age-group A from 20 to 29, and age-group B from 30 and above, comprising 21 and 22 participants respectively.

Table 2 shows a positive reaction by 17 out of 21 or 81% of the participants in subcategory A; and by 12 out of 22 or 54% of the participants in subcategory B. So, where in total close to 7 out of 10 reacted positively, close to 8 and 6 out of ten reacted positively within each of the two subcategories A and B. Within the 29 positive reactions, the subcategories A and B contributed with 17 and 12 respectively. Here subcategory A contributed the most. Thus, as to age, a participant aged between 20 and 29 is more likely to react positively than a participant from the other age-group.

4.3.2 Country of Origin

The category 'origin' was divided into two subcategories: European and non-European (A and B), comprising 24 and 19 participants respectively.

Table 3 shows a positive reaction by 15 out of 24 or 63% out of the participants in subcategory A; and by 14 out of 19 or 74% of the participants in subcategory B.

So, where in total close to 7 out of 10 reacted positively, close to 6 and 7 out of ten reacted positively within each of the two subcategories A and B.

Within the 29 positive reactions, the subcategories A and B contributed with 15 and 14 respectively. Here subcategory A contributed the most.

Thus, as to origin a participant of a non-European origin is more likely to react positively than a participant of European origin.

Table 3 Origin influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction / Origin	No	Yes	Total
A Europe	9 38%	15 63%	24 100%
B Not Europe	5 26%	14 74%	19 100%
Total	14 33%	29 67%	43 100%

4.3.3 Gender

The category 'gender' was divided into two subcategories: female and male (A and B), comprising 26 and 17 participants respectively.

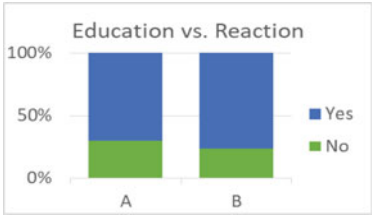
Table 4 shows a positive reaction by 16 out of 26 or 62% of the participants in subcategory A; and by 13 out of 17 or 76% of the participants in subcategory B. So, where in total close to 7 out of 10 reacted positively, close to 6 and 8 out of ten reacted positively within each of the two subcategories A and B. Within the 29 positive reactions, the subcategories A and B contributed with 16 and 13 respectively. Here subcategory A contributed the most. Thus, as to gender, a male participant is more likely to react positively than a female participant.

Table 4 Gender influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction / Gender	No	Yes	Total
A Female	10 38%	16 62%	26 100%
B Male	4 24%	13 76%	17 100%
Total	14 33%	29 67%	43 100%

Table 5 Education influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction Education	No	Yes	Total
A BA	6 30%	14 70%	20 100%
B MA	4 24%	13 76%	17 100%
Total	10 27%	27 73%	37 100%



4.3.4 Education

Among the participants 3 had a high school education, 17 a BA, 20 an MA and 3 a PhD. The first and the last groups are too small for comments, here. Thus, the category 'education' was divided into two subcategories: BA and MA (A and B), comprising 17 and 20 participants respectively.

Table 5 shows a positive reaction by 14 out of 20 or 70% of the participants in subcategory A; and by 13 out of 17 or 76% of the participants in subcategory B.

Thus where in total close to 7 out of 10 reacted positively, close to 7 and 8 out of ten reacted positively within each of the two subcategories A and B. Within the 29 positive reactions, the subcategories A and B contributed with 14 and 13 respectively. Here subcategory A contributed the most. Thus, a participant with an MA is more likely to react positively than a participant with a BA.

4.3.5 Occupation

Among the participants 1 was without a job, 11 were students, 23 were salaried employees and 8 were managers. Group one is too small for comments here. Thus, the category 'occupation' was divided into three subcategories: students, salaried employees and managers (A and B and C), comprising 11 and 23 and 8 participants respectively.

Table 6 shows a positive reaction by 6 out of 11 or 55% of the participants in subcategory A; and by 18 out of 23 or 78% of the participants in subcategory B; and by 7 out of 8 or 88% of the participants in subcategory C.

So, where in total close to 7 out of 10 reacted positively, close to 6 and 8 and 9 out of ten reacted positively within each of the three subcategories A and B and C. Within the 31 positive reactions, the subcategories A and B and C contributed

Table 6 Occupation influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction / Occupation	No	Yes	Total
A Student	5 45%	6 55%	11 100%
B Employee	5 22%	18 78%	23 100%
C Manager	1 13%	7 88%	8 100%
Total	11 26%	31 74%	42 100%

with 6 and 18 and 7 respectively. Here subcategory B contributed the most. Thus, a manager is more likely to react positively than an employee and a student.

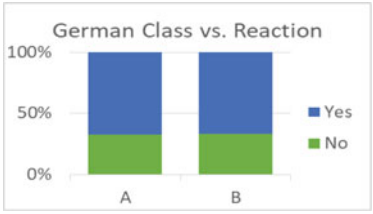
4.3.6 German Language Class

Among the participants 6 did not attend a German language class and 37 did. Thus, the category 'German class' was divided into two subcategories: yes, did attend, and no, did not attend (A and B), comprising 37 and 6 participants respectively.

Table 7 shows a positive reaction by 25 out of 37 or 68% of the participants

Table 7 German class influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction / German class	No	Yes	Total
A Yes, I attended	12 32%	25 68%	37 100%
B No, I did not	2 33%	4 67%	6 100%
Total	14 33%	29 67%	43 100%



in subcategory A; and by 4 out of 6 or 67% of the participants in subcategory B. Consequently, where in total close to 7 out of 10 reacted positively, close to 7 out of 10 reacted positively within both subcategories A and B.

Thus, as to the German language class a participant who attended a German language class was a little more likely to react positively than a participant who did not attend. What is interesting to see is that all the participants had a high agreement rate, which shows that they highly valued socialization and communication with other students.

4.3.7 Native English Speakers

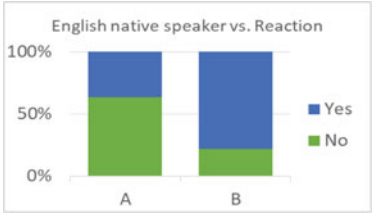
Among the participants there were 32 non-native English speakers and 11 native English speakers. Thus, the category 'Native English speaker' was divided into two subcategories: 'yes, native speaker', and 'no, not native speaker' (A and B), comprising 32 and 11 participants respectively.

Table 8 shows a positive reaction by 4 out of 11 or 36% of the participants in subcategory A; and by 25 out of 32 or 78% of the participants in subcategory B. Thus, where in total close to 7 out of 10 reacted positively, close to 4 and 8 out of 10 reacted positively within each of the two subcategories A and B.

Thus, as to being a native English speaker or not, a non-native English speaker is more likely to show full or partial agreement, and a native English speaker is more likely not to do so. Native English speakers showed neutral or partial or full disagreement maybe due to them using English as a lingua franca and thus not needing to improve their German language skills. The result emphasizes the influential role of English.

Table 8 Native English speaker influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction English language	No	Yes	Total
A Yes, native sp.	7 64%	4 36%	11 100%
B No, not native sp.	7 22%	25 78%	32 100%
Total	14 33%	29 67%	43 100%



4.3.8 First Foreign Language

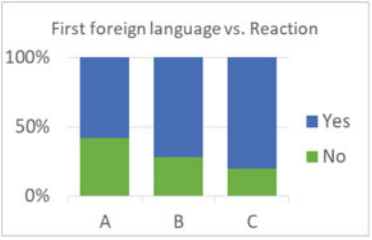
Among the participants 12 had German as their first foreign language, 25 English and 5 another foreign language. Thus, the category 'first foreign language' was divided into three subcategories: German, English and Other (A and B and C), comprising 12 and 25 and 5 participants respectively.

Table 9 shows a positive reaction by 7 out of 12 or 58% of the participants in subcategory A; and by 18 out of 25 or 72% of the participants in subcategory B; and by 4 out of 5 or 80% of the participants in subcategory C.

So, where in total close to 7 out of 10 reacted positively, close to 6 and 7 and 8 out of ten reacted positively within each of the three subcategories A and B and C. Within the 29 positive reactions, the subcategories A and B and C contributed with 7 and 18 and 4 respectively. Here subcategory B contributed the most. Thus, as to first foreign language, a participant with another first foreign language than English or German was most likely to react positively. Expats having German as their first foreign language showed the lowest degree of agreement, finding it less important to socialize to improve their German language skills. Yet they valued socialization to some extent as a source of language improvement. In summary, Tables 2, 3, 4, 5, 6, 7, 8 and 9 show that 20–29 year-old, non-European, male expats with an MA, holding a managerial position and neither English nor German as their first foreign language were more willing to socialize in order to improve their German language skills than other expats. So both personal traits and position in society influenced L2 WTC. It should be emphasized that it is an ideal description of an expat since the traits will vary from expat to expat, and a specific expat will probably not comprise all the traits mentioned.

Table 9 First foreign language influencing the reaction to the statement: *I practice my German when I socialize with the other students because for me, that is how I improve my German*

Reaction First for. lang.	No	Yes	Total
A German	5 42%	7 58%	12 100%
B English	7 28%	18 72%	25 100%
C Other	1 20%	4 80%	5 100%
Total	13 31%	29 69%	42 100%



4.3.9 German Language Skills and Communication Challenges

The third research question concerned what is the expat attitude to communicate in a foreign language other than English. The factors influencing L2 WTC were related to different contexts such as German language class, private life and work environment. Expat experience of communication in German was influenced by their German language skills, different German attitudes to foreign speakers of German, different German accents and the possibility of using English as a lingua franca.

On average 37% out of the 62 expats agreed and 46% disagreed in the statement, *I find that Germans make very little attempt to understand foreigners if they pronounce German words incorrectly.* A minority agreed, and the highest percentage of agreement was among expats aged between 30 and 39 (50%), managers (50%), MA's (49%), Ph.D.'s (60%) and expats with an L2 other than German or English (63%). The reason could be their involvement in detailed discussions with Germans as a consequence of their occupation, or they might have insufficient German language skills. Expats mentioned job related and privately related communication challenges:

> Leading a department as a non-German person is a big challenge. (Expat No. 12, Origin: Ukraine, Gender: M, Age: 27)
>
> Learning German, convincing my future employer in German, making friends in German. (Expat No. 13, Origin: Greece, Gender: F, Age: 34)

Being accepted as a German speaking person was also seen as a challenge:

> Having German people reply to you in English when you try and speak German to them because it's easier. (Expat No. 55, Origin: England, Gender: M, Age: 20)
>
> Germans are almost incapable of understanding German if it isn't spoken with perfect pronunciation. (Expat No. 61, Origin: England, Gender: M, Age: 40)

Some expats experienced being appreciated by the Germans due to their willingness to speak German:

> I had heard lots of stories regarding racist Germans. However my experience so far has been good. I felt when I take an effort to learn and communicate in German, Germans really appreciate us. (Expat No. 52, Origin: India, Gender: F, Age: 29)

Other expats experienced disappointment not especially due to the language but due to their origin:

> My English is better than of an average German, therefore I'm often mistaken for an American, however once it's established that I am from Russia I see almost disappointment and a lack of interest – difficulty to become friends with Germans - most of my friends are non-German. (Expat No. 86, Origin: Russia, Gender: F, Age: 34)

Different German accents gave rise to challenges:

> Understanding the very different accents from various regions of Germany. (Expat No. 83, Origin: UK, Gender: M, Age: 62)
>
> Understand Bavarian language since I was already speaking German (limited to work). French humour totally different than the German one. (Expat No. 92, Origin: France, Gender: F, Age: 46)

Annoyance was expressed due to some expats not learning German:

> Stupid people who can't be bothered to learn the language making foreigners look bad. (Expat No. 50, Origin: UK, Gender: M, Age: 39)

Some expats had a clear impression of the value of communicating in German for integration and intercultural understanding:

> If you are precise and have reliable statistics (wissenschaftlich bewiesend) then it is good. When you speak the language, it is easier to be integrated. Once you understand the rules, that is fine. (Expat No. 28, Origin: France, Gender, M, Age: 50)
>
> Learn the language. Get to know people from all over. Understand my own cultural roots. (Expat No. 42, Origin: Brazil, Gender: M, Age: 29)

The results showed some evidence that learning German was considered important for expat integration and understanding.

4.3.10 German Language Classes and the Influence on Willingness to Communicate in German

Attending a German language class increased expat willingness to communicate in German although in some cases expats experienced challenges, e.g. in terms of lack of confidence in their own language skills. On average 48% out of the 44 participants agreed and 34% disagreed in the statement, *I would like to speak more in my German class, but I do not feel confident enough.* The statement indicated expats' confidence in their German language skills and their willingness to communicate in German. The highest level of agreement (68% and 64%) was among non-Europeans and expats at the age of 30–39 thus showing lack of confidence. The low number of participants indicated that not all expats found the statement relevant.

On average 82% out of the 51 participants agreed and 10% disagreed in the statement, *German class environment helped me to learn the language.* A clear majority of all the categories agreed. The only categories with a low percentage (14 and 45%) were expats not attending a German language class and expats aged 40 and above, probably both categories being expats not needing to improve their German language skills. On average, 55% out of the 54 expats agreed and 39% disagreed in the statement, *I found it easier to learn German by attending a German class than by going to work in Germany.* Native English speakers (32%) did not find attending a German language class that important maybe due to them using English as a lingua franca. Expats not attending a German language class and expats with German as their first foreign language also had a low agreement rate (9% and 38%), which is quite natural. Table 10 shows a high level of agreement, which underlines to which extent expats benefit from German language classes. It emphasizes the importance of using German in different contexts and the influence of English when communicating with other expats.

Table 10 Context: *How helpful have your German language classes been in the following situations?*

	Low or not at all (%)	Medium or high (%)
Cultural events	36	64
Communicating with Germans	9	91
Communicating with other expats	51	49
When applying for a job in Germany	43	57
At work/in the office	32	68

4.4 Willingness to Communicate in German

A clear majority of all the categories agreed that learning German from the beginning of their sojourn was very important to succeed as an expat. On average 80% out of the 61 expats agreed and 7% disagreed in the statement, *Start using German right from the beginning of your stay in Germany*. Also expats able to manage by using English as a lingua franca realized that communicating in German was important:

> My impression of German people before coming was that they were reserved, but nice people and after coming here I think I was somehow right (at least in most of the cases). At the moment my expertise in the language is not so good (around 20–30%) and in my opinion to blend entirely into their culture and to be fully accepted you need to learn the language - even though it's possible to live with English knowledge. (Expat No. 40, Origin: Colombia, Gender: M, Age: 29)

> Learn the language, or you shouldn't move to Germany. (Expat No. 77, Origin: USA, Gender: F, Age: 25)

Although the majority of expats were willing to learn and communicate in German, English played an essential role as the language of communication. On average, 79% out of the 61 participants agreed and 16% disagreed in the statement, *I would like to improve my German, but I mostly speak English with other expats*, showing expats willingness to improve their German language skills and the influence of English as a lingua franca. All the categories had an agreement rate considerably above 50% apart from the PhD's having 50%.

The importance of using English as a lingua franca in different contexts appears from Table 11. Although a clear majority of expats were aware of the importance of speaking German, they realized that the use of English as a lingua franca was quite important both at work and in other contexts.

4.4.1 Key Factors Influencing Willingness to Communicate in German

A majority of expats considered L2 WTC as an essential condition for coping in Germany. They emphasized the importance of learning and communicating in

Table 11 Context of communication: *How much have you benefitted from your ability to speak English?*

	Low or not at all (%)	Medium or high (%)
At cultural events	22	78
When communicating with Germans	25	75
When communicating with other expats	3	97
When applying for a job	21	79
At work/in the office	13	87

German from the beginning of their sojourn. The access to learning and improving their German language skills differed from expat to expat. Some knew the language before coming to Germany. Among the rest, some preferred German language classes and some preferred to learn German at work and/or through socialization. Especially age, occupation and language skills influenced expat attitude to L2 WTC. Expats aged 20–29 were most positive towards L2 WTC. Other categories being very positive towards L2 WTC were managers, PhD's and MA's. Lack of confidence in language skills was especially seen among non-Europeans. Native English speakers were less positive towards L2 WTC than other expats, and English used as a lingua franca tended to replace German in many contexts and thus hindered L2 WTC.

Willingness to learn and communicate in German was influenced by three main factors:

- Background related L2 WTC (country of origin, education, language skills)
- Personally and privately related L2 WTC (age, gender)
- Environmentally related L2 WTC (occupation: kind of work/study).

The findings will be discussed in relation to the concepts of intercultural dialogue and awareness and the concepts of L2 WTC. Due to lack of relevance, specific expat research from the business field will not be included.

5 Discussion

As pointed out earlier, the results of the analysis revealed that L2 WTC is subject to the influence of many individual and context dependent determinants relating to expat experience of the target language and culture, expat intercultural awareness and adaptation and expat German language acquisition and skills. These determinants encouraged or hindered L2 WTC and varied from person to person.

5.1 Intercultural Dialogue and Willingness to Communicate

It is quite obvious that inner and outer factors influence L2 WTC. The inner factors mentioned especially relate to confidence, goal setting, identity and motivation, while the outer factors relate to cultural norms and the degree of immersion depending on private and work-related position.

The complexity of expat experience resonates with Ganesh's and Holmes' (2011) comments on intercultural dialogue as being shaped by various factors including individual agency, the multiplicity of actors and the surrounding elements. This study brings to the fore responses to otherness. A majority of the expats realized that they needed to communicate in the target language and engage in intercultural dialogue to succeed in the foreign culture. They needed to exchange views with groups with different ethnic, cultural, religious and linguistic backgrounds and heritage. Expats represent a multicultural society with multifaceted purposes and occupations. This does not quite confirm the idea (Härkönen & Dervin, 2015) that mobile students in higher education are considered as privileged movers with shared discourses, aims and images. Expats seem to have different discourses, individual aims and images.

The findings partially confirm Dörnyei's research (2005) that L2 WTC depends upon factors such as motivation, aptitude, language learning strategies, language anxiety, and others. However, anxiety in connection with L2 WTC was not directly represented in the data, only in terms of lack of confidence when attending a German language class. The same applies to MacIntyre's and Doucette's (2010) three L2 WTC variables comprising perceived competence, hesitation and anxiety. Thus competence and confidence are important factors for expats while hesitation and anxiety might be important but not directly mentioned. Motivation is mentioned by Munezane (2015) in connection with the construction of the ideal self-comprising motivation, confidence and goal setting. This is a likely scenario for each individual expat. Motivation and confidence when speaking German and goal setting for the expat sojourn in Germany are factors influencing L2 WTC. In this respect, MacIntyre et al. (2003) draw attention to the learner's decision to voluntarily speak the language when the opportunity arises. MacIntyre et al. (1998) argue that "a program that fails to produce students who are willing to use the language is simply a failed course" (547). The findings are partly consistent with Peng's (2012) research stating that L2 WTC is socially constructed as a function of the interaction both inside and outside the classroom. Expat attitude to German language classes clearly indicated that a majority of expats valued these classes and were willing to communicate in German the reason being that as expats they had to manage in a German context outside the classroom.

5.2 Immersion and Willingness to Communicate

Apart from German language classes, it is a question of real-life situations, and opportunities to speak the language arise all the time. Since expats are in an immersion

situation, there is an intertwined relationship between L2 WTC and the surrounding environment. However, the findings indicated that a majority of expats had limited access to total immersion.

The findings support the idea highlighted in the literature that immersion is essential. In the immersion process, expat motivation to speak German is influenced by factors such as job requirements and occupation, confidence, German language skills, English as a lingua franca and socialization. The outcome also resonates with MacIntyre et al.'s (2002) findings that gender and age influence L2 WTC, which among others appears from expat reaction to the statement of practicing German when socializing with other students. Expats aged between 20 and 29 were more likely to react positively to the statement than expats from the other age-group, and the same applies to female expats being more likely to react positively than male expats. Furthermore, the immersion process is consistent with Yashima's proposition that "Unless one has something to say about a topic or opinions to express about an agenda, one does not have an urge to communicate" (Ushioda, 2009, p. 155). L2 WTC varies from expat to expat depending on their interaction in private and public spheres. Contrary to some classroom activities giving rise to resistance, real-life situations encompass a more positive attitude towards communication since expats may experience an urge to communicate.

6 Conclusions

Until recently, research on L2 WTC has especially focused on English. The aim of this exploratory study was to take into account expats' voices concerning their sojourn abroad. The study provided some clear indications of the aspects expats focus on as successful criteria for sojourn abroad. In Germany expats experience a number of opportunities centered upon language learning, cultural experience, work experience, socialization and travelling. The experiences result in increased intercultural awareness based upon comparison with the expats' native culture. The study gave examples of images of the German culture before and after becoming an expat and examples of developing intercultural awareness. The techniques used to succeed in Germany are learning and communicating in German, using English as a lingua franca and adapting to the German culture. Expat willingness to communicate in German is influenced by age, gender, country of origin, education, language skills and occupation. Intercultural awareness especially increased at work, which emphasizes the importance of immersion for L2 WTC. To a great extent expats benefit from German language classes when communicating with Germans and at work and less when communicating with other expats. It is quite clear that English used as a lingua franca plays a great role in various situations.

L2 WTC is partly shaped by the context, peers and the person speaking. Thus L2 WTC is a complex, fluid and multifaceted phenomenon. Expat immersion in the German culture means increased willingness to communicate in German, which might contribute to enhancing communication and mutual understanding among

people with different cultural and linguistic backgrounds. Although the findings mostly relate to situations outside the classroom, German language classes seem to be a key element for L2 WTC. At the same time, English as a lingua franca shapes expat access to L2 WTC. The ordinary language classroom may benefit from the findings by emphasizing key factors influencing L2 WTC such as learning through socialization and interaction, awareness of confidence in language learning situations and immersion in real-life situations. While efforts were made to ensure that the methods used were rigorous, no study is without limitations. Theories developed in connection with classroom L2 WTC and mobile students in Belgium, China and North America may not be appropriate for use in real-life situations across cultures. Direct comparisons of results might be complicated. However, they represent a global picture of how students and expats look upon their experiences abroad.

This study has some limitations. Among them is the fact that participants' responses might have been affected by social desirability, or they might have responded positively to please the researcher. Self-reported data can be subject to a number of biases due to for instance self-flattery or lack of sense of reality. Therefore, analytic results need further exploration by other researchers. However, it should be added that the researcher was not in direct contact with the participants, thus they did not feel encouraged to give a specific answer. Neither did they feel urged to answer the questionnaire since it was on a voluntary basis.

The study was based upon data from only one group of expats in one specific area of Germany, which limits its generalizability. Future studies which involve participants from other countries in the world communicating in other foreign languages than German or English would yield data that could generalize more easily.

Appendix: Questionnaire

General Info

Q1. How old are you?

Q2. Gender: female or male?

Q3. In which country were you born?

Q4. Higher education: please mention all degrees/ diplomas

Q5. Your current profession

Q6. What was the main reason for your moving to Germany?

The Languages you Speak

Q7. What is your mother tongue/native language?

Q8. Which other languages do you speak?

- First foreign language
- Second foreign language
- Third foreign language
- Other foreign languages

German Culture: Then and Now

Q9. What was your impression of the German culture before you came to Germany? and how does that impression compare with your cultural experience now? please provide us with a short summary. (Feel free to write more, if you would like to).

Expat Statements

Q10. Adaptation & Identity

Please rate the following statements originating from expats living in Germany. The statements have been slightly adapted.

Please use the scale 'Agree, Agree somewhat, Neutral, Disagree somewhat, Disagree, N/A'.

For those that don't know, N/A stands for not applicable.

- Before I came to Germany, I knew the stereotypes: Germans love to drink beer, Germans love to eat Sauerkraut, Germans love soccer. But nothing about their way of life.
- I do not feel so foreign any more. It is a question of mentality and personality, somewhat.
- I am interested in working together with different cultures.
- Be careful: do not forget your own identity.
- Increasing cultural awareness is important and can be achieved through good education.
- You should adapt yourself to the culture and not expect to change it.
- You can keep your eating habits, but not your own country's legal system.
- Getting along with Germans depends largely on your attitude.

Expat Statements

Q11. English as a Lingua Franca (common foreign language)

Please only rate the following statements if you use English as a common language when you speak to other people in Germany, e.g. to other expats or Germans.

Please use the scale 'Agree, Agree somewhat, Neutral, Disagree somewhat, Disagree, N/A'.

- I would say that English is quite a simple language to learn on a basic or intermediate level, but many people do not master it sufficiently to communicate effectively beyond their own field of business. This is disturbing, and in the case

of Germany for example, gives a false image of how well local people speak English.
- I encounter more positive situations than negative ones, and it is always an amazing feeling, connecting with someone in a common language that is neither of our mother tongues.

Expat Statements

Q12. English as a Lingua Franca (common foreign language) … continued

The following are all statements from a native English speaker. Please only give your opinion on the following statements if you use English as a common language when you speak to other people in Germany, e.g. to other expats or Germans.

Please use the scale 'Agree, Agree somewhat, Neutral, Disagree somewhat, Disagree, N/A'.

- The English we develop together as expats is not the kind of English I speak at home.
- I have to improve my British English when I go back to England.
- English as a lingua franca is a simplification of the English language.
- You cannot really associate English as a lingua franca with any culture.
- When expats use English as a lingua franca, they use a lot of German words.
- Germans tend to use a German word when they do not know the right word in English.

Expat Statements

Q13. The German Language

Kindly rate the following statements, made by fellow expats.

Please use the scale 'Agree, Agree somewhat, Neutral, Disagree somewhat, Disagree, N/A'.

- I would like to improve my German, but I mostly speak English with other expats.
- I would like to speak more in my German class, but I do not feel confident enough.
- During German class, I like when the teacher helps me to finish my sentence.
- German is still a huge problem for me: I still can't roll my tongue when I pronounce some difficult words, so it could lead to a new word with a different meaning.
- I practice my German when I socialize with the other students because for me, that is how I improve my German.
- When I am with other students, especially with someone close to me, then I feel more comfortable to speak German, because I know that they will listen, try to understand me and help me to pronounce German words correctly.

Expat Statements

Q14. The German language … continued

Kindly rate the following statements, made by fellow expats.

Please use the scale 'Agree, Agree somewhat, Neutral, Disagree somewhat, Disagree, N/A'.

- I find it very useful to use body language to express what I mean.
- I find that Germans make very little attempt to understand foreigners if they pronounce German words incorrectly.
- Start using German right from the beginning of your stay in Germany.
- German class environment helped me to learn the language.
- I found it easier to learn German by attending a German class than by going to work in Germany.

Challenges and Opportunities

Q15. What kind of challenges have you encountered as an expat in Germany? Name three.

Q16. What kind of opportunities have you experienced as an expat in Germany? Name three.

Cultural Awareness

Q17. Where has your German cultural awareness increased the most?

Please use the scale 'Not at all, Low, Medium, High, N/A'.

- At work
- During German class
- When socializing with other expats
- When socializing with other Germans
- When studying informative material about the German culture
- When reading German literature
- When comparing your own culture and the German culture

Comments.

German Language Lessons for Expats

Q18. How helpful have your German language classes been in the following situations?

Please use the scale 'Not at all, Low, Medium, High, N/A'.

- Cultural events
- Communicating with Germans
- Communicating with other expats

- When applying for a job in Germany
- At work/ in the office

Comments.

English Language Ability

Q19. How much have you benefitted from your ability to speak English?

Please use the scale 'Not at all, Low, Medium, High, N/A'.

- At cultural events
- When communicating with Germans
- When communicating with other expats
- When applying for a job
- At work/ in the office

Comments.

Socialising with Other Expats

Q20. Where do you mostly socialise with other expats?

Please use the scale 'Not at all, Low, Medium, High, N/A'.

- At public get-togethers/ social clubs
- At work
- During German class
- At the gym/ during sports activities
- At private parties
- Privately arranged get-togethers

Comments.

Your Advice to Others

Q21. What kind of advice would you like to give future expats heading to Germany?

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The Mediating Effect of Culture on the Relationship Between FL Self-assessment and L2 Willingness to Communicate: The Polish and Italian EFL Context

Małgorzata Baran-Łucarz

Abstract The study reported in this chapter verifies the assumption that the strength of relationship between self-assessment of foreign language (FL) skills and Willingness to Communicate (WTC) in a FL is determined by the cultural background of the students. Since self-assessment is said to be culturally-bound (e.g., Lockley, 2013; Mercer, 2011), variation in the link between the two variables found in different countries may be significant. To explore this phenomenon, a pilot study was conducted among 35 Polish and 35 Italian high school learners of English as a FL, representing the same level of proficiency (B1 +/B2 according to Common European Framework of Reference). The data for the study were collected with the use of three questionnaires, which had the form of self-report surveys. One of them, that is, the FL Self-Assessment Measure, consisted in the participants evaluating their level of different subskills in English, such as grammar and pronunciation accuracy, vocabulary range, and fluency. The two other batteries - the Measure of WTC in the FL Classroom and Measure of WTC outside the FL Classroom (Baran-Łucarz, 2014) - diagnosed the participants' eagerness to speak in a FL in these two different settings. The outcomes showed that the Italian participants not only assessed their level of English subskills significantly higher than the Polish students, but also that they were more willing to communicate in both settings. Moreover, the results suggest that the Polish participants were more concerned about their level of English when speaking in the TL than the Italian learners. While in the case of the Polish respondents, moderate to strong relationships (Spearman rho) between self-assessment of English skills and WTC both in the classroom and naturalistic setting were found, in the case of the Italian participants the correlations were either weak or non-significant. Most of the differences between the paired correlations computed for particular subskills and L2 WTC for the Polish and Italian participants were statistically significant.

Keywords Willingness to communicate · Cultural background · Self-assessment of FL subskills · Formal and informal setting

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_5

1 Introduction

Few would disagree that at present times—times of intensive globalization—the vast majority of learners struggling to master foreign languages (FLs) aim first and foremost at communicative proficiency, which would allow them to become active citizens of the global world. At the same time, many SLA researchers stress the fact that speaking is not only the most important target of FL students but also a means of reaching satisfactory communicative skills (e.g., Savignon, 2005; Skehan, 1989; Swain, 1995). Although nowadays, FL learners are provided with more opportunities to use the target language (TL) in authentic conversations taking place in naturalistic contexts, it is still the classroom that for many FL learners constitutes the main setting for communicative practice in the TL, not only at early but also later stages of learning (see e.g., Kuciel-Piechurska, 2011; Pawlak, 2011). Needless to say, the two contexts—formal and informal (classroom and naturalistic)—are governed by their own unique principles, which usually does not allow to generalize observations from one setting to another. It seems, however, that in both contexts, the student's decision to take part in a conversation in the TL is based, among others, on his or her more or less conscious analysis of potential gains (e.g., raising communicative skills by practising speaking in the classroom, successful exchange of ideas, opinions and information both in and outside the classroom) and losses (e.g., losing one's face due to producing erroneous utterances, unsuccessful communication or losing one's genuineness). MacIntyre and Legatto (2011) corroborate the fact that indeed speaking in a FL which one does not have full control of carries the risk of not only decreasing one's FL self-efficacy but also of fearing that one may lose his or her face if the communicative situation is characterized by pitfalls and communication breakdowns. The arousal of such negative emotions is determined not only by several situation cues and characteristics (Rauthmann et al., 2015; Zhang et al., 2018) but also by trait-like factors, such as personality (e.g., MacIntyre & Charos, 1996; MacIntyre et al., 1998) or motivation (e.g., Hashimoto, 2002). There is also evidence for self-perceptions being important antecedents of the decision to join in or initiate a conversation in an L2 (e.g., Baran-Łucarz, 2015; Kuciel-Piechurska, 2011). Self-assessment, in turn, has been found to be cultural-dependent (e.g., Lockley, 2013; Mercer, 2011). Some studies have already shown that the approach to speaking in a FL is indeed culture-specific (e.g., Cao & Philp, 2006; Ferris & Tagg, 1996; Peng, 2014; Wang & Clément, 2003). Such reflections are shared frequently by teachers with a rich experience in teaching FLs across the globe. As they claim, learners of presumably comparable levels of the TL representing different cultures often vary in their eagerness to communicate in the TL (see e.g., Mystkowska-Wiertelak & Pawlak, 2017). It seems, however, that more data are needed to examine whether indeed the link between students' self-perceptions related to FL learning and their approach to communication in a FL may vary across cultures. In order to shed more light on this matter, a study comparing the strength of the relationship between

willingness to communicate in a foreign language (L2 WTC[1])—the most immediate determinant of initiating or joining a conversation—and FL self-assessment of learners representing two different countries, namely Poland and Italy, was carried out and is reported herein.

The chapter consists of two major parts. The first one focuses on providing theoretical grounds for hypothesizing about the existence of cultural variation in the link between FL self-assessment and willingness to communicate in a FL. Thus, the construct of L1 WTC is introduced and the role of culture in L1 communication is briefly discussed. What follows is a discussion on how the effect of culture has been understood and examined in reference to L2 WTC. Finally, special attention is drawn to self-assessment as an antecedent of WTC, viewed again through the perspective of cultural differences. The second part of the chapter reports the conducted mixed-method study,[2] opening with research questions, followed by methodology (subjects, instruments, data collection and analysis procedures), and presentation of quantitative and qualitative outcomes. The chapter closes with a discussion of results and some brief pedagogical implications.

2 Literature Review

2.1 Culture and L1 Communication

According to Hall (1959, p. 169), "culture is communication and communication is culture," while Risager (2006, p. 11) further explains, "languages spread across cultures, and cultures spread across languages". The view that the three phenomena—culture, language and communication—are interlinked has been accepted for decades (see e.g., Kramsch, 1998; Salzman, 1998). Mitchell and Myles (2004) put forward a claim that language and culture are inseparable and acquired in tandem, with the growth of one being automatically supported by the development of the other. Furthermore, it has been acknowledged that culture shapes a person's eagerness to engage in communication in first language (L1) (McCroskey & Richmond, 1991). These cultural specifications have also been observed to function sometimes as "restraining forces on communication, which can affect intercultural communication as well as impinge on L2 learners' behaviour inside and outside the classroom in monolingual settings" (MacIntyre, 2007, p. 572). Consequently, culture has been taken into account not only in the explanation of variation in willingness to communicate in mother tongue (L1 WTC), but also considered one of the antecedents of L2 WTC.

[1] Although both for Poland and Italy English is not a second but foreign language, the typical abbreviation of *L2 WTC* is used in reference to the participants' willingness to communicate in English throughout the entire chapter.

[2] The study reported in this chapter was presented at the 14th Annual Worldwide Forum on Education and Culture, taking place in Rome (3–4 December, 2015). The meetings were initiated in 2002 by Professor Bruce Swaffield, who passed away in 2016. Thank you, Bruce.

On the basis of numerous studies (e.g., Burgoon, 1976; McCroskey & Baer, 1985; McCroskey & Richmond, 1982, 1987; Mortensen et al., 1977), L1 WTC - an inclination to initiate, join in or avoid communication when given a choice - was conceptualized as a personality-based trait-like variable, characterized by a relatively stable level, irrespective of the communication setting and interlocutors involved in a conversation (McCroskey & Richmond, 1982, 1991). Next to extraversion, which was found to correlate positively and highly with levels of eagerness to communicate in mother tongue, McCroskey and Richmond (1991) considered self-perceived communicative competence and communication apprehension significant antecedents of L1 WTC. What captivated the attention of researchers in their identification of predictors of WTC in L1 was also culture. Empirical data (e.g., Barraclough et al., 1988) evidently showed that L1 WTC varied significantly from culture to culture. Studies conducted among learners representing various countries, such as Puerto Rico (McCroskey et al., 1985) Australia, Micronesia, Sweden, America (McCroskey & Richmond, 1990), and Finland (Sallinen-Kuparinenet et al., 1991) lent further support to this claim. As Mystkowska-Wiertelak and Pawlak (2017, p. 4) put it, summarizing the observations of McCroskey and Richmond (1991), "… although communication as such is a universal phenomenon, there exist certain norms and required skills in this respect that appear culture specific … Cultural divergence seems to have a considerable impact on a speaker's WTC". This may be explained, among others, by the fact that personality traits are nurtured by particular cultures and thus are more likely to be found among members of some communities than others. Aida (1994), for example, notes that extraversion—a variable positively correlating with WTC—is more characteristic among Americans than the Japanese.

Much in the same vein, Engelbert (2004, p. 204) clarifies that "individuals of one culture show a concentration of behaviour patterns which in another culture are not observed with the same frequency, meaning that the observed features exist, normally distributed, in both cultures under comparison, but with a different strength of emphasis". This dissimilarity in the distribution of particular features across cultures may be due to it having stronger and deeper historical and cultural roots in some communities than others. For example, Bogdanowska-Jakubowska (2011) observes that one of the traits cultivated for generations in Poland is modesty. Although after 1989, the quality is not believed to be the "top value" by the younger generation of Poles anymore, "modesty was, and still is, considered by some Poles one of the fundamental values that should be acquired by young people" (Bogdanowska-Jakubowska, 2011, p. 170). Revealing an appropriate level of modesty by the application of particular strategies seems to be prescribed in the norm of the Polish self-presentation style. Among these strategies is not only avoiding direct boasting about one's private or career successes, (e.g., Grybosiowa, 2002; Jakubowska, 1996) or lowering one's gaze, but also "timidity and lack of assertiveness visible in responses to compliments and congratulations (which are often played down or even rejected) (Bogdanowska-Jakubowska, 2011, p. 171)". Though indirectly, modesty may be expected to affect the content of a conversation, the manner in which it is held, and even the decision on whether to initiate or join a conversation or not. The decision might result from the speaker's perceptions not only of situational characteristics (Rautmann et al.,

2015) but also of his or her self-perceptions, which again may be filtered through such cultural traits as modesty.

2.2 Culture in the Model of L2 WTC

Numerous studies have shown that WTC in a FL is "not a simple manifestation of WTC in L1" (MacIntyre et al., 1998, p. 547). In fact, some researchers have even observed a negative correlation between L1 and L2 WTC (e.g., Charos, 1994). All this suggests that L2 WTC is a unique construct, governed by its own peculiar rules and that "the change of language imposes a 'dramatic' transformation of the communication setting" (MacIntyre et al., 1998, p. 546). The change may lead to high levels of anxiety and withdrawal, caused by difficulties with opening oneself to new cultures, experiencing destabilization of one's self-concept acquired prior to encountering a new culture (Gardner, 2001), or by considering one's genuineness to be threatened when interacting with others in a language that has not been fully mastered (Horwitz, 2017).

Defining L2 WTC as "a readiness to enter into discourse at a particular time with a specific person or persons, using a L2," MacIntyre et al. (1998, p. 547) put forward a heuristic pyramid model of the construct. It has been suggested that L2 WTC and its actual use are shaped by a range of interrelated linguistic, communicative and socio-psychological factors (Peng, 2014). While some of these antecedents can be considered typical situational variables (layers I-III of the model), e.g., desire to communicate with a specific person, state communicative self-competence or anxiety, others are more distant and stable variables (layers IV-VI), such as motivation, communicative competence, personality, and intergroup climate. Many studies have lent support to the heuristic model of MacIntyre et al. (1998). What has attracted particular attention of many researchers are the more distant and stable variables of L2 WTC. Studies exploring the nature of the construct from a macro-perspective have proven, for example, that anxiety (e.g., MacIntyre & Legatto, 2011), self-perceived communicative competence (e.g., Hashimoto, 2002; MacIntyre & Charos, 1996; Yashima, 2002), intrinsic and extrinsic motivation (e.g., Hashimoto, 2002), ideal L2 self (e.g., Ryan, 2009), beliefs related to FL learning (e.g., Peng, 2007), and attitudes (Baker & MacIntyre, 2000) are indeed significant antecedents of L2 WTC and its use. Further research, though initially less popular, have examined the more dynamic nature of the construct, focusing on the immediate situational factors, just to mention task-interest (e.g., Eddy-U, 2015; Dörnyei, 2009), familiarity with the interlocutors (e.g., Cao & Phil, 2006), group cohesiveness and classroom climate (e.g., Peng, 2007; Riasati, 2012) or class size (Cao & Phil, 2006; Khazaei et al., 2012). A framework offering a "comprehensive and systematic approach to the study of situational antecedents of WTC," in which a clear distinction between situational cues (objective features of a learning situation) and situational characteristics (a student's subjective perception of the learning situation) is made, has been forwarded recently by Zhang et al. (2018). Finally, Mystkowska-Wiertelak and Pawlak (2017) have managed to

combine the macro- and micro-perspectives, not only verifying the stable dispositions of L2 WTC but also providing a look at how it may fluctuate over time in particular situations.

When the role of culture in the model of WTC is concerned, initially it was discussed and examined in reference to intergroup climate. Placed at the very bottom of the heuristic pyramid model (Box 11) together with personality (Box 12), it was considered the "basis or platform on which the rest of the influences operate; the foundation on which the pyramid is built" (MacIntyre et al., 1998, p. 54). Usually it has been viewed through the perspective of *ethnolinguistic vitality* and *subjective group vitality* (Giles et al., 1977). The latter, which has appeared to be more important in SLA studies, is related to how L2 students perceive the economic and social importance, and power of their own and the TL culture. Observations show that for some nations, for example Poles, English—a native language of high status countries—has always been attractive. The perspective of achieving a good command of English has usually been more or less directly associated with the possibility of joining a more prestigious society and the perspective of more open access to attractive and better-paid employment, perspectives for self-development, or interesting social connections (see e.g., Piechurska-Kuciel, 2011). Consequently, as the example shows, culture can shape, among others, motivation to learn a FL, one of the significant antecedents of L2 WTC.

Culture is also perceived as a filter through which several situational factors determine L2 WTC. For example, Zhang et al. (2018) explain that the way certain situation characteristics and cues, such as task-usefulness or teaching style, are perceived by the students depend upon the culture the students were brought up in. An analogous view was also held by Wen and Clément (2003), who called for a need to design a Chinese indigenous model of L2 WTC that would differ from the pyramid model of L2 WTC built on the basis of learner behaviours typical for Western countries. Having observed that in the case of Chinese learners, the desire to communicate does not straightforwardly lead to the readiness to speak, they suggested modifying the original model by relocating some of its variables. According to the researchers, the state of being ready to communicate may be hindered directly by the classroom societal context (group cohesiveness and teacher support), personality factors (risk-taking and tolerance of ambiguity), motivational orientation (affiliation, task-orientation), and affective perceptions (inhibited monitor and positive expectation of evaluation). As they sum up, "Confucian cultural values are the dominant force shaping the individual's perception and way of learning, which is manifested in L2 communication" (Wen & Clément, 2003, p. 18).

The specificity of the Chinese cultural influence on L2 WTC was also examined by Peng (2007). On the basis of her observations, she concluded that culture affected both internal learner variables, such as communicative competence, language anxiety, and risk-taking, as well as external factors, namely group cohesiveness, teacher support and classroom organization. In her later work, Peng (2014, p. 29) forwarded four aspects of "Chinese culture of learning and communication" that would shape the L2 WTC of Chinese students. Among them are respect for the teacher and the teacher-centered classroom culture, which traditionally do not allow the student to take

initiative or ask questions unless encouraged to do so. Learning through memorization and imitation rather than interaction is the second characteristic of FL classroom learning/teaching that can explain students' lower levels of WTC. The third aspect is related to modesty and humbleness, typically observed in Chinese culture (e.g., Gao, 1998), which "may predispose individuals not to be assertive" or display reserved behavior in the classroom (Peng, 2014, p. 31). The fourth aspect related strongly to Chinese culture is face protection. Caused by the fear of being ridiculed or negatively evaluated by others, it typically leads to silence or limited communication in the classroom. Relying on observations of Gao and Ting-Toomey (1998), Peng (2014, p. 31) clarifies, "Chinese people are sensitive to their public image and concerned about what others think of them. 'Losing face' will bring disgrace and humiliation on a person and even reduce him or her to being unaccepted socially".

Culture-specific rules and behaviours that could affect L2 WTC were also observed in other countries. For example, Pattapong (2009) reported WTC in an EFL classroom setting of Thai learners to be determined by cultural mentalities that shaped both classroom practices and the students' perceptions related to FL learning. It is also Matsuoka (2006) who considered difficulties with speaking in a FL to be culture-based. As she explained, limited L2 WTC of Japanese students can be accounted for by their inborn "predisposition against verbal behaviour" (Peng, 2014, p. 29).

2.3 The Link Between Self-assessment and Culture in the Model of L2 WTC

Among the most immediate antecedents of L2 WTC is self-confidence (MacIntyre et al., 1998)—a construct proposed originally by Clément et al. (Clément, 1980; Clément & Kruidenier, 1985) in their social context model. The model is based on the premise that motivation to master an L2 and the final level achieved are shaped by self-confidence, which in turn is mediated by ethnolinguistic vitality and frequency of contact with the target language. Self-confidence is said to comprise an affective and cognitive component. While the former concerns L2 anxiety (Horwitz et al., 1986), the latter—self-evaluation of learners' L2 skills. Some studies (MacIntyre et al. 2003) have shown that the two can differ in their "relationship with L2 WTC" (Peng, 2014). Most data, however, suggest that they are interrelated variables working in tandem, namely, that students having a high opinion about their communicative skills would reveal at the same time lower levels of anxiety, and the other way round (e.g., Fushino, 2010; Hashimoto, 2002; MacIntyre et al., 1999).

Self-confidence, entailing perceived competence and a lack of anxiety, has been found to positively correlate with levels of L2 WTC in several cultural settings, for example in Canada (Clément et al., 2003), China (Peng & Woodrow, 2010), Iran (Ghonsooly et al., 2012), Japan (Fushino, 2010; Yashima, 2002), Korea (Kim, 2004), or Turkey (Cetinkaya, 2005). It has, however, also been observed that self-confidence in L2 use is culture-related, with it revealing significantly higher levels

in some countries than in others. For example, on the basis of a large-scale survey study conducted among 2156 university learners of English in Hong Kong, Liu and Littlewood (1997) concluded that East Asian students' passiveness and inclination to stay silent in the FL classroom was due to their "lack of confidence in their English competence" (Zhang et al., 2018, p. 232). At this point it is worth underlining the fact that "since the choice of whether to communicate is a cognitive one, it is likely to be influenced more by one's perceptions of competence (of which one usually is aware) than one's actual Foreign Language competence (of which one may be totally unaware)" (McCroskey & Richmond, 1991, p. 27).

The perceived competence of a L2 learner entails his or her self-assessment. Usually, however, self-assessment in reference to L2 WTC has been considered from the perspective of the so called *self-perceived communicative competence (SPCC)*, regarded as "self-perception of adequate ability to pass along or give information; the ability to make known by talking or writing" (McCroskey & McCroskey, 1988, p. 109). Thus, to diagnose perceived competence of FL learners, an instrument (or its adaption) designed by MacIntyre and Charos (1996) was most frequently applied. It consisted in the respondents reflecting on how competent they believed they were in speaking a FL/L2, with the level of acquaintance with the interlocutor(s) and type of speaking task functioning as mediating variables (e.g., Hashimoto, 2002; Mystkowska-Wietelak & Pawlak, 2017). An alternative approach to FL self-assessment was used in a study conducted among Polish high school learners of English (Baran-Łucarz, 2015). This time the participants did not evaluate their general ability to communicate but were asked to assess their level of particular target language subskills, such as fluency, interactive skills, competence of and actual abilities to use English grammar, pronunciation and vocabulary correctly. Not only did the data show that the self-perceptions of particular FL sub-skills were significantly correlated with the levels of WTC in and outside the FL classroom. The outcomes also suggested that Polish students were very much concerned about their accuracy at the phonetic, grammatical and lexical levels, and that they evidently feared being negatively evaluated by teachers and their interlocutors and on the basis of these criteria, which in turn shaped their L2 WTC in and outside the FL classroom. Further studies, however, are evidently needed to verify whether this is a universal or rather culture-specific trend.

Many researchers (e.g., Lockley, 2013; Mercer, 2011) posit that indeed self-evaluation—an umbrella term embracing self-assessment—is cultural-dependent. Such a view is shared by Heine, Lehman, Markus and Kitayama (1999), who clarify that self-evaluation includes "self-criticism, self-discipline, effort, perseverance, the importance of others, shame and apologies, balance and emotional restraint" (p. 769), all of which are deeply rooted in and shaped by the culture we are brought up in. It seems that while some cultures are more prone to over-estimate their FL skills, others under-estimate them. Data adding support to this claim have been provided by the Eurobarometer (2012). It shows, for example, that while 90% of the Dutch respondents believe they could speak English well enough to have a conversation, only 33% of the Polish respondents and 34% of Italians held such an opinion. The

discrepancy may be due to, among others, modesty—a concept discussed briefly above.

What may constitute a basis for hypothesizing that the link between learners' FL self-assessment and their L2 WTC varies across cultures is also the typology of cultural dimensions proposed by Hofstede (1980). Having conducted comprehensive studies in over 70 countries representing different national cultures, aimed at distinguishing preferences and values across which cultures diverge (e.g., Hofstede et al., 2010), six dimensions have been identified. Two of them might be worth having a closer look at in reference to the problem dealt with in this chapter. One of them is uncertainty avoidance, which denotes the degree to which members of national cultures are tolerant of ambiguity and the way they deal with uncertainties caused by unknown, novel situations filled with unexpectancies, which do not allow to follow pre-set rigid rules. Such situations and contexts appear to be more anxiety-breeding and threatening to some cultural communities than others (Hofstede et al., 2010). Social groups scoring high on this dimension attempt to minimize the potential chances of experiencing such situations and aim to introduce a feeling of security by creating rigorous codes of behavior, beliefs and rules. Their tendency to avoid ambiguity might be seen also in communication, especially in a language other than L1. The situation of speaking in a language that has not been not fully mastered is already threatening to the L2 speaker due to it being full of unexpectancies and the discomfort caused by one's genuineness being endangered (Horwitz, 2017). The negative feeling can be expected to be boosted when one's FL subskills are perceived as inadequate and insufficient to manage the task successfully (communicate effectively), without being evaluated negatively by interlocutors and losing one's face. For the sake of the study reported further in this chapter, it is important to mention that Poland scores higher in this dimension (93 out of 100 possible points) than Italy (75 points out of 100) (Cultural Dimensions, Poland, 2010; Cultural Dimensions, Italy 2010).

The other dimension that can be a rationale for assuming that speakers of different cultures would vary in the concern about their TL proficiency level in respect to L2 WTC is long-/short-term orientation. It refers to how particular societies link with their past and deal with the challenges of the present and future. Observations show that various cultures prioritize these two targets differently. Those who score low on this dimension (short-term oriented cultures) are inclined to respect traditional norms and ways of thinking, remaining careful and even suspicious about the future, and focusing on achieving fast results. High scorers (long-term oriented cultures) reveal more of a pragmatic approach, and value effort and thrift as a means of preparation for the future (Hofstede et al., 2010). What differentiates the two types of culture in communication is particularly "respect for tradition", "protecting one's 'face'", and "fulfilling social obligations … regardless of cost," which is appreciated by the short-term oriented societies, and "focus on exemplary standards, such a politeness, obedience, and honoring elders" in the case of long-term cultures (Piechurska-Kuciel, 2011, p. 237). As observations show, Italians evidently surpass Poles in their long-term orientation, with the former scoring 61 points and the latter 38 points (Cultural Dimensions, Poland 2010; Cultural Dimensions, Italy 2010).

The theoretical considerations and earlier studies presented above encourage to speculate that the relationship between FL self-assessment and WTC in both classroom and natural settings can vary significantly depending upon the cultural background of the students. The dissimilarity may be observed not only in the case of learners coming from remote continents, such as Europe, America, or Asia, but also among students of different European countries, which usually adopt the same approach to FL teaching (communicative approach), and follow the same principles set by CEFR. Despite these analogies, every country will have its own unique culture, including the "culture of learning" (Peng, 2014, p. 30). As mentioned earlier, the latter may shape students' perceptions of the importance of L2 correctness and proficiency in various subskills. Thus, it seems also worth examining which self-assessed subskills are more significantly related to L2 WTC in various countries. Since nowadays communication in English among members of different European more or less distant countries has become more probable and takes place on a daily basis, examining the dissimilarities in the link between self-assessment and L2 WTC among speakers of these countries is particularly relevant. Aiming to shed more light on this matter, a study involving Italian and Polish students was conducted with the main research questions as follows:

1. Is there a significant difference between the self-perceived levels of English subskills and of L2 WTC in and outside the FL classroom of the Polish and Italian participants?
2. Is there a significant difference in the strength of relationship between self-assessment of English subskills and WTC in English in and/or outside the FL classroom observed in the case of the Polish and Italian learners?

3 Methodology

3.1 Participants—Socio-Demographic Information

An attempt was made to find students of two different national cultures learning English as a foreign language, representing a comparable English proficiency level, age, and having an analogous English learning experience in terms of duration and type of provided instruction. Two representative groups fulfilling most of the criteria set for selecting the participants were chosen, with one coming from the south west of Poland (Wrocław) and the other—from Northern Italy (Reggio Emilia). All the participants attended a lyceum,[3] had 3 lessons of English per week, were from 17 to 19 years old and were considered by their teachers to be representing a B1 +/B2 level of English according to the CEFR (2011). They had been studying English as a FL for an average of 9,7 years in the case of Polish subjects and 11,3 years in the case of

[3]In both countries, lyceum is a comprehensive secondary school attended by students aged from about 15–18 who intend to continue studying different majors at universities. It ends with final exams, among others in a FL (usually in English) at B2 level.

Table 1 Information about the participants of the study

Characteristic	Poland	Italy
N	35	35
Type of school/form	'Liceum'/II	'Liceo'/IV and V
Age	Mean = 17.5; min = 17; max = 18	Mean = 17.8; min = 17; max = 19
Gender	M = 12/F = 23	M = 9/F = 26
Proficiency level	B1 +/B2	B1 +/B2
Years of learning English	Mean = 9.7; min = 7; max = 13	Mean = 11.3; min = 9; max = 13
Visits/stays in other countries	51%/0%	68%/0%
Contact with English	YouTube (76%), movies (62%), songs (83%), gaming (68%), occasional contact with English-speaking peers (70%) systematic contact with English-speaking peers (14%)	YouTube (70%), movies (56%), songs (72%), gaming (57%), occasional contact with English-speaking peers (65%) systematic contact with English-speaking peers (8%)

Italian subjects. None of them declared having stayed in a foreign country for longer than 2 months. Some, however, (51% of Poles and 68% of Italians) had paid at least one short vocational visit to another country. In the case of both groups of students, most of their everyday contact with English outside the classroom was limited to watching short films on YouTube, movies in their original versions (usually with subtitles), listening to English songs, and interactive Internet gaming with people of other nationalities. Although occasional contacts (up to 3 times a year) with speakers of English were reported by many respondents (70% of Poles and 65% of Italians), only a few students (14% of the Poles and 8% of the Italians) would meet with English-speaking peers regularly (i.e., a few times a month).

While the Polish participants attended one of four groups taught by two different teachers, the Italians belonged to two classes run by the same teacher. After rejecting a few students who provided incomplete data or represented other nations than Italian or Polish (e.g., Romanian and Ukrainian), 35 participants representing each national culture were taken into consideration in further data analysis. The basic information about the participants are summarized in Table 1.

3.2 EFL Learning Experience of the Participants

To verify whether the students involved in the research were provided with a comparable type of instruction in the FL classroom in high school, information about the teaching/learning process was gathered with the use of a 9-item questionnaire filled out by the high school teachers, who had been running classes with the

study participants for two (in the case of Polish students) and three (in the case of Italian students) years. The questions addressed the following matters: the prevailing teaching method(s), the proportion of L1 and L2 used in the classroom, time spent on practising different FL skills and aspects, types of exercises and materials used to develop speaking skills, and approach to errors produced by the students. While 6 items had the form of open questions (e.g., those inquiring about time spent on each subskill during the lessons, the method/approach used, and proportion of L1 and L2 used), the remaining (referring to tasks and materials used during the lesson) provided the respondents with options to choose from, allowing them to add further suggestions. The question addressing the approach to error correction consisted of 5 different statements that the teachers were asked to agree/disagree with using a 4-point Likert scale. The information about the treatment offered to the Italian and Polish learners is summarized in Table 2.

The answers seem to suggest that all the students were taught following the principles of the communicative approach, in which speaking was the priority, practised via various kinds of information gap activities and with the use of different materials and resources. There are, however, some discrepancies, consisting in the approach to errors, amount of L1 used during the lesson, and distribution of time spent on particular TL skills and subskills. While the Italian teacher reported correcting errors mainly when they hindered meaning, usually by encouraging self-correction, the Polish teachers claimed to be correcting errors either always or usually, and not only those that could cause misunderstandings. The errors were corrected mainly by means of teacher correction, with one of the teachers reporting to be using also peer and self-correction. Moreover, it appears that the Italian teacher encouraged more TL use in the classroom (80% of the lesson) than the Polish teachers (60–70% of the lesson). Finally, comparing the answers provided by the teachers, in the Polish lessons there was more time devoted to grammar and vocabulary and less to speaking and pronunciation than in the Italian ones.

3.3 Instruments

Besides the teacher questionnaire mentioned above, which allowed to view the characteristics of the teaching offered to the participants, three other batteries were applied to enable answering the research questions, namely, a *Measure of FL Self-Assessment (MFLSA)*, a *Measure of WTC in the FL Classroom (MWTC-IFLC)*, and a *Measure of WTC outside the FL Classroom (MWTC-OFLC)*. All of them had the form of self-report questionnaires with a 6-point Likert scale. They were prepared in two language versions—a Polish and Italian one—so as to limit the risk of the participants misunderstanding any of its fragments. The Polish versions of the batteries were designed and distributed among the Polish participants by the author of this paper. The translation of instruments into Italian and coordination of all the data collecting procedures was taken care of by an academic and researcher from the

Table 2 Comparison of treatment offered to the polish and italian participants during their english lessons

	Poland	Italy
Number of Ts	2	1
Teaching experience of Ts	15–16 years	30 years
% of English used during the lessons	60–70	80
Teaching method/approach	mainly CA, eclecticism	CA, "functional CA"
Minutes per week: Writing Speaking Listening Reading Vocabulary Grammar Pronunciation	W: 20 S: 20–30 L: 20–25 R: 20–30 V: 30–45 G: 30–45 P: 0–10	W: 20 S: 40 L: 20 R: 30 V: 20 G: 30 P: 20
Types of speaking exercises	Discussions, picture discriptions, role plays, info gap activities, presentations of projects,	Discussions, picture discriptions, role plays, info gap activities, presentations dedicated to literary and daily topics,
Materials used to practise speaking	Coursebook, other speaking resource books, blogs, websites, YouTube, songs	Coursebook, other speaking resource books, blogs, web sites, magazines, newspapers, YouTube, songs
Approach to errors	• Corrected almost always when produced. • Self-correction rarely/usually used. • Peer correction rarely/usually used.	• Corrected mainly when hindering meaning, not any time when produced. • Self-correction usually used. • Peer-correction rarely used.

Ts—teachers; CA—communicative approach

University of Modena and Reggio Emilia. The three instruments are described in a detailed manner below.

Measure of FL self-assessment. The MFLSA, aimed at examining the participants' self-perceived level of particular English subskills, was adapted from an earlier version of a battery designed by the author of this paper for another study (Baran-Łucarz, 2015). This time, however, new items were added to raise the level of internal consistency of each subscale. After introducing the amendments, a pilot version of the instrument written in Polish was filled out by a group of 12 high school learners. The feedback on the questionnaire provided by the students resulted in excluding two items and reformulating three others. In the final form, the instrument consisted of 28 items, with the first two subscales referring to pronunciation (12 items) and grammar (9 items). The next two subscales concerned respectively

vocabulary appropriacy and range (4 items), and fluency (2 items). The questionnaire, complemented with a few modifications and requests for further necessary changes that would address difficulties encountered specifically by Italians when learning and using English, was emailed to Italy in its English version. After the cooperating Italian researcher introduced a few other amendments and translated the survey into Italian, it was distributed to a group of English majors studying at the University of Modena and Reggio Emilia to check its clarity. They found the instrument clear, though suggested reformulating a few statements.

The Polish and Italian participants' task was to assess not only their theoretical knowledge of English in with regard to particular subsystems/subskills (pronunciation, grammar, and vocabulary), but also the level of accuracy and correctness of these subskills in their speech. The level was estimated by the respondents on a 6-point Likert scale, in which 6 denoted a '*very high*' and 1 a '*very low*' level of knowledge or practical competencies in particular subskills. Eventually, every participant had one total score for each aspect, which was the result of adding up the values (from 1 to 6) chosen by him or her for the items within every subskill. The more the subject scored, the higher his or her level of self-assessment for particular aspects subskills was considered to be.

The items in the pronunciation subscale addressed the following matters: general level of pronunciation; pronunciation at word level, embracing such areas as suffixes (e.g., *–ate*, *-ous*, (*able*), phonetically difficult words caused by interference from spelling (e.g., *seize, fruit, meadow*), overgeneralization of rules (*e.g., recipe, blood*), selected letter sequences *(e.g., -ough*, (*ought*, *-eign*), pronunciation of proper names (e.g., *Thames, Edinburgh, Turkey, Madrid, Japan*), word stress of cognates (e.g., *success, guitar, museum*) and of frequently mispronounced longer vocabulary items (e.g., *determine, development*). Other pronunciation aspects self-assessed by the participants were the pronunciation of weak forms, proper use of different intonation contours; pronunciation of vowels (distinction between long and short vowels, and between ash,/e/and/ʌ/) and consonants (velar n, interdentals), and consistency in using either the British or American accent. Most of the pronunciation aspects selected for the battery were those that are considered to cause difficulties to all learners of English, irrelevant of their L1 (Szpyra-Kozłowska, 2015; Derwing & Munro, 2015). However, two items were modified in the pronunciation subscale of the Italian version of the MFLSA. First of all, two statements addressing the pronunciation of velar/n/and interdentals were combined into one, leaving place for a new item. Secondly, the pronunciation of the/h/sound was added to this statement, which is often treated as a silent sound by Italians (e.g., Hudson, 2013; Modesti, 2015). Finally, the free slot enabled forming a new item concerning a common habit of Italians, consisting in adding a schwa to word final voiced obstruents (e.g., Hudson, 2013; Modesti, 2015). Examples of items used in this subscale are as follows: *'Using consequently one accent, e.g., British or American English'* (for both language versions), *'Pronunciation of words ending with a consonant, as in the sentence—'I ate soup for lunch' (stopping with the final consonant, without adding an extra vowel.)'* (for the Italian version). The internal consistency of the pronunciation subcomponent of

MFLSA, estimated with Cronbach alpha, reached a satisfactory level of .93 for both the Polish and Italian versions.

In the grammar subscale there were items addressing grammatical competence in general and grammar correctness in speaking, the use of the auxiliary 'do', word order, articles, proper usage of present, future and past tenses, modal verbs and more complex structures (relative clauses and conditionals). While all of these are structures used frequently in everyday situations, many of them are difficult to master by FL learners irrespective of their L1. In the Italian version, separate items referring to the use of the subject pronoun *('The proper use of pronouns in spoken sentences, as in "It's impossible!"'*) and the present perfect tense were formed, since these aspects are considered particularly challenging for Italian learners of English (e.g., Bogart, 2007). The reliability of the vocabulary subcomponent of MFLSA was .94 for the Polish version and .90 for the Italian version.

When the vocabulary subscale is concerned, next to a general statement about the range of vocabulary, there were items concerning the use and understanding of idioms. Among the items was the following one*: 'The use of idioms, such as "You're pulling my leg!" "It's not my cup of tea!'" in speech.* Other items referred to the use of colloquial expressions (e.g., *'What's up, mate?', 'How's it going?'*), and false friends in conversations. In the case of the last aspect, the examples provided in the Italian and Polish versions of the instrument were not exactly the same. In the Italian version, the item *bravo, library, sympathetic* were used (e.g., Nicholls, 2004), while the Polish version had the following examples: *dress, actually, and sympathetic* (e.g., Wiktionary n.d.). The Cronbach alpha achieved for this subscale was .89 for the Polish version and .82 for the Italian version.

Finally, in the last two items the participants were to try to evaluate their level of fluency, represented by (1) the rate of speech and (2) the amount and length of pauses made within sentences when speaking. The reliability of this subscale reached .93 in the case of the Polish version and .87—the Italian version.

Measures of L2 WTC. Since formal and informal FL settings are governed by their own unique rules, the level of L2 WTC was measured separately with respect to these two different contexts. Thus, although a well-validated measure of L2 WTC is available (e.g., MacIntyre et al., 2001), a decision was made to apply independent instruments—one addressing eagerness to join in or initiate conversations specifically and exclusively in the FL classroom and the other tapping into willingness to speak a FL in a naturalistic setting. Moreover, unlike the standardized battery of MacIntyre et al. (2001), the instruments applied in this study focused entirely on oral communication, rather than other skills.

The *Measure of WTC in the FL classroom (MWTC-IFLC)* consisted of 12 statements referring to various speaking activities that are commonly used in FL courses, such as debates, prepared presentations, role-plays, information-gap tasks. The participants were to specify their usual extent of eagerness/willingness to take part in them, by choosing a value from 1 to 6, where 1 meant *'very reluctant'* and 6—*'very willing'* in the case of each item. Consequently, the higher the participants scored, the more willing to communicate in the classroom they were considered to be. The

values chosen for the 12 items were summed up for every participant and denoted his or her general degree of WTC in the formal setting.

Borrowing the idea from McCroskey's (1992) instrument measuring L1 WTC, two additional criteria were followed when designing the statements, namely (1) the degree of acquaintance with and affection towards the interlocutor/s (A: a close friend, B: a liked classmate, C: a classmate the respondent did not know well nor spent time with him/her after school) and (2) the number of interlocutors involved in the speaking tasks, naturally resulting from their types (dyads for role-plays, small groups for information-gap tasks, medium-sized groups for debates, and large groups for presentations). All four types of activities appeared three times in the battery, each time in reference to (an) interlocutor(s) liked to a different extent. A considerable thought was given to most possible combinations of grouping arrangements that the speaking tasks might take place in during a typical FL lesson. Thus, while the role-play performed in a dyad appeared in the instrument in three versions, addressing separately the situation of talking to a close friend, a liked classmate or a student the respondent did not know well nor spent time with after school, the other speaking tasks referred to various probable task settings performed in the following mixed configurations: A + C, A + B+C or B + C. Here are a few examples of statements from the *MWTC-IFLC* with an indication of the grouping arrangement pattern provided in brackets:

- *Explaining the rules of my favourite game to about 3-7 liked classmates and students I don't hang out with after school.* (B + C)
- *Delivering a prepared talk to about 15 or more classmates, among whom there are close friends, liked classmates and students I don't hang out with after school.* (A + B+C)
- *Convincing a close friend to purchase a particular item.* (A)
- *Taking part in a debate with about 8-14 classmates, among whom there are close friends and students I don't hang out with after school.* (A + C).

The internal consistency (Cronbach alpha) of the instrument in both language versions appeared to be satisfactory, namely .90 in the case of the Polish version and .89 in the case of the Italian version.

Similarly to the WTC classroom instrument, the *Measure of WTC outside the FL classroom (MWTC-OFLC)* contained 12 items. This time, however, the items addressed potential real-life situations in which the participants could be faced with an opportunity to use spoken TL. Since WTC refers to an act of volition to participate in conversations (MacIntyre et al., 1998), the items addressed situations in the participants' home country, in which initiating or joining a talk with a non-L1 speaker was possible, rather than in a foreign country, where using the TL is rather a must enabling active participation in everyday life, normal functioning or even survival. Since in naturalistic situations it is both native speakers of English and people of other nations that the participants were assumed to be able to have a conversation with, 6 of the items of the MWTC-OFLC addressed WTC with native speakers (NSs), and 6 with non-native speakers (NNSs). As before, the participants were asked to agree/disagree with to a various extent with the provided statements, by choosing an option from

1 to 6, where 1 denoted '*strongly disagree*', while 6—'*strongly agree*'. The values chosen for each of the 6 items referring to WTC-OFL with NSs were summed up individually for every respondent to denote his or her level of WTC outside the classroom with native speakers of English. The same procedure was followed when estimating the participants' degree of WTC-OFL with non-native speakers. Finally, the points achieved for WTC-OFL with NSs and NNSs were added for each student to represent his or her general (total) level of WTC outside the classroom. As in the case of the battery diagnosing L2 WTC in the formal setting, higher values denoted higher levels of eagerness to speak English outside the classroom. Here are a few examples of the items addressing WTC-OFL:

- *I would be willing/eager to make a free tour of my city with a few native speakers of English.*
- *If I was introduced to a non-native speaker of English, I would be happy to have the opportunity to talk to him/her.*
- *When having a conversation with a native speaker of English, I would most probably be looking for a chance to finish it as quickly as possible.*

In the case of the last example of the statement, which was repeated with reference to a conversation with a non-native speaker, a reversed scoring key was used. Cronbach alpha showed satisfactory levels not only for the total measure of WTC-OFL in both language versions (i.e., .93 for the Polish version and .87 for the Italian version) but also for the WTC-OFL with NSs subcomponent (i.e., .87 for the Polish version and .83 for the Italian one) and the WTC-OFL with NNSs subcomponent (i.e., .88 for the Polish version and .82 for the Italian version).

3.4 Procedures

The empirical data were collected in September and October 2015. In both countries the questionnaires were distributed among the participants during one of their English lessons. They were informed that the study would help explain various aspects of FL learning and teaching, were warranted anonymity and allowed to resign from filling out the forms. None of students present during the lessons objected to participating in the research. The participants were instructed on how to fill out the forms, with special attention drawn to giving sincere responses both in the questionnaires and to open questions. Completing all the pen-and-paper tests took approximately 20 min. All the batteries were printed out on two sides of one piece of paper, so as to eliminate the risk of any data being confused or lost. The form opened with a few inquiries concerning socio-demographic information (age, years of learning English, level, visits and stays in FL countries). Then the MFLSA proceeded, followed by an open question about potential reasons for reluctance to speak in English in the FL classroom. Next, the MWTC-IFLC was filled out, succeeded by another open question—this time about possible reasons for reluctance to take part in conversations in English in real-life settings. Finally, the participants completed the MWTC-OFLC questionnaire.

The analysis of data gathered among the Polish and Italian students[4] was divided into two phases—a quantitative and qualitative one. When the former is concerned, it started with feeding the achieved raw scores into Excel. What followed was computing the means achieved by each participant for self-assessment of particular subskills (vocabulary, pronunciation, grammar, fluency) and for general (total) self-assessment, diagnosed with the MFLSA, and for L2 WTC in the classroom and L2 WTC outside the classroom in general (total) and separately for L2 WTC with native speaker and non-native speakers. Then the means were transferred to SPSS, in which all the further calculations were carried out. First, descriptive statistics were computed (means, SD, min. and max. values) separately for the data provided by the Polish and Italian participants. Before checking whether the data provided by the Italian and Polish participants were significantly different, the assumptions underlying the tests comparing two independent samples were verified. By examining the kurtoses and with the test of Shapiro-Wilk, the normality distribution assumption was checked. Then the homogeneity of variances was verified with Leven's test. When the two assumptions were met, the t-test was computed. If at least one of the assumptions was violated, the non-parametric test for examining the significance of differences among two independent samples (Polish and Italian) was used, namely U Mann-Whitney's test. Then the strength of relationship between self-assessment of different subskills and L2 WTC in and outside the classroom for the Italian and Polish samples was examined by the use of Spearman correlation. Finally, to find out whether the links between self-assessment of particular subskills and L2 WTC in and outside the classroom were significantly different for the Polish and Italian participants, the Fischer z-score transformation was applied.

When the qualitative part of the study is concerned, it seems worth mentioning that the open answers were provided by the participants in their mother tongues and translated into English by the author of this paper (in the case of the responses provided by Poles) and the Italian cooperating academic (in the case of the Italian responses). The answers were then compiled separately for the two cultures. On the basis of the answers provided by the respondents, several codes were established representing different reasons for reluctance to speak in English. Finally, an attempt was made to find common trends within and across the cultural groups, by observing the frequencies with which certain responses occurred.

4 Results

In this section the outcomes of the research are presented. It is divided into two parts. While the first part reports the quantitative data, the second—the qualitative findings.

Table 3 presents the descriptive statistics for the outcomes of the Measure of FL Self-Assessment achieved by the Polish and Italian participants. The last column

[4]Scans of the questionnaires filled out by the Italian students were sent to the author of this paper by the cooperating Italian academic.

Table 3 Descriptive statistics and results of the independent T-test and U Mann-Whitney's test computed for the self-assessed English subskills of the Italian and Polish participants

		Mean	Min.	Max.	SD	$t(68)/U(68)$
Total *(max = 168)*	IT	126.80	92.00	158.00	15.50	$U = 857$***
	PL	99.77	53.00	147.00	24.02	
Gram. *(max = 54)*	IT	44.97	32.00	56.00	5.56	$U = 901{,}500$ ***
	PL	33.07	16.00	54.00	9.76	
Voc. *(max = 24)*	IT	16.77	11.00	24.00	3.03	$t = -2.752$**
	PL	14.30	6.00	24.00	4.29	
Pron. *(max = 66)*	IT	56.97	41.00	72.00	7.51	$t = -4.497$ ***
	PL	46.17	23.00	65.00	47.00	
Fluency *(max = 12)*	IT	8.31	4.00	10.00	1.57	$U = 790$ ***
	PL	6.23	2.00	11.00	2.42	

Note ***$p < .001$, **$p < .005$

IT—Italian participants; *PL*—Polish participants; Gram.—grammar; Voc.—grammar; Voc.—vocabulary; Pron.—pronunciation

reports the results of either the parametric or non-parametric tests, namely the independent t-test or U Mann-Whitney's test, depending upon whether the normality distribution and homogeneity of variances assumptions were met or not.

The results of the t-tests and U Mann-Whitney's tests show that the self-perceived levels of the English subskills of the Polish and Italian participants differed significantly. What can be easily noticed is that in the case of each subskill, the scores of the Italian learners are higher than those of the Polish students, which suggests that the former considered themselves to be more competent in English than the latter. Unfortunately, since no tests diagnosing the actual level of the self-perceived L2 subskills of the participants were conducted, it is not possible to state whether indeed the Italians outperformed the Poles in all the inquired TL subskills. It is, however, worth stressing the fact that it is the perceived rather than the authentic level of the subskills in English that is of our interest and needed for further analysis in this study. A more careful examination of the data allows an observation that the biggest difference in scores obtained by the Polish and Italian learners were found with regard to grammar and pronunciation, with the Poles achieving in both cases an average score of approximately 60% and the Italians over 80% out of the possible total score for self-assessment of these particular subskills.

Figure 1 depicts divergences in the level of WTC in and outside the FL classroom between the Polish and Italian participants of the study. The tendency is analogous to the one observed earlier, that is, the scores of the Italians reach higher levels than those of the Polish students.

Table 4 presents the descriptive statistics and results of comparing the outcomes achieved by the Polish and Italian participants on the measures of WTC in and outside the FL classroom.

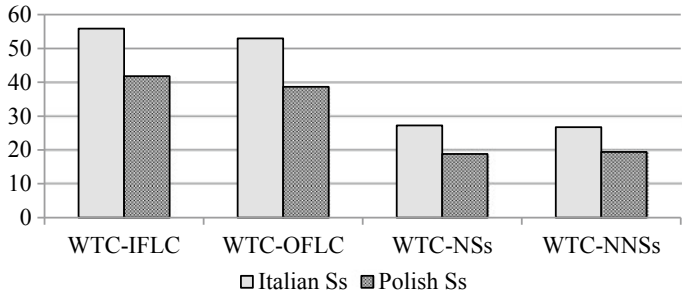

Fig. 1 Mean scores for the MWTC-IFLC and MWTC-OFLC achieved by the Italian and Polish participants. *Note* Ss—students; IFLC—inside the FL classroom; OFLC—outside the FL classroom; NSs—native speakers; NNSs—non-native speakers

Table 4 Descriptive statistics and results of the independent T-test U Mann-Whitney's test computed for the outcomes of the MWTC-IFLC and MWTC-OFLC with native (NSs) and non-native (NNSs) speakers achieved by Italian and Polish participants

		Mean	Min.	Max.	SD	$t(68)/U(68)$
WTC-IFLC	IT	55.87	37.00	67.00	7.17	$t = -6.372$ ***
	PL	41.82	24.00	60.00	10.15	
WTC-OFLC	IT	52.97	29.00	67.00	9.51	$U = 922{,}500$ ***
	PL	38.63	24.00	70.00	10.53	
WTC-NSs	IT	27.27	16.00	34.00	4.70	$U = -879{,}500$***
	PL	19.80	10.00	42.00	6.86	
WTC-NNSs	IT	26.77	16.00	34.00	4.70	$t = -6.181$***
	PL	19.43	11.00	35.00	5.60	

Note ***$p < .001$

Both the parametric and non-parametric tests show statistically significant differences between the Polish and Italian levels of WTC in and outside the EFL classroom. Though this time not verified by statistical tests, the scores achieved by the two nations for WTC in the FL classroom do not seem to differ significantly from those obtained for WTC in the naturalistic setting, though they are somewhat higher in the case of the former. Similarly, the discrepancies between WTC with native and non-native speakers within the two cultural groups do not appear to be meaningful, which at first glance suggests that for the Italian and Polish learners involved in this study, the cultural background of the interlocutor does not seem to determine their decision to join in or initiate a conversation in English.

The final step of the quantitative data analysis addressed the second and most important research question - it focused on comparing the strength of relationship between the level of self-assessed English subskills and L2 WTC in and outside the FL classroom of the Polish and Italian participants. Since, as Tables 3 and 4 presented, the scores on some subscales were not normally distributed, a decision

Table 5 Spearman rho correlation coefficients computed between self-assessment of FL subskills and WTC in and outside the FL classroom for the Polish (PL) and Italian (IT) participants; results of comparing z-scores (U)

		Total	Gram.	Voc.	Pron.	Fluency
WTC-FLC	IT	ns.	ns.	.42*	ns.	ns.
	PL	0.65***	0.33***	0.70***	0.64***	0.65***
	U	–	–	-1.61	–	–
WTC-OFLC	IT	0.41*	0.46*	ns.	0.34*	ns.
	PL	0.66***	0.61***	0.48*	0.61***	0.37*
	U	−1.37	−0.81	–	-1.36	–
WTC-NSs	IT	0.42*	0.49*	ns.	ns.	ns.
	PL	0.66***	0.58***	0.57***	0.64***	0.41**
	U	−1.32	−0.48	–	–	–
WTC-NNs	IT	ns.	ns.	ns.	ns.	ns.
	PL	0.53**	0.56**	ns.	0.46**	ns.
	U	–	–	–	–	–

Note ***p < .001, **p < .005, *p < .05
df for IT = 33
df for PL = 33

was made to compute Spearman correlation. The results are these calculations are displayed in Table 5.

What immediately draws our attention in Table 5 is the number of non-significant correlations found in the Italian group (14 out of 20). As for the Polish results, only two altogether were found non-significant. In all the cases in which significant correlations are matched with non-significant correlations, the differences between these outcomes can be considered statistically significant. The most visible differences between the correlations of participants representing the two different cultures can be found in the case of the classroom setting. When the Italian scores are concerned, only the self-assessed level of vocabulary is linked to WTC ($r_s. = .42$, $p = .021$).

In the case of the Polish outcomes, significant moderate/high relationships have been found, with self-assessment of particular subskills explaining 49% (vocabulary), 42% (fluency), 40% (pronunciation), and 11% (grammar) of variance in WTC in the classroom context. Interestingly, the quantitative data suggest that for both the Italian and Polish participants, the self-perceived level of vocabulary seems to be the subskill most importantly related to their WTC in this setting. Although the correlation coefficient achieved for vocabulary and WTC-FLC is high (.70, $p < .001$) for the Polish group and only moderate (.42, $p < .05$) for the Italian group, the *U* value calculated on the basis of Fischer z-score transformations suggests that the difference between these two coefficients is non-significant ($df = 1$, $p < .005$). This may imply that for both cultural groups the self-perceived level of vocabulary is an equally important correlate of WTC in the English classroom.

With regards to WTC outside the classroom with NSs, there seems to be an agreement between the participants representing the two different cultures in how their self-assessment of grammar relates to their eagerness to talk in these particular circumstances. In fact, this is the only subskill whose self-perception is linked to WTC-OFL with NSs in the case of the Italians. The correlations computed for the Polish participants are all statistically significant of moderate/high strength, with the coefficient being the highest ($r_s. = .64$, $p < .001$) for pronunciation self-assessment, explaining 41% of variance in WTC with native speakers of English. Finally, when WTC with NNSs is concerned, in both cultural groups no links were found with fluency and vocabulary. However, while self-assessment of grammar and pronunciation were found to be significantly linked to WTC for Poles, the self-perceptions of Italians concerning these subskills did not reveal any systematic relationship with WTC-OFLC with non-native speakers of English.

The outcomes presented in Table 5 may suggest that for the Polish students taking part in this study, the self-perceived levels of their subskills were more important antecedents of initiating or joining a conversation in English than for the Italians. This seems to be true not only when WTC in the classroom (with the exception of self-assessed vocabulary) is concerned, but also in reference to taking to NSs in informal settings (with the exception of self-assessed grammar) and to NNSs (with the exception of self-perceived level of fluency and vocabulary). Since, however, correlation analysis does not allow us to draw conclusions about causality, it is worth complementing and verifying the achieved quantitative results with qualitative data, which might shed some more light on the problem under investigation.

The presentation of qualitative data gathered from the Polish and Italian participants with the use of open questions preceding the measures of WTC in and outside the EFL classroom has two major parts. First, the responses concerning WTC in the formal setting are analysed, then answers provided in reference to WTC in informal setting are discussed.

Reasons for reluctance to speak in the FL classroom. The analysis of qualitative data opens with a focus on potential reasons of being reluctant to speak in the FL classroom offered by the Italian respondents. Usually the students offered a few possible explanations for their unwillingness to speak in this context. The most popular answer, provided by 24% of the participants, referred generally to the fear of making mistakes, without specifying in which area the erroneous language is probable to appear. The second most common source of unwillingness to speak in class (17%) was discomfort caused by making grammar mistakes specifically (e.g., *"Gross grammar mistakes," "When improvising it's hard to create a well-structured sentence"*.). While 14% of the participants blamed their poor vocabulary range and use (e.g., "*Lack of appropriate and specific vocabulary," "I can't remember the vocabulary while speaking," "I think faster than I can speak, consequently I can stumble over words"*.)—the only subskill whose self-assessment was found to be linked to WTC in the quantitative analysis—only one student referred to his or her pronunciation, worrying about being ridiculed when speaking with a good accent (i.e., "*I may be laughed at if I imitate a pronunciation with an appropriate accent"*.). Moreover, 4 students (11%) claimed to feel insecure when speaking in the

FL classroom due to their perceived low level of fluency (e.g., "*…the anxiety and will to deliver a fluent speech,*" "*I can't speak fluently*".). However, the most frequent argument, provided by approximately 35% of the subjects, seemed to relate to their personality, since it referred to the general feeling of shyness and embarrassment experienced when speaking *(*e.g., *"Shyness", "I am generally reluctant to speak," "Lack of self-confidence and shyness," "I am not able to speak in public, especially in English," "I feel observed"*.). The frequency of occurrence of this argument can be considered surprising, taking into account the high level of extroversion and outgoingness ascribed to the Italian nation (e.g., Janni & McLean, 2003). As could be expected, the feeling of shame was also mentioned several times in reference to some FL deficiency (e.g., *"I can't speak fluently and I don't know many words, so I feel ashamed," "Feeling embarrassed to say something wrong"*.). The other responses touched upon the issue of discomfort caused by the feeling of being judged by other students (14%) and the teacher (5%), by the boring topic (8%) or fear of being misunderstood or not understanding the interlocutor (5%). Finally, while one participant observed that there are "*Too few conversation hours and possibilities of intercultural exchange,*" another one stated that he or she simply did not like the teacher.

When analyzing the frequencies of particular reasons for being reluctant to speak English in formal context provided by the Polish participants, what was the most striking was the more common occurrence of responses than in the case of Italian students referring to concerns about students' deficiencies in the TL competence and use. Approximately 20% of the participants mentioned the discomfort accompanying speaking resulting generally from the fear of making mistakes, without specifying its cause. The most frequent cause of unwillingness to join in a speaking task, shared by 37% of the subjects, was the worry about their pronunciation, e.g., *"I fear that others might laugh when I mispronounce a word," "I think I sound weird speaking English," "When I'm uncertain about how to pronounce a word, particularly if it is spelt in a strange way"*. As many as 31% of the answers touched the matter of poor vocabulary (e.g., *"Sometimes I lack vocabulary. Then I prefer to stay silent"*.). Finally, 26% of the subjects mentioned their lack of fluency, while 23%—problems with grammar, which were often mentioned in reference to the feeling of discomfort caused by being corrected by the teacher (e.g., *"I know I make grammar mistakes and don't like the teacher correcting me in the presence of others"*.). Moreover, while about 20% of the participants mentioned their general tendency to avoid talking in public (e.g., *"I'm always shy to speak aloud"*.), 11% of them complained about the boring topics or unchallenging exercises.

The open answers concerning eagerness to join in or initiate communication in the FL classroom not only suggested trait-like (personality) and a few situational antecedents (the rapport with the teacher, level of acquaintance with the interlocutors, attractiveness of speaking tasks) of WTC-FLC, which were not diagnosed in the quantitative part of this study. They also seemed to lend support to the importance of vocabulary self-assessment in WTC and might suggest cultural divergence with regards to the approach of learners towards grammar, pronunciation and fluency.

Reasons for reluctance to speak outside the FL classroom. The common patterns found in the qualitative data on WTC in naturalistic context do not always mirror the quantitative outcomes. The two sets of data—quantitative and qualitative—vary particularly in the case of the Italian outcomes. The first trend that emerges from the responses provided by this group (found in 17% of answers) is their reluctance to initiate conversations with strangers (e.g., *"I don't like to speak with people I don't know," "I make mistakes when talking to people I don't know," "If I don't know my interlocutor, it's hard for me to initiate a relation with him/her*".). As before, the comments of the participants, denoting their reservation towards unknown speakers, do not corroborate what can be expected from this nation. Moreover, although there were again several statements referring to the fear of making mistakes in general (14%), only 4 Italians (11%) mentioned deficiencies in grammar as potential causes of their reluctance to speak (e.g., *"Afraid of making grammatical mistakes and being corrected"*.), which was the only correlate of WTC with native speakers in the case of the Italian subjects. Surprisingly, what was provided more frequently (20% of responses) as an argument for unwillingness to speak was poor vocabulary (e.g., *"Not confident about words".).* The Italians referred also to shyness, embarrassment and/or anxiety resulting from lack of self-confidence (11%), potential problems with understanding the speaker and being unable to respond to questions in the conversation (6%), lacking fluency (2%), and fearing of leaving a bad impression on the interlocutors (6%) or of being judged by them (8%). Finally, one student raised the matter of his or her low level of pronunciation as a source of reluctance to speak. Additionally, there was a respondent that shared a positive remark, stating *"It can be funny if you make a mistake"*.

When the answers to open questions about WTC outside the classroom provided by Poles are concerned, they were far more compatible with the quantitative data presented in the tables above than the Italian ones. Analogously to the WTC in the classroom setting, about 20% of the participants mentioned the discomfort caused by the general fear of making mistakes, without specifying its type, which would lead them to the feeling of embarrassment. As far as the most popular cause of being reluctant to talk in naturalistic context is concerned, it was shared among the concern about making pronunciation mistakes (31%) and grammar (29%) mistakes. Representative examples of worries related to poor pronunciation are as follows: "*I'd feel silly and embarrassed 'cause I know my accent is far from English-like. I know probably nobody would correct me, but still…"; "I think it would be a bit easier if the interlocutor was not a native speaker. I wouldn't be so shy, assuming that he/she also has some accent"*. Many shared the opinion of another participant, whose unwillingness to speak would derive from him or her "*being uncertain about the tenses that should be used in specific situations"*. Moreover, about 23% of the Polish participants acknowledged to being uncertain about vocabulary, which, as they noticed, could easily lead to misunderstandings, e.g., "*My vocabulary is rather poor and I would be ashamed not understanding what the other person was saying to me"*. Around 14% of the Polish respondents confessed that it is their lack of fluency that would take the blame for their reluctance to speak, e.g., *"I try my best. I'd be definitely more willing to speak, if I didn't have to think so long about how to say*

something. At the moment I think both me and the people I'd talk to would find the conversation with me a bit straining". Finally, as in the case of Italian responses, there were a few (20%) referring to personality and not being eager to start a conversation with a person who is a stranger to them. Although some positive remarks were also provided (i.e., *"When I have something to say, I simply start talking. I realize my English is far from perfect, but after all, we all make mistakes, and the aim is to communicate, isn't it?"*), these were found very rarely (6%).

5 Discussion

Earlier observations have suggested (e.g., Heine et al., 1999; Lockley, 2013; Mercer, 2011) that self-assessment is culture-related. The quantitative data, showing statistical differences in the levels of all the self-perceived English subskills and of WTC in English in and outside the FL classroom of the Polish and Italian participants, who were said to represent a similar proficiency level, imply that important discrepancies can be observed not only among representatives of remote countries, such as the USA, Japan, Korea, China, Canada, but also across Europe. Moreover, the quantitative and qualitative data imply that the cultural background of the participants can be a variable significantly mediating the link between the level of WTC in and outside the FL classroom and the learners' FL self-perceptions. This has appeared to be true not in the case of students' self-perceived communicative competence, most often observed in WTC studies, but their self-assessment with regards to particular FL subskills, such as vocabulary, grammar, pronunciation and fluency. The statistically higher correlations between L2 self-assessment and L2 WTC of the Polish learners and their open responses might signify that these participants were more concerned about their potential inaccuracies and deficiencies in English and more prone to filter their decision to join in or initiate a conversation in English through the self-perceived level of their language competencies and skills than the Italian participants.

What can help in explaining the different results achieved by the Polish and Italian students are the dissimilarities in selected cultural dimensions, as depicted by Hofstede et al. (2010) and introduced briefly in the theoretical part of the present paper. Having a higher degree of uncertainty avoidance than the Italian learners, Polish FL students may be by nature less willing to experiment and take risks, which speaking in a FL that has not been fully mastered evidently requires. What comes on top of that is their lower level of long-term orientation in comparison to Italians, revealing itself among others in the attempt to protect one's face and keep traditions. As mentioned above, one of the traditionally nurtured features of Poles is modesty, which may hold a learner back from speaking, if his or her level of particular subskills is considered by him or her insufficient to hold a successful conversation. It is necessary to add that certain cultural characteristics, though usually deeply rooted in the nation, may have a dynamic nature. For example, due to economic and political changes and more opportunities for contact with members of other

nationalities, Poland has recently started revealing more characteristics of individualist than collectivist societies (Bokszański, 2007). Furthermore, as Bogdanowska-Jakubowska (2011, p. 179) explains, the "Polish face, i.e., the self-image created by Poles … is in transition", with traditional hierarchy of values, which modesty is a part of, "undergoing some changes". If this is so, it is also changes in self-assessment and its link to L2 WTC that may be expected to appear in the future.

Additionally, it may be hypothesized that the fear or shame of using erroneous FL in speaking, which might keep one away from joining in conversations in a FL, can be intensified when one's country is considered by a learner to be representing lower ethnolinguistic vitality than other countries, whose representatives one might be trying to communicate with (e.g., Piechurska-Kuciel, 2011). The significant moderate correlations between self-assessment of different subskills and WTC with native and non-native speakers achieved for the Polish participants may corroborate the importance of subjective group ethnolinguistic vitality with reference to WTC. We may risk a hypothesis that Germany, France or Holland, provided in the *MWTC-OFLC* questionnaire as countries other non-native speakers of English might come from, were considered by the Polish participants of this study to have an equally high level of ethnolinguistic vitality as the English-speaking countries, probably higher than that of Poland. Contrastively, for the Italian participants, other European countries which their potential interlocutors might be coming from, may not have been assumed to represent a higher status and prestige than their own country. Thus, while the natural discomfort of the Italian participants deriving from making mistakes at grammatical level in front of a person for whom it is a mother tongue might have introduced some reluctance to speak, the concern about making mistakes in front of other non-native speakers may not have discouraged them from speaking (all the coefficients were statistically non-significant) (for the importance of subjective group vitality in communication see e.g., Johnson et al., 1983; Yagmur & Enhala, 2011).

It is important to add that anxiety and reluctance to speak may be particularly high when not having experienced frequent real-life conversations outside the classroom. Successful communication could not only raise self-efficacy of the learners, but also show them that native-speakers are far less critical of non-native speakers' FL attempts (see e.g., Foote & Trofimovich, 2016) than they might think they are. Moreover, contact with other non-native speakers might show them that all learners make mistakes and struggle the same way as they do when speaking a language other than their mother tongue. Such a claim seems to be supported by FL users who gain more courage in speaking after having experienced an opportunity to meet a speaker of other cultures representing a level of FL similar to their own (e.g., Baran-Łucarz, 2017; Lee, 2018). It is worth drawing attention to the fact that indeed fewer Polish participants of the present study had a chance to visit foreign countries in which English could be used than the Italian students, which might have resulted in the former being less confident L2 speakers.

The evident cultural difference in the strength of relationship between FL self-perceptions and WTC in the classroom may also result from variation in beliefs that learners hold concerning the teaching and learning of FLs. In a study conducted among Polish and Italian advanced students on views about different aspects of

form-focused instruction, Pawlak (2011) observed, among others, that the Polish participants "appeared to be more aware of the importance of grammar in communication" than the Italian subjects, for whom grammar was rather an aspect of accuracy. This may shed some light on why a significant link appeared between self-assessment of grammar and L2 WTC-FLC in the case of the Polish participants, while the link was non-significant for the Italian group. Some differences may also be detected in the case of attitudes of the students representing different cultures towards pronunciation learning. Although studies show that both Polish learners (e.g., Baran-Łucarz, 2009, 2014; Bryła, 2006; Nowacka, 2012; Waniek-Klimczak & Klimczak, 2005) and Italian students (e.g., Nowacka, 2012; Modesti, 2015) reveal high concern for EFL pronunciation, some observations have implied that Poles are more motivated to achieve highest levels in pronunciation than the Italians. For example, Nowacka (2012) observed that the effort put in pronunciation self-studying of Italians was lower than that of Poles (81% of the Polish and 58% of Italian respondents declared to be practising pronunciation outside the classroom). It must, however, be stressed that while the data concerning motivation and attitudes of Polish learners towards learning this aspect and its importance is rich and consistent, not many studies report the approach of Italian students towards this aspect. It is worth adding that the ranking of subskills that the Polish learners showed particular concern about in reference to WTC were analogous to those identified in an earlier study (Baran-Łucarz, 2015), with self-assessment of pronunciation being in both cases at the top of the list.

Finally, in attempting to explain why the Italian and Polish results varied in the magnitude of link between the perceived self-assessment of FL subskills and WTC in the classroom, it is necessary to consider the specificity of formal instruction that the participants received. As Table 2 depicted, although the communicate approach was reported to be used both by the Italian and Polish teachers, several differences in the teaching could be observed. The excessive concern about vocabulary, overuse of immediate error correction, limited or lack of pronunciation instruction and practice despite interest in this aspect, and fewer opportunities to develop speaking skills allowing to improve fluency provided by the Polish teachers in comparison to the Italian teacher cannot be disregarded. It is also worth mentioning the general tendency in Poland, which we could consider one of the aspects of the Polish "culture of learning" (Peng, 2014), to overfocus on accuracy and to offer too little speaking practice to students from the earliest years of learning (Wawrzyniak-Śliwska & Andrzejewska, 2017). Such an approach can be expected to shape students' views about the importance of particular subskills and competencies and to determine their WTC in and outside the FL classroom.

6 Conclusion

The study reported in this chapter aimed at providing answers to two research questions. The first one addressed the issue of whether self-assessment of FL subskills

and L2 WTC in classroom and naturalistic settings of students representing a comparable proficiency level but coming from two different European cultures would differ significantly. The second inquiry concerned the matter of culture functioning as a mediating variable of the relationship between L2 self-perceptions and L2 WTC in the two contexts. The quantitative and qualitative data gathered among Polish and Italian comprehensive school students suggest positive responses to both research questions.

It must be, however, made clear that due to the relatively small number of participants representing the two cultural groups, the final conclusions ought to be drawn with caution. The research can be treated as a pilot study, encouraging further observations in this area, spread across more numerous groups representing other cultures. The outcomes achieved with these particular participants, suggesting culturally-based divergence in L2 self-perceptions and in the strength of link between L2 WTC and self-assessment of different subskills may imply that some variation may be needed in the FL teaching approaches and techniques, which ought to be carefully planned and adjusted to particular nations. Not only might some cultures benefit more than others from training leading to opening the students to communication, encouraging risk-taking and raising their self-worth as a nation, but also from changing the culturally-based attitudes towards and views upon the importance of learning particular subskills. The intervention, in turn, ought to be based on well-grounded contemporary SLA theories and latest classroom-oriented research results. It would be interesting to observe whether such well-planned treatment would indeed affect students' L2 self-perceptions and the their L2 WTC in classroom and naturalistic settings. To ensure a better understanding of the nature of L2 WTC, another step worth taking might be examining (e.g., with the application of multiple regression) the importance of L2 self-perceptions for L2 WTC in comparison to other antecedents, such as situational cues and characteristics for different cultural groups.

Acknowledgements I wish to express my deepest gratitude to Annalisa Sezzi, Ph.D., for her assistance in carrying out the research, that is, for translating and editing the Italian version of the instruments and students' responses, managing the data collection in Italy and for her cooperation with the Italian teacher.

I am also indebted to the school principals for them agreeing to conduct the research among their students. Last but not the least, I would like to thank all the teachers for their help in providing and gathering the research data, and the Italian and Polish participants for their time and cooperation.

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What Does Students' Willingness to Communicate or Reticence Signify to Teachers?

Negah Allahyar

Abstract Though the literature on teachers' perceptions and students' willingness to communicate (WTC) has expanded, less is documented on what students' willingness to communicate or reticence signifies to teachers. This paper is an attempt to understand how teachers make sense of learners' WTC and reticence and explain the causes of WTC and reticence. Drawing on the attribution theory, this qualitative study explored the perceptions of six purposively selected Iranian English teachers at a private language school. Semi-structured interviews were the main instrument for data collection. Thematic analysis showed that all the teacher participants held a negative view of the reticent students. They attributed reticence to more student internal causes within the student's control and willingness to communicate to more external, teacher controllable causes. The findings have implications on teacher education in the Iranian as well as similar English language contexts.

Keywords Reticence · Teacher perceptions · Willingness to communicate

1 Introduction

The global role of English has created, especially among non-native speakers, the need to be competent and fluent English language users. To fulfil the need, instructional language policy-makers particularly advocate Communicative Language Teaching (CLT), as encouraging students to participate in EFL classes is a prime focus (Peng, 2007). However, the recommended approach has failed to bring satisfactory results (Abdullah & Hosseini, 2012; Shamsipour & Allami, 2012). In Iran, there is a great deal of discussion on the failure of CLT and students' reticence has become a focus in educational reform throughout the country (Rashidi & Mahmoudi Kia, 2012).

Studies on the reasons for Iranian students' reticence in class have covered the challenges in implementing and adapting western oriented CLT methods in EFL

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_6

classes which have Asian socio-cultural, political, or physical contexts (Kalanzade et al., 2013; Tajadini & Sarani, 2009). Teachers' and students' negative beliefs, perceptions, and attitudes of towards CLT seem to be the major challenges. Empirical and anecdotal evidence has indicated that Iranian students view learning English negatively because of inefficiency in developing communicative competence (Parvaresh, 2008; Pishghadam et al., 2010). The negative attitude is also linked to the learning culture which generally observes submission to teacher authority, which is in contrast with CLT principles (Jalali & Abedli, 2011; Maftoon, 2002; Tajadini & Sarani, 2009). These challenges do not promote active participation in the classroom and throw some light on why CLT is less preferred by Iranian EFL learners (Kafipour et al., 2011; Ward, 2001). However, empirical findings in this area are inconsistent. For example, research has also shown that Iranian EFL learners look for cooperative learning, try to increase the opportunity to engage in class activities, and appreciate CLT (Ghorbani & Nezamoshari'e, 2012; Marashi & Baygzadeh, 2010). Therefore it is not justifiable to claim that Iranian students' learning styles and preferences do not agree with the western-culture of learning.

Rather than analysing reticence and CLT through cultural lenses, investigations can be approached from an attribution standpoint. The present qualitative research argues that teacher perception of the learners' willingness to communicate (WTC) or reticence could be a causal attribution encouraging or discouraging communication. It may explain why the CLT approach is not effective. The findings in this article, which is part of a larger study, answer the question:

What are Iranian teachers' perceptions of learners' WTC and reticence?

In unpacking this question we will see how they make sense of learners' WTC and reticence, and how they explain the causes of WTC and reticence.

2 Theoretical Framework

This study was framed by the attribution theory (Weiner, 1985, 2000) which proposes that perceivers explain and rationalize their own or other people's behaviours using different attributions. Attributions are not necessarily true and can be the perceivers' biased views. They can be explained with regard to their locus of control (i.e., Are the causes of behaviour internal or external?), controllability (i.e., To what extent do people exert control over their behaviour?) and stability (i.e., Are the causes of behaviour stable and fixed variables?). The perceivers may attribute any failure to external and uncontrollable factors to absolve themselves from any blame. Success on the other hand is attributed to themselves. Among the attributions that explain success in language learning, teacher variables play an important role (e.g., Williams and Burden, 1999; Williams et al., 2001). Though WTC is a facilitator of language learning (MacIntyre et al., 1998; MacIntyre et al., 2003) rarely do studies on attribution explore how teachers make sense of students' WTC and reticence and what explanations they have for such behaviours. In applying the attribution theory, language

teachers may make attributions about students' WTC or reticence and misinterpret the causes of their behaviour. Teachers may not consider reticence as within their control and thus will be disinclined to solve the problem.

2.1 Willingness to Communicate and Teacher Perception

Teachers believe that students' WTC is one of the crucial psychological factors contributing to language learning (Gkonou et al., 2017). In the context of second language learning, MacIntyre et al. (1998) define WTC as "a readiness to enter into discourse at a particular time with a specific person or persons, using a L2" (p. 547). Many scholars believe that students' WTC should not be just considered as a personality trait because WTC is influenced by contextual and personal factors (Denies et al., 2015; Pawlak et al., 2015; Teimouri, 2017). WTC is manifested by learners' voluntary verbal communication behaviour (i.e., participation) in the classroom when the opportunity is there (Cao, 2009). In this study, the term reticence is the absence or lack of the learners' voluntary verbal communication behaviour. Reticence has been used interchangeably with quietness (Cao, 2009) and silence (Baurain, 2011; Harumi, 2011). It has been reported a source of teachers' annoyance and confusion is English learners' reticence (Jackson, 2002).

The construct of teacher perception has a strong conceptual and empirical appeal among researchers in different disciplines. Teachers' perception serves as a filter through which teachers interpret their classroom behaviour, classroom decisions and teaching principles (Breen et al., 1998; Fang, 1996) and can make them misinterpret what they observe (Rubie-Davies et al., 2006). Teachers' inappropriate strategies informed by their wrong perceptions have been shown to decrease students' initial level of motivation (Pelletier & Vallerand, 1996; Sarrazin et al., 2006; Skinner & Belmont, 1993). Teachers' attributions of the behaviours of students (i.e., talkative or quiet) influence their perceptions of their academic abilities (Coplan et al., 2011). Teachers misperceive vocal students as active learners (Reda, 2009) and reticent students as less engaged and motivated (Dewaele & Dewaele, 2018). Teachers may attribute student WTC or reticence to some student factors and even stereotyping reticent and vocal students (Ellwood & Nakane, 2009).

The potential biases in teacher perceptions of willing students' characteristics and abilities have been highlighted as a major concern because these perceptions play either an inhibitory or a facilitative role in the interaction opportunity that teachers provide the students with (Ellwood & Nakane, 2009; Vongsila & Reinders, 2016). Available studies have documented misconception held by teachers about students' reticence (Kember & Gow, 1991; Marriott, 2004) and shown that quiet students are often ignored by teachers (Evans, 2001). Teacher perception affects the distribution of opportunity to talk for the learners (Ellwood & Nakane, 2009; Hall, 1997), thereby leading to exclusive interaction with specific learners in the class (Mack, 2012).

Ellwood and Nakane (2009) showed that Australian language teachers' perceptions of Japanese reticent students' ability caused them to be inattentive to the

students' real desires and attempts to speak. The teachers' misperception of reticent students' desire to talk affected their intention to participate and this group often withdrew from participation. The reticent students were left alone, further reinforcing their silence. Similarly, Donald (2010) and Cao (2009) pointed out that teachers often misattribute students' reticence and lack of participation to their lack of desire for learning or motivation. The observation data indicate that this misattribution, consequently may work as a filter and guide the teachers to interact differently with those whom they perceive as reticent or not reticent. Teachers often prefer to interact with the ones whom they think are more competent and confident in the language, rather than those who are less skilled in talking, rarely raise their hands or volunteer an answer (Ellwood & Nakane, 2009; Liu, 2001; Mack, 2012; McNeil, 2010; Xie, 2010). However, some research has shown different results. For example, Jones and Gerig's (1994) study showed that the teachers' treatment towards both groups of students in a classroom in the United States was equal.

An issue underlying all the studies is that teachers may develop a wrong set of attributions to explain student WTC or reticence. They may not only interact with the reticent differently but also constantly work towards confirming their perceptions. Consequently, reticence may become ingrained in these students' behaviour (e.g., Ellwood & Nakane, 2009; Liu, 2001). The concern is if teachers attribute reticence to student internal and uncontrollable factors than their own interactional behaviour among the reticent, teachers may be less inclined to reflect on their interactional patterns or change their perceptions. It is therefore important to study what language teachers mean by WTC and reticence as well as how they perceive these two types of students.

3 Methodology

3.1 Setting and Participants

The research site was a private language school situated in north east of Tehran, the capital of Iran. The learners were aged between 18 and 25 years old, with the majority coming from urban middle-class families. The choice of the school was supported by two reasons. First, the authors' familiarity with the school system was an advantage in the understanding and interpretation of context and data. Second, the language school and the participants provided access and were accommodating towards the authors' request to conduct the study. From a research perspective this school provided an opportunity to learn (Stake, 2000). Following the identification of the school as the research site, six English language teachers were purposively selected, three males (aged 38, 41, 45) and three females (aged 41, 42, 43).

Purposive sampling could allow an identification of "information-rich" cases (Patton, 2002, p. 230) along with the sample size (Morse, 1994). Intentionally selecting the participants who were familiar with issues explored in the present

Table 1 Demographic details of the participants

Pseudonym	Year of birth	Gender	Years of teaching	Field of study
1. Reza	1974	M	5	B.A.in English Translation
2. Bita	1977	F	4	MA in English language teaching
3. Mahnaz	1976	F	3	B.A in English Teaching
4. Majid	1981	M	6	MA in English language teaching
5. Farnaz	1978	F	3.5	MA in English language teaching
6. Ali	1978	M	6	M.A in English translation

study could guarantee learning "the most" from them (Merriam, 1998, p. 48) and gathering relevant, meaningful, and rich information (Creswell & Plano, 2007). The six teachers had at least three years of experience in teaching English. They were introspective and self-reflective about teaching and learning of the language. The pseudonyms assigned to the teachers were Ali, Bita, Majid, Mahnaz, Farnaz and Reza. Demographic details of the participants are shown in Table 1.

3.2 Instrument

The semi-structured interview was the main instrument used in this study. Based on the literature on WTC and teacher perception, a set of questions was formulated. The questions were then validated by two professors in an Iranian university. A few minor amendments on word choice were suggested to make the questions clearer. The final set of interview questions can be found in Appendix. These questions were used to guide the individual interviews conducted in the study.

3.3 Data Collection

After access was obtained from the school head, the study was explained to the six teachers identified. At this point individual informed consent was obtained from the teachers. Data collection took six months to complete. The interviews in school were conducted at a specific time determined by each teacher. The length of the individual interviews varied from 45 min to an hour and a half. To ensure credibility the verbatim transcripts were returned to the teachers for member checking (Lincoln & Guba, 1985; Patton, 2002).

3.4 Data Analysis

The data were analyzed thematically by applying prior categories (Bogdan & Biklen, 1998) on the meanings of WTC and reticence (explanation for behaviours related to WTC and reticence) and attributions of WTC and reticence consistent with the attribution theory. Following Patton (2002), the author and one of her colleagues simultaneously started coding the transcripts independently focusing on the keywords. Meaningful segments were identified and each was assigned a code. The two coders reconciled any differences between them by comparing their notes. The analysis of the interviews yielded 190 segments and 110 codes. A code was a short phrase carrying the essence of the meaning of the segment. Segments with similar meanings were assigned the same code. The following examples show how the data were coded.

"The truth is sometimes they are really behave as if they know a lot of things and they trust their knowledge too much" (Over confidence—Negative Behavioural characteristics)—Code 1.

"I think willing students are my favourite type, I really love them as they are lively and energetic, always sending positive waves" (Energetic—Attitudinal characteristics)—Code 2.

"They are extrovert, good at making friends inside or outside of the class or on yahoo messenger" (Extrovert—Social characteristics)—Code 3.

"These types of students need a place to present themselves" (Extrovert—Social characteristics)—Code 3.

Codes 1, 2 and 3 which had similar properties fell under the personal qualities category which came under a superordinate category of Meanings of WTC and reticence. Through repeated analysis a number of irrelevant codes were discarded. Attributions, their locus, stability and controllability were coded by looking for expressions that show or imply the reason for WTC and reticence. The process of developing categories took place as the data were constantly reviewed, discarded and synthesized. To strengthen the trustworthiness of the data analysis and interpretation, the researchers held peer debriefing sessions to check the data analysis process and interpretation (Patton, 2002).

4 Results and Discussion

The findings are presented as themes under two major categories, namely, meanings of WTC and reticence and attributions of WTC and reticence.

4.1 Meanings of WTC and Reticence

This category refers to the concepts that teachers used to understand the nature and significance of WTC and reticence. It includes a) signs and symptoms of WTC and reticence, b) feeling towards and experience of students who are willing to communicate or reticent, and c) significance of WTC for language learning. The following four interrelated themes have emerged from the analysis.

4.2 WTC as Motivation

The teachers generally did not distinguish between motivation and WTC. According to Shimamura (2010), motivation is a broader term compared to WTC. Motivation can be an antecedent of a wide range of human actions while WTC is more on speaking. This construct shows learners' voluntary actions linked to a positive attitude towards speaking. Bita stated directly that "WTC is synonymous with motivation" while Ali said there was "no difference between WTC and motivation". Similarly, according to Reza, WTC was "a pulling force or what gets you started to talk and learn, a kind of desire". When the teachers talked about high WTC students, they referred to the ones who had a high level of motivation, those who "show much interest in English" (Mahnaz) and "do the optional assignments" (Majid) or "are determined to learn" (Farnaz). When the teachers were asked to put the characteristics of the reticent students into words, all directly or indirectly said that WTC and reticence were related to each other. Bita stated that "WTC and reticence are antonyms [that] depend on each other". The dichotomy was expressed as "there is a tiny line between WTC and reticence" (Farnaz) and "if someone is not willing [he] is unwilling (Majid). In contrast to students who were willing to communicate, reticent students "miss or skip the class" (Mahnaz) and "hardly get involved in class activities" (Reza). The findings here are consistent with the existing literature. WTC in a second language grew out of research on motivation (Dörnyei, 2003). There are many studies on the relationship between WTC and motivation (Cetinkaya, 2005; Hashimoto, 2002; MacIntyre et al., 2001; Peng, 2007).

4.3 WTC as Integrated with Silence

The teachers considered students as willing to communicate if they were physically and mentally attentive or engaged in the classroom. That is to say WTC included more than just speaking in class. WTC was indicated by appropriate gesture, body language, and more importantly, silence on some occasions. For example willing students "keep or have eye contact" (Reza), "hold head up" (Farnaz), "following other speech by nod[ing] or shake[ing] the head" (Majid), "having a relaxed body

position" (Reza) and "do not ignore the teacher, mingle with his/her classmate while the teacher is talking or teaching" (Mahnaz).

It seemed that while the teachers were looking out for verbal participation, they were of the view that silence did not necessarily mean reticence. Silence is a form of classroom participation (Schultz, 2009) and indicates following the interactions of the interlocutors (Baurain, 2011) when accompanied by attention or reflection on what has been presented in class (Meyer, 2007). This is in contrast to some stereotypical views of silence. When the learner-centred approach focuses on the tangible output of the students, their quietness would be a negative attribute (Cao, 2009) which is interpreted as a sign of deficiency and failure. Coplan et al. (2011) empirically showed that teachers held a stereotypical view of quiet students and perceived them to be less intellectually competent compared to their more verbal counterparts. As in studies reporting the positive interpretations of silence in Japanese and Chinese EFL contexts (Harumi, 2011), the present study also showed the Iranian teachers did not completely reject the silence of their EFL learners.

4.4 WTC and Reticence as Related to Certain Personal Qualities

The teachers identified the willing students with specific behavioural, emotional, social, and attitudinal characteristics which usually were accompanied by some adjectives like "positive" (Farnaz), "valuable" (Bita) and "good" (Reza and Majid). Students with high WTC were reported as being "extrovert," (Bita and Reza) "energetic" (Bita) "receptive" (Ali) and "attending to what a teacher says, to live up to his expectation" (Mahnaz).

While WTC was recognized as a positive trait in relation to language achievement, not all high WTC student behaviours were interpreted positively. Some negative attributes were "argumentative, disrespectful, and distrustful of teachers" (Majid), "kind of opinionated" and "over confident" (Mahnaz). The description cast the students as those who challenged the teachers when they themselves were not without flaws. Mahnaz's irritation with the language inaccuracy of some high WTC speakers was expressed in "some [high WTC learners], like unwilling students, are irritating companions who really flip my lid" (Mahnaz). She attributed inaccuracy in language use by the willing students to their disregard for grammar.

Not much disagreement was found among the responses of the teachers about reticent characteristics which were basically negative. The teachers associated reticence with lack of friendliness and avoidance. The reticent were reported to fold their arms as "a sign of anger or unfriendliness" (Farnaz) and avoid looking at the teacher (Ali and Reza). In addition, "usually their eyes are on the books" (Bita) signalling that they did not wish to speak or be asked to speak. Sometimes their eyes were found "straying to the clock" (Ali). Reticent students were described as "idle" (Farnaz), "slow learner" (Mahnaz), "dummy" (Ali), "lazy" (Mahnaz), "shy" (Reza), suffering

from "low self esteem" (Reza), "lack of confidence" (Bita) and generally "blame their teachers for the lack of success" (Mahnaz).

These learners were also said to be "bad at self disclosure" (Reza), "less attracted by the others" (Farnaz), "anxious" (Majid), "touchy" (Ali) and "likely to be emotionally hurt" (Bita). Only Majid added that apart from negative characteristics, some of the reticent were "more cautious than others and polite". With only this single teacher's kinder words about the reticent, it seemed that teachers were generally not very happy with this group of learners. Majid continued to explain that the reliance on negative images appeared to be much more related to "the absence of interaction with them [the reticent]". When the teachers attributed reticence to the negative personal qualities above, such as being lazy and unfriendly, they were unlikely to engage them further, thus blocking the opportunity to understand these students better.

4.5 WTC as Predictor and Outcome of Success in Learning English

All the teachers believed WTC was associated with language learning and success in different ways. As expressed by Bita:

> Learning to talk just happens through practice, through talking; this needs to have WTC in place as it is an inseparable part of the interaction. Therefore WTC can act as an indicator of a successful learning session, the more students are engaged, carefully listen and interact, the more they have learnt.

This finding was consistent with the findings in the study by Gkonou et al. (2017) that examined psychological factors contributing to language learning from the perspective of 311 teachers. Students' WTC was identified as the second most important factor after motivation.

In describing good language learners, Majid and Mahnaz reported WTC as an important element and an enviable trait in schools. To stress the link between WTC and success in language learning, Reza differentiated the English class from any other classes, saying that:

> In any kind of classroom, like physics, geometry, in any kind, the teacher may regard talkative students as bad students but everyone knows in English classes participation has a spiraling effect on success.

As highlighted by Reda (2009) vocal students were perceived as active learners by teachers who believed learning occurs when students are verbally active. Furthermore, Bita and Reza added respectively that "active language users" and "autonomous learners" demonstrated WTC and were more likely to succeed in learning English. Farnaz said:

> Autonomous learners are better at proficiency levels, language use and are more willing to communicate because they are more responsible and this increases the possibility of learner getting engaged in activity and using language. Over time, the more they use language, the more they will be motivated, and the more willing they will be to talk.

Similarly in an empirical study, Canary and MacGregor (2008) investigated communication differences between the ideal and less than ideal students as perceived by the teachers. The ideal students were perceived to be intellectually motivated and participative, while the less than ideal students were more likely to be quiet. The teachers perceived the ideal ones as enthusiastic about the course and class topics, intellectually stimulated, cooperative and curious. On the contrary, the reticent students were perceived to be bored and sleepy, resistant towards teaching efforts, and absent more often than their ideal counterparts.

For Bita and Reza in the present study, both WTC and English language achievement went hand-in-hand. They not only argued that WTC preceded students' success, but also agreed that the converse could be actually true. In other words a student's WTC could be a consequence of language achievement. Therefore, low achievement or lack of progress affects students' WTC and interactions. This explains why Bita said, "Neglecting students' progress encourages a belief that those students cannot talk and causing his/her continued passive behavior".

4.6 Attributions of WTC and Reticence

This category refers to the identification of the causes, stability, and controllability of WTC and reticence.

WTC as Teacher-Owned Factor and Lack of WTC as Student-Owned Problem.

Teachers in the study attributed WTC and reticence to a variety of causes, some of which overlapped with the signs and symptoms related to personal qualities. The findings suggested that the teachers' role was perceived to be more central to WTC than lack of WTC. In other words, teachers were more likely to attribute students' WTC to what teachers did and reticence to what students did.

Of those frequently-mentioned reasons for reticence, the internal and unstable factors which were perceived to be controlled by the students rather than the teachers were at the top. Examples of these factors were "feeling of anxiety" (Bita), "fear of losing face" (Farnaz), "lack of psychological closeness and confidence," "lack of effort indicated by not spending time and energy to practice English" (Reza), "not being hardworking" (Mahnaz), "lack of preparation and participation" and "lack of being exposed to English" (Majid) and a low level of proficiency (Mahnaz). The factors which were less supported as the causes of reticence were student intelligence and personality (Ali and Mahnaz). It seemed that teachers were inclined to view reticence as changing over time due to its instability. If students took the steps to address their issues, for example, be more prepared for their English lessons, they would be less reticent.

Teachers did not see their role as dominant as students' role when WTC was lacking. One possible explanation for this could be teachers' lack of ability or confidence to make a change in the reticent students in the classroom when they felt some factors were internal and uncontrollable. As Majid put it, "No matter how hard the

teacher is working, it would be of little help to make them talk if they are at the silent stage".

Attributing students' reticence to student factors suggested that the teachers seemed to regard themselves as competent professionals. Mahnaz added that dissatisfactory outcome might imply that the teacher could not handle the job professionally. "The lack of students' improvement somehow gives the idea that their teachers have not been good enough at teaching" (Mahnaz). The factors such as subject-related aspects (task difficulty), teaching material and poor teaching methodology were among the least mentioned causes (Farnaz and Majid). These findings were in contrast with those of Vongsila and Reinders (2016). While the teachers in the New Zealand context were competent and confident in terms of experience and access to teaching and learning resources, they felt responsible to encourage WTC among their students.

5 Conclusion

This study extends previous studies on WTC in two directions. First this study empirically contributes to WTC research by examining the perceptions of language teachers of WTC and reticence. Second, it is the first attempt which draws upon the attribution theory to shed light on the understanding of WTC and reticence. Six Iranian English language teachers were recruited to participate in the study and data were collected using the semi-structured interview. The teachers talked about the nature of WTC and reticence, the characteristics that high WTC and reticent learners possessed, as well as contextual and experiential aspects of teaching these two groups of learners.

The findings revealed that the teachers generally viewed WTC positively and reticence negatively. They considered the learners with high WTC to be good, as their verbal (language use) and nonverbal behaviour in the classroom brought them success in language learning. They used a *diverse range of opposite characteristics of WTC to contrast with the reticent.* These might have been stereotypical views strengthened through their years of learning and teaching. Consistent with the attribution theory the teachers rarely took responsibility for the students' reticence and lack of participation. They felt the amount of controllability and causality they had on the reticent students was less compared to the willing students. This view can limit the teacher's role, responsibility and choice of strategies to address the problem of reticence in the classroom.

From a research methodological perspective, this study has some limitations. The findings came from six English teachers teaching only students from an English programme in a private language institute. Views might have come from a narrow context of teaching and learning. Furthermore, there was a heavy dependence on interview data although member checking and reconciliation of different interpretations between two coders were carried out. Future research should target more diverse teachers and use more than one data collection method to increase the trustworthiness of the findings.

Overall, the research findings can be used as a frame of reference by teacher educators to analyze teachers' interactional behaviour and study the effects of teachers' perceptions of WTC and reticence on classroom instruction. Being aware of teachers' perceptions, teacher educators may better equip teachers with teaching strategies that meet the needs of both willing to communicate as well as reticent students. The findings can also encourage teachers, at least the six in this study, to rethink their perceptions of high WTC and reticent learners of English. Differential treatment in offering opportunities to only certain students to talk in the classroom, especially the kind that stereotypes and discriminates the reticent ones, brought on by the teacher's perceptions, can thus be checked.

Acknowledgements The author would like to thank the anonymous reviewers and Dr. Tan Kok Eng for their constructive feedback.

Appendix: Interview Questions

1. From your perspective, what is 'willingness to communicate'?
2. From your perspective, what is 'reticence'?
3. Do you think that students are willing to talk or are reticent in your classroom? If so, how do you know?
4. What are the main reasons that some students are reticent in general and in your class?
5. Which students would you say are the "best" students? What is it about them that makes you think they are good students?
6. How do you get the required output you expect?
7. How you realize your lesson has gone poorly? Probing questions:
   - Do you only think of interaction frequency as a sign of WTC? How about interaction quality?
   - Can you explain more about these non verbal aspects?
   - Is L1 in conversation a sign of reticence? Why?
8. Can you explain more about autonomy and its relation to WTC?
9. How can teachers maintain their students' WTC?
10. Can you explain more how the learning environment contributes to students' WTC?

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Positive Predictive Value of Extraversion in Diagnosing L2 WTC

Ewa Piechurska-Kuciel

Abstract Willingness to communicate in a foreign/second language (L2 WTC) is now considered an influential variable underlying the second and foreign language learning processes. It is also perceived in terms of a fundamental goal of second language education, because its higher levels result in a greater desire to practise oral communication, bringing about successful language learning. According to the pyramid model of L2 WTC, it is rooted in personality which produces both distal and enduring influences on a student's verbal behaviour. It can thus be expected that extraversion, a personality dimension identified with energy and enthusiasm and characterised by sensitivity to reward and sociability, is tightly connected with WTC. Indeed, recent empirical research tends to demonstrate that personality (e.g., extraversion) is directly related to L2 WTC, self-perceived proficiency and language anxiety (immediate antecedents of WTC). However, studies have been undertaken in which no direct effect of personality (extraversion) on L2 WTC can be confirmed. The research carried out for the purpose of this chapter demonstrates a modest predictive value of extraversion for L2 WTC levels, caused by a direct impact of this personality trait on the interpersonal nature of a learner's readiness to communicate in a foreign langue. Its indirect effect, exercised by influencing the immediate WTC antecedents (self-perceived levels of foreign language skills and language anxiety), is also revealed.

Keywords Willingness to communicate · Extraversion · Language anxiety · Self-perceived levels of foreign language skills

1 Introduction

It is assumed that successful language learning requires effective interaction (Ellis, 2005; Mackey & Sachs, 2012). However, the use of productive skills (speaking and writing) is regarded as most difficult because it may create a particular threat directly

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_7

connected with the specific situation of foreign language practice (Horwitz et al., 1986), requiring the application of a language that has not been fully mastered. In effect, a learner's insufficient knowledge of grammar, vocabulary, pronunciation or cultural awareness is likely to be exposed, endangering their sense of safety and self-perception. Students' precarious status may also be exacerbated by the fact that they are all different—they bring diverse expectations to the classroom and their biographies vary, while their personal characteristics create a unique mixture of traits and talents that may be difficult to accommodate. One of the most influential human characteristics is personality, which may be regarded as responsible for the learner's academic success. Consequently, the aim of this chapter is to present empirical research carried out in order to investigate the influence of extraversion on students' WTC in a foreign language in the context of Polish secondary grammar schools. For this purpose, the chapter opens with a theoretical discussion of the two main concepts—L2 WTC and extraversion. The examination of these concepts leads to the formulation of the main research problem, and then to the presentation of the method and results of the study. The chapter closes with a discussion of the research results and recommendations regarding classroom procedures, as well as the limitations of the study.

2 Literature Review

2.1 L2 WTC

The understanding of the concept of L2 WTC derives from studies on universal communication that draw upon the individual's predilections with regard to talking. These culminated in the study of unwillingness to communicate, and then of willingness itself (McCroskey & Richmond, 1987), understood as one's "predisposition toward approaching or avoiding the initiation of communication" (McCroskey, 1992, p. 16). The conceptualization of WTC in L1 focuses on the concept as a trait, deeply rooted in personality (McCroskey & Richmond, 1990), with a special focus on extraversion and neuroticism. It follows that WTC in L1 has a stable character, although it may also be situation-dependent from the point of view of the number of interlocutors and the relationships with them (Zakahi & McCroskey, 1989). There are also other numerous situational variables affecting an individual's WTC such as one's mood, previous communicative experiences with a specific person, or an expected gain or loss caused by a specific communication act (McCroskey, 1984).

One's WTC in L1 is shaped by two basic factors: communication apprehension and self-perceived communication competence (Burroughs et al., 2003). The first concept is connected with anxiety stemming from real or anticipated communication with other people. It can have disastrous effects on one's WTC, forcing anxious individuals to avoid or abandon communication (McCroskey et al., 1990). The other concept, self-perceived communication competence, designates perception of one's

communication abilities. It is more critical for predicting WTC than actual competence (MacIntyre et al., 2001) because when a person is convinced they possess good communication skills, their level of communication apprehension is low, and that of WTC—high (McCroskey & Richmond, 1990). Unsurprisingly, research demonstrates that the use of a language other than L1 is connected with a higher level of communication anxiety (Burroughs et al., 2003).

The analysis of communication carried out in foreign and second languages has adapted the concept of WTC, proposing that it be viewed as "a readiness to enter into discourse at a particular time with a specific person or persons, using a L2" (MacIntyre et al., 1998, p. 547). Nevertheless, it is stressed that the change of language brings about a substantial modification of the communication act (MacIntyre et al., 1998), playing havoc with one's WTC. It is postulated that in the specific situation of learning and using an L2, it is the language of communication that interacts with the structure of the individual's willingness. While the conditions of L1 use are usually stable and predictable, allowing for the perception of WTC as a trait, one's WTC in the foreign or second language is limited by one's L2 proficiency. For this reason, it tends to be extremely sensitive to both external and internal influences which lie beyond the learner's control. Understandably then, WTC in L2 mostly reveals the role of situational factors that may shape one's inclination to start communication, such as interlocutor(s), topic, and conversational context (Kang, 2005). It follows that even when an individual demonstrates high WTC levels in L1, their volitional tendency to engage in communication may be drastically limited by the specificity of the language learning situation. Obviously, when a string of negative experiences develops in the foreign language learning context, an aversive approach to FL communication, limiting one's L2 WTC, can be developed. The specific challenges embedded in the L2 learning process make L2 WTC uniquely distinctive from L1 WTC due to the individually varying L2 communicative competence, which plays a crucial role in shaping L2 WTC (Dörnyei, 2003). At the same time, situational factors, such as the demands of formal instruction with threats embedded herein play a pivotal role in shaping the variable in question. In other words, L2 WTC is not a simple transfer from L1 (MacIntyre & Doucette, 2010), because the change of language softens the trait-like nature of WTC, shifting more importance to situational factors that otherwise would not play such a decisive role in L1 communication.

The critical power of a magnitude of situational factors was not taken into consideration in the early model of WTC (MacIntyre, 1994), which accommodated only the trait-like factors of perceived communication competence and communication anxiety. For this reason, it failed to explain the role of situational variables, as well as the more constant (stable) factors influencing communication initiation. Therefore, a multi-layered pyramid model of WTC was proposed (MacIntyre et al., 1998). This heuristic outline comprises L2 WTC shapers (antecedents) arranged in a proximal–distal continuum in six layers (MacIntyre, 2004; MacIntyre et al., 1998). The three bottom layers contain enduring (distal) influences. The social and individual context can be found at the lowest level, above which the affective-cognitive context concerning more individually-based variables is located. Motivational propensities constitute the highest level of enduring influences. The remaining three levels are

dedicated to situated antecedents—the most proximal determinants of WTC. At the lowest level, the desire to communicate with a specific person and state communicative self-confidence can be found. Above it, the actual construct of WTC is located. This represents the final psychological stage of one's preparation for L2 communication. Finally, direct L2 use is placed at the top of the pyramid. All these factors represented in the four lower layers of the model have the potential to influence the individual's L2 WTC. Understandably, the variables found at the most distal levels of the pyramid are likely to exert the most subtle, though enduring influence on one's WTC. For this reason, accommodating personality at the lowest and at the same time broadest layer of the pyramid appears to indicate its permanent and unwavering effect on L2 WTC, most probably setting "the stage for L2 communication" (MacIntyre et al., 1998, p. 558). On the other hand, the variables placed closest to the WTC layer will play the most decisive and direct role in modifying one's readiness to communicate in L2 (i.e., perceived communicative competence and communication anxiety).

L2 WTC is now considered a particularly prominent variable, fundamental for the processes of second and foreign language learning, and an essential objective of second language education (Clément et al., 2003). Its higher levels prompt "increased opportunity of L2 practice and authentic L2 usage" (MacIntyre et al., 2001, p. 382). A student with high WTC levels has a chance to develop their FL proficiency, constantly building their L2 communicative competence, especially when communicating with familiar receivers in small groups or pairs on topics related to personal experiences (Pawlak et al., 2016; Syed & Kuzborska, 2018).

Empirical research on L2 WTC demonstrates that greater L2 WTC is connected with higher self-perceived competence (Halupka-Rešetar et al., 2018; Piechurska-Kuciel, 2011; Yashima et al., 2004). Confidence and motivation are listed among its other correlates, as well as a more frequent use of the language in the classroom (e.g., Khajavy et al., 2016). Aside from that, various affective and social psychological variables, such as classroom environment and learner beliefs are strongly related to L2 WTC (Peng & Woodrow, 2010). Its other salient shapers are gender and age (Amiryousefi, 2016), as well as international posture (Yashima et al., 2004), though not in the Polish context (Mystkowska-Wiertelak & Pietrzykowska, 2011).

2.2 Extraversion (E)

As the pyramid model suggests (MacIntyre et al., 1998), personality can be regarded as the most wide-ranging foundation for L2 WTC. It denotes a psychological organisation that comprises interrelated and evolving parts or subsystems that modify an individual's behaviour (Mayer, 2007). These subsystems can be described in every language by means of adjectives representing fundamental personality traits. The traits in turn are identified and organized into extensive personality dimensions (Dörnyei, 2005). According to the personality model that has achieved a dominant status in personality studies (John et al., 2008), *the Five Factor Model (FFM)*,

also called *the Big Five* (Costa et al., 1995; McCrae & Costa, 2004), there are five broad dimensions of personality traits that can describe an individual, regardless of language or culture. Each dimension is placed on a continuum in relation to two extreme poles, labelled as: openness to experience versus low openness, conscientiousness versus low conscientiousness, extraversion versus introversion, agreeableness versus antagonism, and neuroticism versus emotional stability. Thanks to such categorisation, personality factors can be perceived as independent variables in research studies in an easier and more reliable manner for non-psychologists (Dörnyei, 2006).

Extraversion is often identified with energy and enthusiasm. This trait is characterized by "a keen interest in other people and external events, and venturing forth with confidence into the unknown" (Ewen, 1998, p. 289). A conceptual definition of the term implies an *energetic approach* toward the outer world (social and material), including traits of friendliness, activity, confidence, and positive emotionality (John et al., 2008). It involves an interest in social interaction, pertaining to "an active, zestful, and venturesome approach to life and to interpersonal relations" (Digman, 1997, p. 1250). Its basic facets are warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions. The strong link between extraversion and positive affect (Smillie et al., 2012) can be attributed to one of the basic characteristics of the extraverted individual—the inclination to be sociable (Smillie et al., 2015). Understandably, with their energetic and dominant approach, extraverts actively try to gain other people's attention and develop wide social and professional networks (Monzani et al., 2014). However, their affective and social bonds with those around them may be shallow and superficial (Bauer et al., 2006). In general, they are more sensitive to pleasant rewarding stimuli, maintaining cheerful moods for longer, and spending more time in enjoyable social situations (Zelenski et al., 2013). In contrast, introverts are inward-oriented, and are less likely to develop social or professional networks. They also tend to avoid establishing close affective ties, and are inclined to be sensitive to threat, punishment, and the unknown (novelty cues). These trigger activation of a behavioural inhibition system, along with avoidance motivation (Dietrich & Verdolini Abbott, 2012).

Personality traits are important in daily interaction, hence they can also be regarded as a significant factor in achieving educational goals among students learning foreign languages (Erton, 2010). For this reason, the study of the role of personality in the field of second language acquisition appears to be of primary importance, particularly in view of the fact that little research on this subject has been carried out to date (Dewaele, 2012). In spite of the lack of studies into this area, it has been established that personality is a significant predictor of foreign language proficiency, accounting for 13% of its variance (Ghapanchi et al., 2011), and playing a major role in the process of foreign language learning. However, "no single personality trait has ever been found to predict overall success in second language learning" (Dewaele, 2007). Generally, it is proposed that there is a two-way relationship between personality and language learning. Personality can influence second/foreign language, and vice versa (Dörnyei & Ryan, 2015). More importantly, global personality traits may also have

an indirect influence on various aspects of the foreign language learning process, i.e., on WTC, and foreign language anxiety, etc. (MacIntyre & Charos, 1996).

Extraversion appears to be the personality dimension that is "most often researched" in the process of foreign language learning (Ożańska-Ponikwia & Dewaele, 2012, p. 119). In the literature of the field it is proposed that extravert learners have a natural advantage in the acquisition of the L2 when compared to their more introverted peers due to their talkativeness and sociability (Dewaele & Ip, 2013). However, empirical studies do not render straightforward and consistent findings. On the one hand, extraversion may have little effect on the oral speech production of L2 learners (Flemish) of a foreign language (French and English) (Daele et al., 2006), as also confirmed by Chen et al., (2015) in Chinese learners. Moreover, extraverts perform better in learning situations with a moderate degree of novelty, while introverts do better in situations with which they are familiar (MacIntyre et al., 2007). As far as foreign language writing ability is concerned, it appears that introverts outperform their extraverted peers, possibly due to their preference for solitude, enabling greater concentration and generation of ideas (Boroujeni et al., 2015). Conversely, it was found that extraversion positively correlates with English pronunciation accuracy (Hassan, 2001). Extraverts are more fluent than introvert bilinguals, especially in interpersonal stressful situations (Dewaele & Furnham, 2000). What is more, several facets of this trait, including assertiveness, warmth, activity and excitement-seeking have been found to be significant explanatory variables of English L2 fluency ratings among Japanese learners (Ockey, 2011). Extraverts' tendency to take risks appears to extend to their linguistic behaviour, as they use more stigmatized language and are willing to engage in potentially more 'dangerous' emotionally-laden topics (Dewaele & Pavlenko, 2002). Polish extraverts living in the UK and Ireland demonstrate higher levels of the self-perceived L2 use (Ożańska-Ponikwia, 2012). This personality dimension also appears to be one of the most critical shapers of the L2 WTC levels among Arabic English language learners (Oz, 2014). Aside from that, a direct link has been proposed between L2 WTC and self-perceived proficiency (Gol et al., 2014; Xie, 2011), as well as language anxiety. Studies have been carried out, however, in which no direct effect of personality (i.e., extraversion) on L2 WTC can consistently be confirmed (Alemi et al., 2013; Kamprasertwong, 2010).

For the purpose of this study it is speculated that extraversion may be treated as an independent personality dimension bearing a positive predictive power in assessing L2 WTC levels. This assumption is grounded in the nature of personality that is a unique aspect of human individuality (Dörnyei & Ryan, 2015). As such, it may have a twofold influence—both direct and indirect—on one's L2 WTC levels. First of all, its primary or direct effect can be attributed to the enduring influence of personality on all the factors shaping communication in a FL, elegantly captured in the pyramid model proposed by MacIntyre et al. (1998). The "profoundly unsettling psychological proposition" (Guiora, 1984, p. 8) of the foreign language learning process thwarts the learner's ego, and demands a great deal of personal investment, concentration, patience, and active involvement. Its enduring character induces complex psychological processes within an individual, assisted by a powerful interplay of the social aspects of language learning motivation and other influential variables

(MacIntyre et al., 2007). As a result of these interrelated mechanisms, ambivalent feelings of being simultaneously willing and unwilling to communicate are evoked. It appears that, on the one hand, the learner recognizes the importance of practising communication skills, and is drawn to communication. However, on the other, they avoid it because they may be conscious of their linguistic shortcomings, and are afraid of losing face in front of those whose opinion matters to them, that is, their teacher and peers. It may further be deduced that the challenges encountered on the long path to proficiency may be satisfactorily addressed through the distinctive qualities of the learner's personality characteristics, such as higher levels of extraversion. With their risk-approach behaviours, strongly extraverted individuals have a need for social contact and attention (Hampson, 2012), even if these interactions have a negative potential (John & Gross, 2007). This specific requirement can be satisfied by the foreign language learning situation, forcing students to interact for various purposes. In L1, extraverts frequently initiate interpersonal communication and have a higher speech rate, regardless of the qualities of the conversation context (Frederickx & Hofmans, 2014). On these grounds, it can be speculated that the specificity of the foreign language learning process, though often perceived as stressful and demanding, allows extraverts to focus their attention on its positive aspects (Schneider & Jackson, 2014), enabling them to be open with regard to communication and developing higher L2 WTC levels. Aside from the direct effect of extraversion on L2 WTC, its indirect influence can be speculated, through mediating between WTC and its immediate antecedents: perceived communicative competence and communication apprehension, confirmed by research in the field (MacIntyre & Charos, 1996; Ożańska-Ponikwia, 2017). Extraversion focuses on positive affect, hence also in the L2 learning process the feelings of communication anxiety (hereby: language anxiety) may be less pronounced in extraverted individuals. On the other hand, such students are likely to assess their self-perceived communicative competence in the foreign language (operationalized as self-perceived FL skills) at a higher level due to their general tendency to optimistically measure their self-perceived ability (Kemper et al., 2008). On these grounds, it may be speculated that the most immediate and direct influences of L2 WTC are augmented by the mediating effects of extraversion, constituting the basis for all the processes that contribute to shaping WTC, as the pyramid model demonstrates. Consequently, for the purpose of this paper the following hypothesis is formulated:

H: *Students with higher levels of extraversion demonstrate higher levels of L2 WTC in comparison to their peers with lower levels of the trait.*

3 Method

3.1 Participants

The research participants were 494 students from 20 randomly selected classes of the six secondary grammar schools in an urban town in south-western Poland. Among them, there were 308 girls and 186 boys whose mean age was 18.50 (range: 18–21, SD = 0.53). They were in the third (last) grade of school with three to six hours a week of compulsory English instruction, at the B1-B2 levels according to the Common European Framework of Reference for Languages (CEFR). Their level of proficiency was intermediate to upper intermediate, while the length of their language learning experience was of almost eleven years, with the vast majority (above 90%) having studied English for seven to 17 years. The cohort also participated in classes of another compulsory foreign language: French or German with two to four lessons a week. The research participants came from different residential locations. 254 of them were city dwellers, 133 came from neighbouring towns, and 150 students from rural regions.

3.2 Instruments

The basic instrument adopted for the purposes of the study was a questionnaire in the participants' native language—Polish. The tool included demographic variables: age, gender (1—*male*, 2—*female*), and place of residence (1—*village: up to 2,500 inhabitants*, 2—*town: from 2,500 to 50,000 inhabitants,* 3—*city: over 50,000 inhabitants*). Students were also asked to assess the *length of their English instruction* by estimating how long they had studied the language for in a formal context (private classes, school education, etc.).

The questionnaire also included other measuring scales, translated from English. One of these was the *Willingness to communicate in the classroom* scale (WTCI) (Maclntyre et al., 2001). It assessed the students' willingness to engage in communication tasks during class time in the four skill areas (hereby called WTCI) by means of 27 items. Eight items evaluated WTC in speaking, six—reading, eight—writing, and five—comprehension (listening). Sample items in the scale were: *How often are you willing to speak to your teacher about your homework assignment?* or *How often are you willing to read reviews of popular movies?* The participants indicated their answers on a Likert scale, within a range from 1 to 5, indicating how willing they would be to communicate in given contexts. 1 indicated *almost never willing*, 2—*sometimes willing*, 3—*willing half of the time*, 4—*usually willing*, and 5—*almost always willing*. The minimum number of points on the scale was 27, while the maximum was 135. The scale's reliability in the sample was measured in terms of Cronbach's alpha, ranging the level of 0.94.

Another scale, *Willingness to communicate outside the classroom* (WTCO) (Maclntyre et al., 2001), was applied to determine the students' willingness to engage in communication tasks outside the classroom in the four skill areas (hereby called WTCO). It included the same items as the previous scale, adapted to an out-of-school context. Since the Polish respondents had virtually no chances of participating in authentic communication outside school, the results obtained on the WTCI and WTCO scales were later aggregated to assess the global L2 WTC level. It was expected that a student's inclinations to use the foreign language in a voluntary manner in an out-of-school context would likely be shaped by their classroom experiences.

The next scale assessed the participants' extraversion levels by means of a specific part of the International Personality Item Pool (*IPIP*) representation of the Goldberg (1992) markers for the Big-Five factor structure. It consisted of 20 items assessing this dimension with ten positively and ten negatively worded items, which were then key-reversed. The sample items include: *I feel comfortable around people* or *I don't like to draw attention to myself*. Responses were given on a 5-point Likert scale, ranging from *1—strongly disagree* to *5—strongly agree.* The minimum number of points on the scale was 20, while the maximum was 100. The scale's reliability was measured in terms of Cronbach's alpha, ranging the level of 0.94 in this study.

The *Foreign Language Classroom Anxiety Scale* (Horwitz et al., 1986), also used in e.g., Piechurska-Kuciel, 2008) estimated the degree to which students felt anxious during language classes. Sample items were: *I can feel my heart pounding when I'm going to be called on in a language class* and *I keep thinking that the other students are better at languages than I am.* The Likert scale used ranged from 1—*I totally disagree* to 5—*I totally agree.* Positively-worded items were key-reversed, so that a high score on the scale represented a high anxiety level. The minimum number of points was 33, the maximum was 165. The scale's reliability was $\alpha = 0.94$.

Two additional types of assessment tools were used. As far as *final grades* (external assessment) are concerned, the participants gave the final grades they received in junior high school and the first semester of secondary grammar school. They also included the grade they expected to receive at the end of the school year. All these grades were placed on the Likert scale ranging from 1 (*unsatisfactory*) to 6 (*excellent*). The scales reliability was $\alpha = 0.87$. The scale of internal assessment: *self-perceived levels of FL skills* (speaking, listening, writing and reading) was an aggregated value of separate assessments of the FL skills, each of which measured with a Likert scale ranging from 1 (*unsatisfactory*) to 6 (*excellent*). The minimum number of points on the scale was 4, while the maximum was 24. The scale's reliability was Cronbach's $\alpha = 0.88$.

3.3 Procedure

The data collection procedure consisted in asking the students to fill in the questionnaire, which took them about 15 to 45 min. The participants were requested to

give sincere answers without taking excessive time to think. Each new set of items in the questionnaire was preceded with a short statement introducing them in an unobtrusive manner.

The data were later computed by means of the statistical program STATISTICA, with the main operations being descriptive statistics (means and *SD*), correlations, and an inferential statistics operation: step-wise hierarchical multiple regression, where in each step more significant variables are entered into the model. This included the indicator of the significance of variables, i.e., the range of the explained variance R^2, as well as the value and significance of the β weights.

4 Results

First, means and SD were calculated for all the variables included in the study. The summary of the descriptive results can be found in Table 1 The correlation results showed that L2 WTC was significantly related to all the variables; in a positive manner to extraversion, length of the study of English, final grades and self-perceived levels of FL skills. It is worth noting the very strong, negative correlation of extraversion with language anxiety. A summary of the descriptive procedures results is presented in Table 2.

Following this, step-wise multiple regression was performed in order to compute the predictive value of the selected variables for assessing L2 WTC levels. In Step 1 two items correlating with L2 WTC in the weakest manner were entered: extraversion and the length of FL study. This computation showed weak, though statistically significant predictability of the WTC results with $\beta = 0.11$, $p = 0.02$ in the case of the length of FL study, and $\beta = 19$, $p = 0.00$ in the case of extraversion. The two variables were found to be responsible for about 4% of the WTC variability with $F(2,491) = 12.55$, $p = 0.00$.

In Step 2 final grades were introduced into the regression model. The results were: $\beta = 0.23$, $p = 0.00$, proving that the variable could explain 9% of the WTC

Table 1 Descriptive statistics with correlation matrices of the variables (N = 537)

	Mean	SD	2	3	4	5	6
1. L2 WTC	158.75	44.07	0.19^{***}	-0.35^{***}	0.16^{***}	0.25^{***}	0.41^{***}
2. Extraversion	72.83	15.26	–	0.28^{***}	0.00	0.01	0.03
3. Language anxiety	84.04	23.30	–	–	-0.25^{***}	-0.38^{***}	-0.56^{***}
4. Length of FL study	9.89	2.46	–	–	–	0.20^{***}	0.34^{***}
5. Final grades	3.82	0.76	–	–	–	–	0.45^{***}
6. Self-perceived FL skills	3.97	0.87	–	–	–	–	–

*denotes $p \leq 0.05$; ** $p < 0.01$, *** $p < 0.001$

Table 2 Summary of multiple regression results for L2 WTC (N = 494)

Variable	*Adjusted R^2 change*	*β*	*p*
Step 1*			
Length of FL study		0.11	0.02
Extraversion		0.19	0.00
Step 2	0.09	0.23	0.00
Final grades			
Step 3	0.20		
Language anxiety		−0.14	0.00
Self-perceived FL skills		0.32	0.00

*Adjusted $R^2 = 0.04$

variability, independently from the previous variables, with $F(3,490) = 17.64$, $p = 0.00$.

In Step 3, the most powerful variables were entered: language anxiety and self-perceived levels of FL skills. In the case of language anxiety, the result was $\beta = -0.14$, $p = 0.00$, while in the case of self-perceived levels of FL skills: $\beta = 0.32$, $p = 0.00$. The variables appeared to be responsible for 21% of WTC variability, independently from the other variables, with $F(5,488) = 25.28$, $p = 0.00$. Altogether, the variables in the model were responsible for explaining about one third of L2 WTC variability. A summary of the multiple regression procedure can be found in Table 2.

5 Discussion

This study was an attempt to investigate the influence of the personality dimension of extraversion on WTC in a foreign language. The results of the multiple regression procedure demonstrate that in the proposed regression model extraversion can be regarded as a statistically significant, though quite modest predictor of L2 WTC.

The role of personality has already been acknowledged in the pyramid model of L2 WTC, whereby personality is located at the widest bottom layer of the organization (MacIntyre et al., 1998). It follows that this construct plays a grounding role for actual verbal behaviour in a foreign language; that is the effect of one's readiness to communicate in that language. For this reason, it was speculated that personality (with extraversion as one of its dimensions) can be expected to play a twofold function in producing WTC. First of all, it directly impacts one's inclination to initiate communication, which is confirmed by its statistically significant predictive power established in the regression model proposed for the purpose of this research. The influence of extraversion on L2 WTC can be traced back to its impact on L1 WTC viewed as a personal trait (McCroskey & Richmond, 1990). Extraverts, being more socially active, are likely to place "a higher value on communication" (MacIntyre et al., 1999, p. 216), hence they present higher L1 WTC levels. However, in the case of L2 WTC, its trait-like specificity is significantly reduced by the powerful impact of a conglomerate of various situational factors, among which the change of language

appears to be the most decisive. In such conditions even socially active extraverts may refrain from voluntary participation in communicative tasks. Their personality trait no longer guarantees the facilitation of social interaction through communication. The change of language and the powerful activation of other situational variables typical for the language learning situation (e.g., ambiguity or lack of control) may quite strongly undermine extraverts' predisposition to talk. L2 WTC is considered "an internal psychological state" (Clément et al., 2007, p. 61), which means that the intrapsychic aspect of communication in this specific situation is of paramount importance. Indeed, venturing to engage in communication in a language that has not yet been mastered has been likened to 'crossing the Rubicon' (ibid.). It requires volition that extraverts may not always present to the extent needed for initiating communication in a stable manner in a language they have not fully mastered. Their tendency to be outgoing and sociable may not be likely to suffice in the context of L2 communication. The reason may be that extraverts positively rate social and solitary situations that are pleasant (Lucas & Diener, 2001). This is when they become more aroused, and engage more willingly in active behaviour (Kuppens, 2008). Unfortunately, in the foreign language learning situation positive experiences are not obvious, which may induce extraverts' lower L2 WTC levels. The status of introverts is even worse. They are not generally inclined to pursue communication in order to seek pleasure, so their readiness to initiate any exchange in the classroom is bound to be significantly lower, especially when their language skills are perceived as insufficient.

Alongside the direct influence of personality (i.e., extraversion) on L2 WTC, it can be expected that personality also affects WTC indirectly by shaping the variables placed at upper layers, mostly the immediate, particularly significant, antecedents (communicative anxiety and perceived communicative competence). As far as communicative anxiety (that is: skill-specific language anxiety in the foreign language learning domain) is concerned, the research results demonstrate its considerable predictive power for L2 WTC (e.g., Simons et al., 2019), while anxiety has also been found to be influenced by extraversion to a moderate extent (Dewaele & Ip, 2013). It means that extraverted students declare lower levels of language anxiety due to their tendency to experience positive emotions. Conversely, in introverts, the specific personality effects may hamper the adequate assessment of the communicative situation and cognitive processes underlying effective decision making, and discouraging the introverted student from speaking. For this reason several interactional patters among variables shaping L2 WTC can be expected: alongside the direct influence of extraversion on language anxiety, and that of extraversion on WTC, anxiety also impacts WTC on its own accord. At the same time, their levels of language anxiety interact bidirectionally with WTC, confirmed by the statistically significant relationship between the variables, which determines the explanatory power of extraversion for WTC. Summing up, this biologically grounded personality trait may impact WTC in a direct manner, inducing extraverted individuals to frequently interact verbally in various situations, the foreign language classroom among others. In effect, a cumulative impact of extraversion on L2 WTC can be expected. A low level of this personality trait essentially realised as minor social

activity and a lesser interest in communication can be deduced to lead to a lower degree of WTC.

In the case of the other immediate antecedent of L2 WTC, perceived communicative competence (operationalised as self-perceived FL skills), a similar mechanism occurs—it shapes WTC, which is revealed through its quite strong predictive power, as revealed by the results of the present study. At the same time, it is also shaped by extraversion, through their engagement in social activities and tasks in the classroom (Khany & Ghoreyshi, 2013). It then appears that the decision to initiate communication also stems from self-perceptions of skills, not the actual skills themselves. Therefore, self-perceived assessment plays a decisive role not only in universal WTC (Richmond & McCroskey, 1989), but also L2 WTC (Donovan & MacIntyre, 2004). Aside from that, self-perceptions of ability may also be grounded in extraversion (Garaigordobil & Bernarás, 2009). It follows that an extraverted learner may tend to assess their FL ability at a higher level than an introverted one. Altogether, with high language anxiety and low self-perceptions that may be related to low extraversion, such a student has no readiness for initiating communication in L2, which deprives them of chances to develop their communicative competence and performance. Self-protective behaviours may then become routine in the classroom, and as a result, such learners remain reticent and evasive in order to survive.

The last factor included in the model is the length of one's FL instruction. For the purpose of this study it was speculated that growing proficiency allows for encountering more positive experiences, and greater freedom in the classroom. The developing familiarity with the educational environment, teaching and learning procedures, and peer behaviours enables even the most introverted students to master the basic strategies that reassure their basic performance in the classroom. In this way, they may be able to lower the arousal levels to which they are prone with their specific cortical arousal (Swickert et al., 2002). However, it should not be expected that they all may eventually risk initiating communication in a foreign language on their own accord. Their trait-like predisposition to be sensitive to stress may consistently limit their WTC, even in spite of their growing L2 proficiency and familiarity with classroom routines.

All in all the minor, though statistically significant, strength of extraversion as a predictor of L2 WTC may be the consequence of its direct and indirect influence on distal and immediate antecedents of L2 WTC. The collective power of these effects may lead to the speculation that extraversion should be regarded as a crucial, though not quite clear-cut antecedent of WTC. Its greatest explanatory power can be attributed to shaping language anxiety and self-perceptions of communicative competence. It can be concluded that an elevated level of extraversion may be conducive for effective foreign language learning, enabling realistic social interactions and satisfying communicative exchanges.

6 Conclusions

As L2 WTC is now considered a primary goal of language instruction (Clément et al., 2003), not only in production-based approaches, but also in input-based instruction that sensitizes learners to form-meaning relationships. This will allow for the growth of the student's WTC, but also for "willingness to listen closely" (Ellis, 2012, p. 324). A balanced approach to foster two-way communication that is both understood and responded to may give equal chances to extraverts and introverts who listen more than talk, and think before they speak. Their specific traits, which might so far have been regarded as an obstacle to effective communication can now serve as a springboard for realistic exchanges, requiring understanding and accuracy. It would be too risky to conclude that high levels of extraversion are always beneficial for L2 WTC. It appears that for introverted learners L2 study may be sometimes easier because they are likely to develop higher levels of cognitive academic language proficiency (Ellis, 2008). Hence, a deliberate development of WTC that places equal stress on listening and speaking should primarily focus on creating more opportunities for learning and using the FL in and out of the classroom by inducing authentic communication (e.g., through authentic videos, introducing native speakers to the classroom, or analysing real-life facts and behaviours). Obviously, pursuing intercultural communication within the constraints of a non-native language classroom may be extremely difficult, yet it may offer students valuable experience. One's volition to initiate communication may be difficult to obtain on the part of introverts; however, the foundation for a higher level of confidence with regard to verbal behaviour may be ensured by introducing greater feelings of safety within the classroom. This can be obtained through the establishment of familiar teaching and learning routines, as well as the explicit introduction of lesson objectives and effects. Aside from that, a strong focus on the elimination of negative emotions identified in the foreign language learning process deserves special attention. Ways of combatting them may include the introduction of relaxation training, desk yoga, meditation or breathing techniques sessions during the lessons. The use of the mother tongue may be quite liberating, giving learners the impression of being always able to rely on well-known and familiar linguistic and cognitive patterns. In the long run, this strategy may lead to a more reliable cognitive cohabitation of the languages in the learner's mind.

This study has several limitations that should be addressed. The proposed model does not appear to have a robust explanatory power, because it explains only about 30% of L2 WTC variability. It follows that there are other influential variables that have not been taken into consideration while predicting the WTC levels. The predictor variables included only factors from the most distant and closest to WTC layers of the pyramid, so the representation of the WTC antecedents is definitely far from complete. Understandably, a cross-sectional type of the study does not allow insights into the attainment of more complex cause-and-effect conclusions providing for a broader collection of variables. Furthermore, the study is limited to only one research method, excluding triangulation, which could offer a greater degree of confidence in data validation.

Hence, it is clear that numerous research implications can be proposed. First of all, the inclusion of variables representing most if not all WTC pyramid layers should be taken into consideration. For example, all the personality dimensions (not limited to extraversion) included in the bottom layer deserve deeper analysis (c.f. Piechurska-Kuciel, 2018), although it may be speculated that their influence is likely to be indirect, due to personality's distal location. Also, taking into consideration inter-group climate represented by ethnocentrism or language dominance may offer exciting paths of inquiry. Also factors placed in upper layers of the pyramid, such as social situation, exemplified by social support or financial strain, or various motivation constructs deserve attention, shedding more light on the socio-economic context of language study and WTC development. Evidently, the role of proximal, situated antecedents of WTC may eventually turn out decisive in the formation of one's readiness to initiate communication in a foreign language, the subtle, yet pervasive influences of distal factors cannot be neglected due to their more universal nature. Aside from that, applying longitudinal studies or panel designs in culture-specific contexts may shed more light on the intricate relationship of L2 WTC and personality factors.

In spite of its weaknesses, it is hoped that this research sheds more light on the role of extraversion in students' readiness to initiate communication in a foreign language. Investigating such relationships may offer valuable insights into how people with distinctive personal characteristics learn languages, resulting in the proposal of more effective classroom procedures.

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On the Effect of Using a Flipped Classroom Methodology on Iranian EFL Learners' Willingness to Communicate

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Abstract This study employed a mixed method design to study the effect of a flipped classroom strategy on Iranian EFL learners' willingness to communicate (WTC). Two EFL classes (N = 20 for each class) were assigned to experimental and control groups. The flipped classroom was taught via flipped classroom strategy while the control group received conventional English teaching. The groups were tested for their WTC before and after the intervention. Also, interviews were conducted with the participants of the both groups. The results indicated that flipped classroom strategy significantly influenced learners' WTC by making language learning enjoyable, increasing motivation, and decreasing language anxiety. The implications of the study for researchers and language teachers are presented.

Keywords Flipped classroom strategy · WTC · Anxiety · Motivation

1 Introduction

Willingness to communicate is among the individual differences that predict the amount of communication in L2 (Clément et al., 2003). Over the past two decades, a considerable bulk of research has been conducted on different linguistic, psychological, pedagogical, and contextual factors that influenced L2 learners' WTC (Baker & MacIntyre, 2000; Peng, 2012; Zarrinabadi, 2014; Zarrinabadi & Khodarahmi, 2017). While remarkable achievements have been made in understanding WTC and the factors that hinder or foster it (see Zarrinabadi & Tanbakooei, 2016 for a review), there are still several unknown issues about L2 WTC. One of these issues related

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_8

to online and computer-assisted learning environment and their effects on learners' WTC. To address this gap in the research, this study examined the effect of flipped classroom strategy on Iranian EFL learners' WTC. In so doing, this study compared L2 WTC in flipped classroom environment with the conventional one and examined the reasons for effectiveness or ineffectiveness of the both strategies.

2 Literature Review

2.1 L2 WTC

The concept of L2 WTC was introduced into the L2 literature by MacIntyre et al. (1998) as a complex construct underpinned by a group of contextual and psychological variables that are linked in a linear-cause-and-effect relationship (Baker & MacIntyre, 2003; Hashimoto, 2002; Yashima, 2002). It has been generally described as "a readiness to enter into the discourse at a particular time with a specific person or persons, using a L2" (MacIntyre et al., 1998, p. 547). Considering the significance of "talking in order to learn" (MacIntyre & Legatto, 2011, p. 152), L2 WTC has been highlighted as one of the main goals of L2 pedagogy (MacIntyre et al., 1998, pp. 545–6). Through boosting learners' L2 WTC, language instruction can be more efficient given that learners with higher WTC are more likely to use L2 in real communication situations and to get involved in autonomous learning outside the classroom (Kang, 2005). In its earliest conceptualization, psychological variables including communication apprehension (CA), perceived communication competence and motivational propensities were seen as the proximal factors and contextual variables such as topic, interlocutor and conversational context as its distal antecedents (MacIntyre et al., 2003; Dornyei & Ryan, 2015; MacIntyre et al., 2002). Accordingly, early research into WLC was predominantly concerned with the causal relationship between learners' L2 WTC and its psychological predictors including motivation, self-confidence, communication apprehension and personality (e.g., Ghonsooly et al., 2012; MacIntyre & Charos, 1996; MacIntyre et al., 1999; Yaghoubinejad et al., 2017; Yashima, 2002, 2009). More recently, however, research studies have shown that while psychological variables are the determining factors in L2 learners' WTC, contextual factors also interact with L2 WTC directly (Kang, 2005; Peng, 2014). These findings have resulted into the development of the Dynamic Systems Theory (DST) as a new approach which has characterized L2 WTC as a dynamic and non-linear construct which is the outcome of the interplay among multiple factors including psychological, contextual and linguistic variables (MacIntyre et al., 2011). Several studies have adopted DST to explain whether and how it can explain the dynamic interrelations between L2 WTC and its underpinning variables (e.g., Cao, 2009; Pattapong, 2015; Peng, 2014; Suksawas, 2011; Syed & Kuzborska, 2020).

In this strand of research, classroom environment including teacher (Hsu et al., 2007; Menzel & Carrell, 1999; Wen & Clément, 2003; Zarrinabadi, 2014), learning task, topic, multimodality of classroom interaction (Peng, 2019) has been reported as one of the strongest antecedents of L2 WTC (Hsu et al., 2007; Joe et al., 2017; Khajavy et al., 2016; Peng & Woodrow, 2010) that could enhance or hinder L2 WTC (Eddy-U, 2015; Kang, 2005; Peng, 2019). As Dörnyei & Ryan (2015) noted, qualitative classroom-based research on WTC has gained momentum in an attempt to examine the situated nature of learners' L2 WTC (e.g., Cao, 2009; Kang, 2005; MacIntyre et al., 2011; Pawlak & Mystkowska-Wiertelak, 2015; Peng, 2007, 2012, 2014; Peng & Woodrow, 2010; Yu, 2015). Kang's (2005) study which was among the first classroom-based studies on L2 WTC focused on four male Korean students in the US for eight months and found that their willingness to communicate in English was affected by the interaction among psychological variables such as excitement, sense of responsibility, and security, as well as contextual conditions including topic and interlocutor, and the conversational context. Zarrinabadi's (2014) study showed that teachers can affect learners' willingness to talk in the classroom. More specifically, teachers' wait time and support, feedback, and decision on the topic were found to exert an influence on learners' WTC. Khajavy et al.'s (2016) also found out that classroom environment was the most important predictor of WTC among Irnian English-major university students.

In particular, due to the important role of classroom environment, several studies have adopted an experimental approach to find out whether and how it would be possible to promote L2 WTC in the classroom environment (Buckingham & Alpaslan, 2017; Munezane, 2015; Peng, 2019). In a large-scale study, Peng (2019), for example, examined the interrelations among multimodal pedagogic effect, classroom environment, and Chinese EFL learners' WTC in English. The results showed that the effective use of audio and video as well as teachers' gestures and spatial positions could significantly predict L2 WTC. In another study, Buckingham and Alpaslan (2017) reported significant improvements in Turkish learners' L2 WTC after completing out-of-class speaking activities which involved recording their voices in response to the questions their teachers raised in video and voice recordings. Reinders and Wattana (2014) reported that playing a multiplayer online role-playing game (MMORPG) for nine hours over six weeks, relieved L2 apprehension and boosted L2 WTC among Thai EFL learners. In a follow-up study, Reinders and Wattana (2015) argued that unlike classroom environment that learners feel worried about negative judgment of the teacher and their classmates, in digital game environment, they have a higher willingness to communicate as they play under pseudonyms which make them feel safer and more relaxed while using the L2. Eddy-U (2015) explored factors affecting task-situated WTC at two Chinese universities. Students reported in focus group discussions that in addition to self-confidence and L2 learning motivation classroom, social atmosphere, group mates, marks, and task-related factors significantly influenced their willingness to participate in pair and group tasks. Despite the wide range of studies on L2 WTC, whether and how different teaching methods can influence L2 WTC has yet to be fully clarified.

2.2 Flipped Classroom Strategy

Education has made great strides toward more student-centered and self-directed learning over the last few decades (Wanner & Palmer, 2015). In fact, pedagogical literature has shown that teaching and learning is moving from teacher-centered instructions towards personalized education and flexible learning in which the learner is central and actively involved in the learning process in a way that their needs, interests, backgrounds and learning styles are the focus of attention (Johnson et al., 2012; Keamy et al., 2007). Flipped model as one of the personalized and flexible teaching methods emerged in 2007 by Chemistry teachers Jonathan Bergmann and Aaron Sams. It refers to a blended and online method wherein *students* get their first exposure to *course* content and learning materials *before coming to class* (Bergmann & Sams, 2012). Students watch video lectures before joining the class, they build knowledge through readings, learn other materials at home, and then participate in an active-based learning in class time (Arnold-Garza, 2014; Bergmann & Sams, 2012; Snowden, 2012). As students have enough time to gain necessary knowledge *before* class time, they can increase the value of face-to-face and meaningful interaction in class time by their active engagement so that teachers are able to provide appropriate guidance and feedback during in-class activities (Kim et al., 2017). Flipped classroom has been also advocated in higher education for reflecting flexible and innovative pedagogies (Nouri, 2016).

The studies on the flipped model impact showed that not only does it have a deep impact on the teachers' professional lives, but also it has positive effect on language learners' lives. For instance, Bergmann and Sams (2012) found that greater extent of motivation was reached due to students' greater engagement and their freedom to learn independently. Davies et al. (2013) had similar findings reporting that students in the flipped classroom courses were more satisfied with the learning environment than the traditional ones.

As it was mentioned earlier, the flipped classroom model is about increasing active learning (Hamdan et al., 2013); therefore, it reverses the traditional classroom approach to teaching and learning (Sharples et al., 2014) where students are passive due to the lack of engagement with the material, their attention decrease quickly, and the pace of the lectures is not adapted to all learners' needs (Young et al., 2009). Moreover, learners prefer flipped classroom over traditional approaches as they enjoy being able to learn in their own pace (Davies et al., 2013; Zarrinabadi & Ebrahimi, 2019) and in terms of examinations of learning outcomes, students using a flipped classroom approach get higher exam grades as compared to students learning through traditional methods (Love et al., 2014). While, much has been reported about the beneficial effects of flipped classroom strategy in education and language learning (Bergmann & Sam, 2012; Zarrinabadi & Ebrahimi, 2019), little research is done on the effect of this method on learners' L2 WTC. This study aimed to address this gap in the literature by addressing the following research question.

RQ1: How does implementation of flipped classroom strategy influence L2 WTC among Iranian EFL learners?

3 Methods

3.1 Design of the Study

The purpose of the present mixed methods study was to explore the impact of two types of teaching methods (conventional classroom vs. flipped classroom) on learners' L2 WTC. First, the authors gathered quantitative data about learners' L2 WTC in both classroom situations before and after the interventions. To further analyze the data gathered in this stage, the authors planned and implemented a qualitative phase. To this end, a protocol for semi-structured interviews based on the data in the experimental phase of the study was developed. The data collected in this stage helped to explain and interpret the quantitative results.

3.2 The Setting and Participants

The present study was conducted in a private language school in Isfahan, Iran. The school offers different English courses in different proficiency groups. The authors randomly selected two intact classes from eight intermediate level classes in this language school. There were 40 intermediate EFL learners in the two classes (13 males and 17 females; two intact classes, N for each class = 20). The two classes were randomly assigned to the flipped strategy and conventional groups. All participants spoke Persian as their mother tongue and ranged in age from were from 14 to 19 years old (M = 15.6, SD = 1.6). The classes met three times a week and the main coursebook was *American English File 2*. The purpose of the course was developing learners' ability for communication in English. The same teacher taught both classes. Participants' OPT scores and their L2 WTC before the intervention were used to ensure homogeneity of both classes.

3.3 Instruments

Data for the study was collected through L2 WTC questionnaire and semi-structured.

3.3.1 Willingness to Communicate Inside the Classroom

To measuring participants' willingness to communicate inside the classroom, a modified version of the L2 WTC questionnaire developed by MacIntyre et al. (2001) was used. It is a 27-item scale comprising 27 items on 5-point Likert scale (1 = almost never willing, 2 = sometimes willing, 3 = willing half of the time, 4 = usually willing, and 5 = almost always willing). The items indicate willingness of learners

to communicate inside the classroom in the four language skills. The reliability estimates for this scale in the pretest and posttest conditions were 0.73 and 0.76.

3.3.2 Semi-Structured Interviews

Semi-structured interviews and stimulated recalls were used to supplement the findings of the statistical analyses (Green et al., 2007). The goal was to understand whether and how flipped classroom strategy could influence learners' L2 WTC. Five participants in each group were asked to talk about their experiences and feelings towards communication in English in the classroom before and after the intervention. To prevent any negative effects of participants' English proficiency on their ability to express their feelings, the interviews were conducted in Persian. The interviews were performed by the first author in one of the classrooms of the language school and lasted between 15 to 35 min. All the interviews were audio-recorded.

3.4 The Intervention

The intervention involved assigning pre-class activities to provide preparation for being engaged in deeper learning and increased L2 WTC in the classroom. Learners then did some higher level classroom activities which involved group-level and whole-class communication. More specifically, the flipped strategy employed in this study included three stages.

In the first stage, Telegram application was used to assign learners pre-class activities. Telegram is one of the most widely used social networks in Iran with more than 45 million subscribers. Materials were sent to the classroom group on Telegram. Learners were supposed to watch the videos, study short texts, and listen to audio recordings related to the content of each lesson. In the second stage, in the classroom, the teacher reminded learners of the pre-class activities they were to complete before the class. In the next stage, the teacher assigned group-level and whole-class activities. These activities included problem-solving activities, and question and answer tasks. For instance, learners were asked to propose solutions for some problems/tasks related to the materials studied online. The students' discussion in the groups was audio-recorded using recorders installed on the desks. Finally, the teacher asked the groups to share their solutions with other groups and to present arguments for and against the ideas presented. The intervention continued for 16 sessions. It should be noted that the course developed synergistically, with less teacher intervention and authority and more learner autonomy and independence in the classroom activities.

The tasks assigned to the control group were the same as those designed for the intervention group in terms of purpose and topic. The only difference relied in task sequencing. To illustrate, in the final session, the focus was on teaching comparatives. Thus, both groups discussed the differences between British and Iranian culture in the classroom. In the control group, however, the participants were presented the

materials inside the classroom and then discussed their ideas. In the flipped classroom, students studied the materials at home and then discussed them in the classroom.

3.5 Data Analysis

The data collected by the L2 WTC scale before and after the intervention was analyzed using descriptive (e.g., Mean, SD) and inferential statistics (Independent-samples and repeated-measures t-test).

The analysis of interview data was carried out in several steps. First, semi-structured interviews were transcribed and coded by the first author. The coding process was guided by the research questions and the literature in the field. After being coded, the data were reread, expanded, and refined again to identify potential themes. To ensure credibility of the analysis, a colleague familiar with L2 WTC and qualitative research was asked to do an external audit of coding and the interpretations. An acceptable level of intercoder agreement was achieved (K = 0.92). Moreover, to avoid bias and inaccuracies in data analysis, member checking was carried out by emailing the results to participants and asking them to comment on the degree to which the interpretations reflected their experiences.

4 Results

Prior to the intervention, the WTC scale was administered and the groups were compared to ensure that no prior differences existed in terms of their WTC scores. An independent-samples t-test was computed to compare WTC in conventional and flipped classroom conditions. There were no significant differences in WTC scores for conventional ($M = 83.95$, $SD = 14.34$) and flipped classroom ($M = 84.25$, $SD = 14.48$) conditions; $t\ (38) = 0.166$, $p = 0.616$. After the researcher made sure that the groups were homogeneous in terms of their WTC, the intervention was presented. Another t-test comparison was conducted for the WTC scores in the posttest. The results of independent-samples t-test indicated that there was a significant difference in WTC scores for conventional ($M = 83.95$, $SD = 10.73$) and flipped classroom ($M = 93.90$, $SD = 14.34$) conditions; $t\ (38) = 2.48$, $p = 0.18$. The results show that flipped classroom strategy significantly improved learners' WTC as compared to conventional classes.

Follow-up interview data were analyzed to see how flipped classroom strategy improved learners' WTC. The results indicated that flipped classroom strategy increased EFL students' WTC in three main ways. First, the results revealed that the flipped strategy enhanced students' motivation to learn L2. The participants noted that they were more motivated when they learned English materials using their mobile phones and via videos, pictures, and audio clips. One participant told us that using

media and studying the information before the class improved his motivation since the new method created positive beliefs about language learning. As he commented:

> I became really motivated to learn English. This method was new and engaging. You were not left to yourself when you were not in class. You had materials to study and this was really useful.

Another participant interpreted flipped classroom strategy as teacher's respect for learning and said that this attention and respect by the teacher made her more responsible and motivated to learn English. As she commented:

> I really liked this method. You know why? When the teacher devotes time and sends you materials online and tells you what to do, you feel really responsible. The teacher showed us respect and implicitly told us that you are important for me. I really felt I should return this attention and respect, so I studied harder. I think I was really motivated and I liked participation in the class.

In addition, the results showed that using flipped classroom strategy created enjoyable feelings about language learning. The participants believed that this method was funny and made language learning enjoyable. As a participant commented:

> I really liked this method. It was really funny. It broke the classroom formalities and made it something enjoyable. I think all classmates had the same feeling. We were willing to speak in the class because it became something funny and some sort of entertainment. We studied everything before the class via videos and audios and then attended the class.

Another participant commented:

> I think the biggest merit of this method was its entertaining nature. The teacher us sent videos, audios, and cartoons about the lesson. It made language leaning easy. It had two benefits. First, it gave us good feelings about learning English. Second, it helped us prepare before the class. I mean it helped us enjoy the class because we knew what would go in the class.

Finally, the results showed that the flipped classroom strategy influenced learners' WTC by reducing their anxiety. the participants noted that having the opportunity to practice the content before attending the class lowered their anxiety. the stated that knowing the vocabulary and grammar needed for speaking in the class and practicing them before the class significantly decreased their stress and anxiety. As they commented:

> It was really helpful to know the content before coming the class. I attended the class with more confidence. I was no longer anxious about my vocabulary or pronunciation because I practiced and learned whatever I needed in Telegram.
>
> I think this method was good because we attended the classes with less stress. When you know about the content you feel no pressure and pain in talking because you have practiced what you should talk about before.

It seemed that practicing the materials before attending the class enhanced students' self-confidence and decreased their stress and anxiety. these two factors in turn lead to higher WTC.

5 Discussion

The results of the study indicated that flipped classroom strategy, as compared to conventional class, significantly increased learners' WTC. The results also showed that flipped classroom anxiety increased learners' WTC by making learning enjoyable, motivating learners, and reducing their anxiety. These results are in line with the results of Zarrinabadi and Ebrahimi (2019) who reported that flipped classroom strategy significantly increased communication among peers and classmates. Moreover, the results for the effectiveness of flipped classroom strategy are explainable through the reasons students mentioned for the usefulness of the method. For examine, flipped classroom increased learners' motivation to learn English. This is in line with previous research on the positive relationship between motivation and L2 WTC (Hashimoto, 2002; Peng, 2012, 2014; Yashima, 2002). Moreover, the results showed that flipped classroom influenced WTC by decreasing anxiety. This is in line with previous studies that found that there is a negative relationship between anxiety and WTC. In other word, this method makes the students feel less anxious and more self-confident which in turn lead top higher WTC.

This study has some implications for language teachers. Language teachers who wish to increase their students' willingness to participate in the classroom activities can use a flipped classroom strategy. Given that all students nowadays are equipped with smart phones and tablets planning and using a flipped classroom strategy might not be that difficult. Also, this study has some implications for further research in the field. It is suggested that more research be conducted on WTC in online and computer-mediated contexts. It is also, suggested to examine learners' WTC while doing language tasks online or on computers or mobile phones to see if these new environments increase students' WTC. It is also interesting to see if the same factors foster or hinder learners' WTC in online computer or mobile-assisted environments.

It should be noted that the results of this study are limited in some ways. First, the findings are limited to the sample of the study and the specific educational context. Moreover, the results are limited to the type of scales and qualitative data collection tools used. Finally, reviews have shown that cultural and socioeconomic factors have the potential to influence learners' WTC. As such, more studies in different ethnolinguistic context are needed before generalizing the results of the study.

6 Concluding Remarks

The results of this study show that implementing new technologies and new environments into L2 teaching practices can significantly and positively influence learners' WTC. We hope that the findings of our study provide language teachers and researchers with insights on how to increase amount of communications in L2 classrooms.

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Examining the Dynamic Relationships Between Willingness to Communicate, Anxiety and Enjoyment Using the Experience Sampling Method

Gholam Hassan Khajavy, Peter D. MacIntyre, Tahereh Taherian, and Jessica Ross

Abstract The aim of the present study was to examine the dynamic relationship between willingness to communicate, foreign language anxiety, and foreign language enjoyment using experience sampling method. To this end, a total number of 38 freshman Iranian university students who were studying Teaching English as a Foreign Language (TEFL) as an academic major participated in the study. Results of the study showed significant amount of variability in all three variables over time, both within weekly sessions and from one week to another. Moreover, moving correlations among the three variables showed the correlations between WTC and enjoyment were remarkably consistent, strong, and positive, while moving correlations between WTC and anxiety, and anxiety and enjoyment were inconsistent and majority of them were negative. Finally, research and pedagogical implications were discussed in light of the findings of the study.

Keywords Willingness to communicate · Anxiety · Enjoyment · Experience sampling method · Moving correlations

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_9

1 Introduction

Willingness to communicate (WTC) refers to being ready to talk which can be either a general personality trait toward talking (McCroskey & Richmond, 1991) or in a more contextualized sense—speaking with a specific individual in a specific context (MacIntyre et al., 1998). Examining the factors which contribute to willingness to speak in L2 has been the focus of many research papers (Cao, 2011, 2014; Ghonsooly et al., 2012; Joe et al., 2017; Khajavy et al., 2016; Peng & Woodrow, 2010). These studies mostly have treated WTC as a personality variable, a stable tendency to initiate communication, and have used questionnaires to assess both WTC and factors that contribute to it. However, recently the dynamic and contextual nature of WTC has started being discussed in the literature (MacIntyre & Legatto, 2011; Pawlak et al., 2016; Yashima et al., 2016). The dynamic aspect of WTC highlights that it can change moment-to-moment with an individual, while also recognizing stability over time and differences from one individual to another.

Emotions can also change rapidly from moment-to-moment and we believe the continuous interaction of emotions with communication is important for understanding WTC. In the classroom, learners quickly react to changes in emotions as spikes in anxiety occur (Gregersen et al., 2014) or moments of enjoyment take place; changes in emotions can affect WTC levels (Khajavy et al., 2018). Previous research by Khajavy et al. (2018) has reported evidence that anxiety and enjoyment are related to WTC. The present study aims to further explore the connections between WTC and emotions using a combination of quantitative data and explanations offered by the learners themselves. Data analysis will link the factors emerging from the present research to WTC theory and prior research. This study uses a variation of the sampling method, which repeatedly measures students' WTC, enjoyment, and anxiety at fixed time points during a classroom lesson. This technique has the advantage of mitigating biases related to retrospective memory, a major source of concern for interpreting the veracity of qualitative data, by testing variables in real time. Moreover, factors underlying WTC, anxiety, and enjoyment for individual learners can be investigated. This shows us what contextual and linguistic factors are responsible for students' WTC, anxiety, and enjoyment.

2 Review of Literature

2.1 Willingness to Communicate

Originally, empirical exploration of WTC started with the first language (L1) and relied on Burgoon's (1976) explanation of unwillingness to communicate as a stable concept. Later, framed more positively, WTC was initially conceptualized as a tendency to start or avoid conversation with others when there is a choice (McCroskey, 1992). WTC was perceived as an individual difference variable, reflecting the

easily observed tendency for some people to initiate conversation more than others. McCroskey and Richmond (1991) recognized that WTC is not constant from situation to situation—talking to strangers is different from talking to friends to acquaintances—but stable patterns can be observed. A number of studies established the relevance of WTC to communication processes such as perceived competence, communication apprehension, personality, and social factors (McCroskey, 1992; MacIntyre et al., 1999; Hodis et al., 2010).

Along with studies of L1, attention also has been focused on the investigation of second language (L2) WTC (e.g., MacIntyre & Charos, 1996; MacIntyre & Clément, 1996). In 1998, MacIntyre et al. argued that L2 WTC is a complex variable that cannot be described as "a simple manifestation of WTC in the L1" (p. 546). They defined it as the "readiness to enter into discourse at a particular time with a specific person or persons, using a L2" (1998, p. 547). Viewed in this way, L2 WTC is the outcome of an interaction of numerous elements, both long-term and immediate, including the broad social context and individual factors, affective and cognitive factors, motivational inclinations, situational experiences, and behavioral intentions. The model was considered in the form of a pyramid including six layers, beginning with intergroup climate and personality at the bottom and L2 use at the top.

More recently, researchers have focused attention on the fluctuations in WTC during specific task activities (e.g., Pawlak et al., 2016). A significant advance in methodology used to explore L2 WTC is based on MacIntyre & Legatto (2011) who used the idiodynamic approach and employed it to investigate changes in the student's affective states. In this method, individuals watch video recordings of communicative tasks in which they participate and they rate their WTC continuously over time, using a computer mouse and specially designed software. Qualitative data are provided in an interview that reviews the recording and engages in discussion of the fluctuation in ratings provided by the students. The researchers then triangulate the explanations for changes provided by the speakers with ratings made of the video, to connect internal mental events with observable communication behavior. Often, a great deal of fluctuation in WTC is observed during the task duration and information that can be provided only from the speaker herself or himself clarifies their rationale for changes in WTC. This line of analysis is an example of research into dynamic systems theory (e.g., Larsen-Freeman & Cameron, 2008). A dynamic systems approach demands studying WTC as a complex system that fluctuates over time due to an interaction of various factors. This approach introduces new types of research questions that seek to explain variability in the relationships among variables—instead of asking 'what is the correlation of anxiety and WTC', a dynamic approach might find positive and negative correlation that take place over different periods of time (MacIntyre et al., 2017).

Following MacIntyre and Legatto's (2011) initial study on the dynamic nature of WTC, recent empirical research has investigated the dynamicity of WTC in authentic communication contexts associated with the language learning (Bernales, 2016; Cao, 2014; D'Amico, 2012; Elahi & Taherian, 2016; MacIntyre, 2012a; Mystkowska-Wiertelak & Pawlak, 2014; Peng, 2014; Wood, 2016; Yue, 2014).

MacIntyre et al. (2011) investigated the ebbs and flows of learners' WTC. The researchers found situation that engender high WTC and those that produce unWTC often are remarkably similar. Even small alterations in the situation, such as the presence or absence of a smile from the teacher, may dramatically affect the level of the WTC. Moreover, Wood (2016) investigated the dynamic experience of the language students and provided evidence that connects WTC and speech fluency of Japanese students learning English as a foreign language. Wood also observed that a minor change in one of the antecedent variables can have a noticeable impact on the other.

Peng et al. (2017) investigated the dynamics of WTC in an English as a foreign language classroom in two groups of students, one willing and the other unwilling to communicate. They attempted to elicit participants' perceptions about how multi-dimensional factors, including gesture or gaze, affect WTC. The data included two classroom scenarios using videotaped English lessons, stimulated recall interviews, and learning journals. They reported that the initial level of WTC was high in most cases; however, due to changes in contextual and affective factors, maintaining high level of WTC was difficult. Moreover, analyzing and comparing the discourse semantic features of the two scenarios indicated that, for experiential meanings, the occurrence of mental processes, which shows the act of thinking from the teacher, was greater in the high WTC situation than in the low WTC situation.

Yashima et al. (2016) also investigated WTC in an authentic classroom situation, taking both a trait- and state-like perspective and a mixed method approach. In the qualitative phase of study, they gathered data by means of classroom observation, self-reflection, and interviews. In the quantitative phase of study they collected data via self-reported WTC and trait anxiety surveys. The researchers described specific ways in which the interaction of both fixed characteristics (such as personality and L2 proficiency) and contextual factors (e.g., interlocutor response and classroom interactional patterns) create fluctuations in WTC.

2.2 Emotions

It is uncontroversial that emotions play an important role in the process of SLA. However, it seems that they have been ignored in the SLA research (Dörnyei & Ryan, 2015). Existing emotion research has tended to concentrate on negative emotions, with a focus on anxiety (Dewaele & MacIntyre, 2014).

The first studies regarding anxiety in SLA produced inconsistent results (Kleinmann, 1977). Horwitz et al. (1986) asserted that the research inconsistencies might due to language anxiety being a multi-dimensional construct that is specific to the context of second language acquisition. Horwitz (2017) argued that not all types and varieties of anxiety might be related to language learning. MacIntyre (2017) labelled the period before the mid-1980s as the 'confounded phase' of research because anxiety constructs were borrowed from other domains and applied to language learning without a thorough analysis of their applicability.

Horwitz et al. (1986) defined FLCA as "a distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom learning arising from the uniqueness of the language learning process" (Horwitz et al., 1986, p. 128). To measure the FLCA construct, they introduced a specific tool called foreign language classroom anxiety scale (FLCAS). Research indicated that FLCA had a debilitating impact on the process of SLA. The results have been replicated in countries around the world, with various kinds of language students. More recently, Horwitz (2017) has emphasized FLCA is distinct, multi-faceted construct, that may be related to but in essence is distinct from constructs such as communication apprehension, test anxiety, and fear of negative evaluation.

Although the FLCAS is a scale measuring the general tendency to experience FLCA, similar to McCroskey's WTC construct, recent studies have investigated anxiety from a dynamic point of view. A ground-breaking study on the dynamic nature of anxiety used the idiodynamic approach to investigate the changes in the students' affective states and their association with both physical (heart rate) and mental processes (Gregersen et al., 2014). The study showed links between anxiety and heart rate, behavioral approaches to speaking that are more/less likely to reinforce anxiety, and the ability of the FLCAS to predict who was likely to experience anxiety more often and more intensely. One other, noteworthy outcome of this study was that one individual (identified only as Low Anxiety Person 2, LAP2) had a significant and unexpected anxiety reaction during the study. Results suggest that both stability and unexpected variability in anxiety reactions can be accounted for using a dynamic research approach.

The literature on language anxiety has successfully expanded knowledge about the physical, cognitive, social and academic correlates, but little is known about other relevant emotions. In particular, positive emotions have not been widely studied directly in SLA (Arnold and Brown, 1999). MacIntyre and Gregersen (2012) suggest that impact of positive emotion is more than simply having pleasurable feelings; they improve students' capacity to pay attention things in classroom context and build up their capacity for language input. Drawing on Fredrickson's broaden-and-build theory, MacIntyre and Gregersen emphasize the positive-broadening power of emotions such as joy, pride, and interest in creating an environment that is associated with intrinsic motivation and efficient learning. Additionally, positive emotions improve learners' flexibility during tough conditions and to recover from setbacks. Perhaps most important, positive emotion motivates students to discover and play, two crucial activities that promote social cohesion. MacIntyre and Vincze (2017) report that the ratio of positive to negative emotions, the so-called positivity ratio, predicts a wide variety of variables directly related to language learning motivation.

Recently, a number of studies have focused on language enjoyment. Dewaele and MacIntyre (2014) designed a Foreign Language Enjoyment (FLE) scale including 21 items demonstrating positive emotions towards the learning experience, peers and teacher. Another study by Dewaele and MacIntyre (2016) found two relatively independent factors underlying the enjoyment items, social and private FLE. Gender differences at item-level were also examined by Dewaele et al. (2016). Data analyses indicated that the 1287 female students pointed out having remarkably more

enjoyable times in classroom, concurred more effectively that they absorb fascinating things, and were more satisfied of their FL achievement than the 449 males. In addition, greater enjoyment of the FL classroom context was associated with feeling more creative and the idea that learning language was "cool". In addition to feeling more enjoyment, female learners also reported feeling more anxiety and had lower self-confidence in utilizing the FL than the male respondents. The researchers suggest that, perhaps, heightened emotionality might lead to the better acquisition and use of the FL by engaging the strong connection between motivation and emotion.

Recently, Dewaele and Dewaele (2017) also investigated the relationship of FLA and FLE over time. Although a prior large-scale survey reported the correlation between FLE and FLA to be moderate ($r = -0.34$), Dewaele and Dewaele reported smaller correlations of $r = -0.19$, $r = -0.19$ and $r = -0.29$ in groups of adolescents aged 12–13, 14–15, and 16–18 years, respectively. The authors also reported that different psychological and contextual variables predicted FLE and FLA, and that those predictors changed over time.

According to the literature review although some studies have investigated language anxiety and enjoyment, no research explores the integrative role of positive and negative emotions in the students' WTC from a dynamic perspective. It is vital to investigate them simultaneously because—as Dewaele and MacIntyre (2016) stated—they are the metaphorical left and right feet of students on their way to learning the FL. MacIntyre and Vincze (2017) studied emotions related to language learning using questionnaires, but they emphasize that the interaction of emotions in situ requires novel methodologies:

> It is an open question whether the pattern of correlations observed on this timescale would also apply to the dynamics of emotions as they wax and wane during the time span of a specific situation, such as a conversation or classroom lesson. To address emotions as they are experienced moment-to-moment requires a different methodology than the one used in the present study, especially, if researchers are interested in describing the coordination of positive and negative emotional experiences during communication. The adaptive value of both positive and negative emotion is best considered a conjoint, intertwined process. (pp. 78–79)

2.3 Experience Sampling Method

When researchers are interested in understanding behavior as it happens naturally in the environment, experience sampling method (ESM) or ecological momentary assessment (EMA) would be an appropriate method (Larson & Csikszentmihaly, 2014). In this method, repeated measurements of data are collected in fixed or random time points over a specific period of time (Frenzel, 2014). Participants should report their current feelings, thoughts, and behavior several times during the day for several weeks or months. Zirkel et al. (2015) mentioned five advantages of ESM for educational researchers. First, using ESM gives researchers the opportunity to access contexts that is not possible to reach in other research methodologies. Second, data in ESM are obtained as they are happening in the context; therefore, it does not

have the shortcomings of retrospective methods such as memory errors and other biases. Third, ESM data provide the researchers with a comprehensive report of individuals' experiences which can supplement data gathered in intensive qualitative studies. Fourth, ESM offers the opportunity to examine intraindividual processes which makes it possible to investigate feelings and thoughts in very specific environments. Finally, because data are gathered repeatedly, this provides the researchers with statistical power which cannot be easily obtained in other quantitative methods.

ESM can be conducted in three ways including signal contingent (or random sampling), interval contingent (or fixed sampling), and event contingent (or event-focused sampling, Bolger & Laurenceau, 2013; Uy et al., 2010). Signal contingent (or random sampling) refers to the type of sampling in which participants should report their experiences by setting an alarm for them, usually using a mobile phone or a personal digital assistant, which signals in random time points. After hearing the signal, they should answer some items. In interval contingent (or fixed sampling), participants should respond to the signal at fixed time points, for example every five or thirty minutes, they should complete a survey. Finally, event contingent (or event-focused sampling) is used when participants are asked to describe their experiences after some specific events.

In the field of applied linguistics, to the best of our knowledge, there is only one study conducted by Pawlak et al. (2016) which uses ESM. In this study, researchers asked participants to report their WTC on a paper every five minutes upon hearing a beep. Therefore, they were using interval contingent (or fixed sampling) method to record students' WTC.

2.4 The Present Study

What remains uninvestigated is to what extent FLA and FLE are related to fluctuations in L2 WTC within a specific classroom context. The present study aims to address five specific research questions, using an experience sampling approach. An important difference between the approach used in the present research and most prior research is that we are not asking 'what is the correlation' between the variables, but we are focused on how much the correlations might change over time, and when those correlations might be positive, negative, or near zero. We phrase our research questions as follows:

RQ1 Do ratings of WTC, anxiety and enjoyment show significant fluctuations during the weekly classroom sessions?

RQ2 Do mean ratings of WTC, anxiety and enjoyment show significant changes from week to week, over the 6 weeks?

RQ3 What are the correlations between WTC and Anxiety (measured repeatedly during a classroom lesson) and how do they change over time?

RQ4 What are the correlations between WTC and Enjoyment and how do they change over time?

RQ5 What are the correlations between Enjoyment and Anxiety and how do they change over time?

3 Methodology

3.1 Participants

Participants were 38 freshman Iranian university students (11 males and 27 females) who were majoring in Teaching English as a Foreign Language program. The participants' age ranged from 18 to 22 years ($M = 19.18$, $SD = 0.90$). All the participants speak Persian as their mother tongue. In order to enter the university, they had passed university entrance exam. As the students have enrolled in the first semester of the university, they have to pass a course called "conversation" in which they talk about different topics using various activities and also participate in a variety of listening activities. Students were also asked to self-evaluate their speaking ability on a scale from 1 (very weak) to 6 (very strong), yielding a mean of 3.71 ($SD = 1.10$). They also self-rated their overall language proficiency, with 84.2% of the participants rating themselves as either intermediate or upper-intermediate.

3.2 Materials

At the beginning of the study, participants completed a set of three trait scales, all of which were measured on a 7 point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). In addition, students were tested on the same three variables, using an experience sampling approach, repeatedly (10 times) during each of six regular classroom sessions.

3.2.1 Trait Measures

WTC scale ($\alpha = 0.76$) included 10 items from Weaver (2005) which were translated and validated by Khajavy et al. (2016). The items assessed students' tendency to speak in English in the classroom (e.g., I am willing to give a short speech in English to the class about my hometown with notes).

Anxiety scale ($\alpha = 0.82$) included 10 items from Horwitz et al.'s (1986) FLCAS which were translated and validated by Khodadady and Khajavy (2013). The items measured to what extent students feel anxious in the English class (e.g., I start to panic when I have to speak without preparation in English class).

Enjoyment scale ($\alpha = 0.88$) was assessed using 20 items from Dewaele and MacIntyre (2014, e.g., I can laugh off embarrassing mistakes in the FL).

3.3 Experience Sampling Method

To assess moment-by-moment fluctuations in WTC, enjoyment, and anxiety, we used a sheet of paper with three thermometer-shaped figures. Using the 'empty' thermometers, students indicated their levels of WTC, enjoyment, and anxiety (from 1 to 10) every five minutes when they heard a beep. The measurement approach was based on the 'anxometers' used by MacIntyre and Gardner (1991). More details about the procedure are given in the following section.

3.4 Procedure

Data were gathered during the regular class hours for six class meetings. As the teacher worked with different topics and activities, students were asked to rate their WTC, enjoyment, and anxiety. This procedure continued for 50 min, producing 10 ratings per class meeting. The instructions were in Persian and were as follows "Upon hearing the beep, how much are you willing to speak in English/how much are you enjoying the activity/how much do you feel anxious to speak in English?". Finally, when students heard the beep and rated their WTC, enjoyment, and anxiety, the teacher wrote down the kind of activity students were doing at that time. This is a variation on the experience sampling method.

4 Results

The first research question examines whether WTC, anxiety or enjoyment changes as the classroom lessons unfold each week (effect of *time*). The second research question examines fluctuations in WTC, anxiety and enjoyment across the six weeks (effect of *week*). To address these questions, data from the 10 testing occasions each week were entered into a 6×10 doubly multivariate ANOVA[1] where the dependent variables were WTC, anxiety and enjoyment and the independent variables were week (6) and time (10). Results show a significant violation of the assumption of Sphericity (see Table 1) indicating that the covariance matrix changes significantly within week and/or from one week to another. The variability in correlations that would contribute to a significant Mauchley's test is explicitly considered in analyses for RQ3–RQ5 reported below. To help compensate for the significant Mauchley's test, a Greenhouse–Geisser adjustment was made to the degrees of freedom. Even with the adjustment, the main effects for week and time were significant for all three dependent variables, as was the interaction of week x time (see Table 1).

[1] A doubly multivariate ANOVA has more than one dependent variable measured on more than one occasion.

Table 1 Results of 6 × 10 doubly multivariate ANOVA

		Mauchley's W	Greenhouse–Geisser	F	df	*p*	Partial Eta-Squared
WTC	Week	0.133	0.524	6.605	2.6, 44.6	<0.001	0.28
	Time	<0.001	0.360	6.682	8.5, 143.6	<0.05	0.28
	Week × Time	<0.001	0.188	2.548	3.2, 55.1	<0.001	0.13
Anxiety	Week	0.117	0.511	6.542	3.2, 53.6	<0.001	0.28
	Time	<0.001	0.369	2.544	2.56, 43.5	0.077	0.13
	Week × Time	<0.001	0.284	2.924	8.7, 148	<0.01	0.15
Enjoy	Week	0.205	0.630	6.207	2.5, 43.4	<0.01	0.27
	Time	<0.001	0.193	10.999	3.3, 56.4	<0.001	0.39
	Week × Time	<0.001	0.168	2.763	7.6, 128.4	<0.01	0.14

These results suggest a significant amount of variability in all three variables over time, both within weekly sessions and from one week to another. That is, as might be expected, mean levels of WTC enjoyment and anxiety do not remain constant throughout the study. Given that our interest is not directed toward specific mean differences and we did not hypothesize pairwise contrasts to be performed, post hoc comparisons of the 60 means involved in the interactions will not be conducted (see Fig. 1 for graphs of the means per class session and Table 2 for summary statistics). Instead, we turn to analysis of the variability in the relationships among the three dependent variables, as expressed by moving correlations.

There are three research questions about correlations that will be addressed. The relationship between WTC and Anxiety, WTC and Enjoyment, and Anxiety and Enjoyment. Each relationship will be examined dynamically, using 'moving correlations' in a descriptive manner. These correlations are presented as evidence for variability in relationships over time. For the present analyses there are 10 data points available per classroom session. There are 10 data collection times each week and we have averaged the data over all of the participants to create a single score for each of WTC, anxiety and enjoyment at each testing time (i.e., 10 scores per class session for each variable). The moving correlations shown in the figures below are calculated using five pairs of data each. To clarify, in the example below (Table 3), the first of the moving correlations between WTC and Anxiety is calculated over

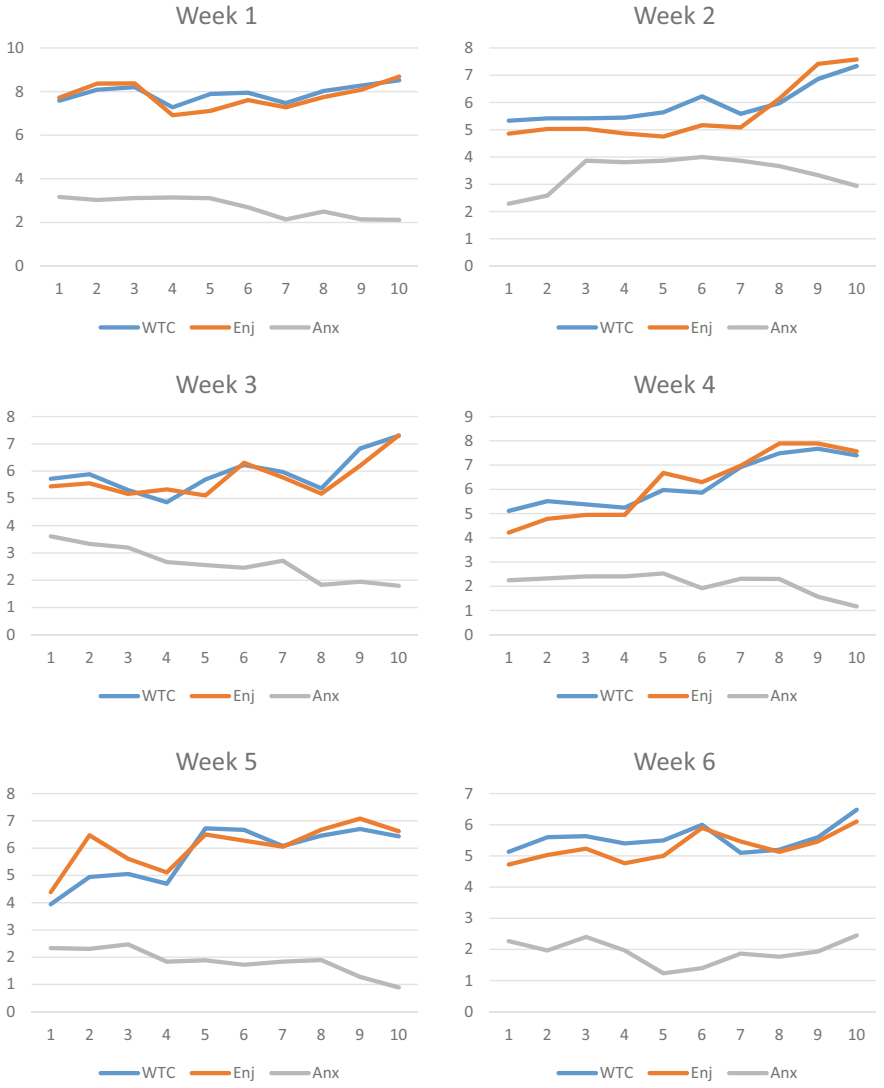


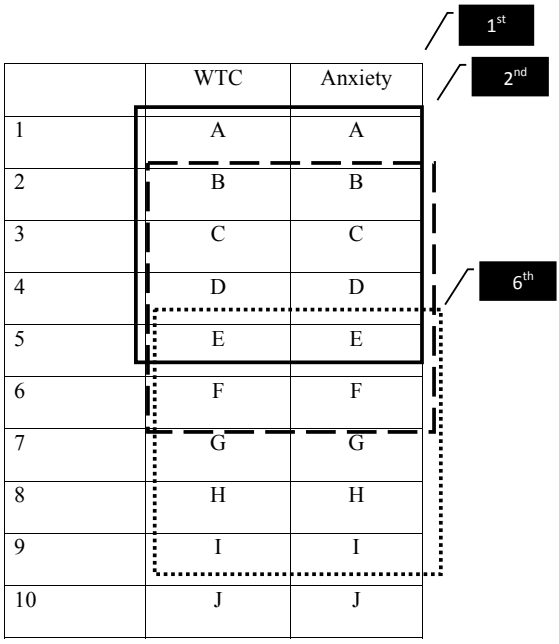
Fig. 1 Variability in mean levels of WTC, enjoyment and anxiety per week

the first five rows of data (A to E, shown in callout 1). The second correlation, also calculated using 5 rows, but after dropping down one row (using rows of data B to F, shown in callout 2). The next correlation drops down yet another row and is calculated for rows C to G. The fourth correlation uses rows D to H and the fifth and final correlation is calculated using rows E to I. These correlations are calculated within each of the six weeks of the study. In each case, the correlation reflects the strength of the relationship between the two variables, WTC and Anxiety in this example.

Table 2 Weekly means and SDs

		Week					
		1	2	3	4	5	6
WTC	Mean	7.7	6.0	5.9	6.7	6.0	5.5
	SD	0.36	0.65	0.69	0.96	0.96	0.40
Enjoyment	Mean	7.5	5.6	5.5	6.5	6.1	5.1
	SD	0.55	1.02	0.66	1.32	0.78	0.43
Anxiety	Mean	3.3	3.6	2.6	2.4	2.2	2.4
	SD	0.43	0.58	0.60	0.41	0.46	0.37

Table 3 Approach to calculating moving correlations



	WTC	Anxiety
1	A	A
2	B	B
3	C	C
4	D	D
5	E	E
6	F	F
7	G	G
8	H	H
9	I	I
10	J	J

Note The callouts show the data used for the first, second and sixth moving correlations

Moving correlations are not tested for significance because we are not attempting to infer "the" correlation between variables in a population, but rather describe linear trends in the data over a limited period of time. Because the choice of 5 data points to include in the moving correlations is both minimal and arbitrary, for completeness the appendix will show correlations involving all possible ranges from $n = 5$ to $n = 10$ data points. In each case, the correlation is computed over the first n data points, the next correlation is computed over the same number of data points dropping down one row, and so on. The process continues until the final row of data is used. Our

focus in presorting the correlations is on the relative stability or variability in the correlation coefficients.

WTC and Enjoyment.

The moving correlations between WTC and anxiety are presented in the appendix. To help visualize the results, Fig. 2 presents the moving correlations with a span of 5. In week 1, correlations ranged from 0.77 to 0.96 with a correlation across all 10 data points of 0.85. In week 2, the only negative value in the set of correlations appears, with the range of correlations −0.58 to 0.89 and an overall correlation of 0.90.[2] In week three, the range of correlations was 0.33–0.94 with an overall correlation of 0.93; in week four the range was 0.89–0.94 with an overall correlation of 0.95, in week five the range was 0.61–0.97 with an overall correlation of 0.86, and finally in week 6 the range was 0.49–0.92 with an overall correlation of 0.77. Compared to the correlations involving WTC and Anxiety, the correlations between WTC and Enjoyment are remarkably consistent, strong, and positive. There is a single negative correlation in the set, 35 of 36 correlations are positive and at least moderate in strength. All of the overall correlations are positive and strong.

WTC and Anxiety.

The moving correlations between WTC and Anxiety are presented in the appendix and the correlations with a span of 5 are shown in Fig. 3. In week 1, correlations ranged from -0.62 to 0.29 with a correlation across all 10 data points in week 1 of −0.38. In week 2, virtually the entire range of possible correlations appears in the set, with the range of correlations −0.88 to 0.95 and an overall correlation near zero, $r = -0.04$. In week three, a narrower range of correlations was found, −0.46 to 0.48 with an overall correlation of −0.48. In week four the range was −0.38 to 0.81 with an overall correlation of −0.61, in week five the range was −0.57 to −0.04 with an overall correlation of −0.77, and finally in week 6 the range was −0.63 to 0.42 with an overall correlation of 0.17. The moving correlations involving WTC and Anxiety are remarkably inconsistent. The majority of correlations (26 of 36) are negative and four of the six overall correlations are negative and at least moderate in strength.

Anxiety and Enjoyment.

The correlations between enjoyment and anxiety are presented in the appendix and those with a span of 5 are shown in Fig. 4. For week 1, correlations ranged from −0.52 to 0.10 with a correlation across all 10 data points of −0.27. In week 2, virtually the entire range of theoretically possible correlations appears in the set, with the range of correlations −0.95 to 0.67 and an overall correlation of −0.18. In week three, a somewhat narrower range of correlations was found, −0.52 to 0.64 with an overall correlation of −0.50. In week four the range of correlations was −0.30 to 0.93 with an overall correlation of −0.53, in week five the range was −0.69 to 0.21 with an overall correlation of −0.56, and finally in week 6

[2]Note that this negative correlation disappears when the moving window is expanded to include 6 data points, and that adding one more row of data changes the correlation from −0.58 to 0.54.

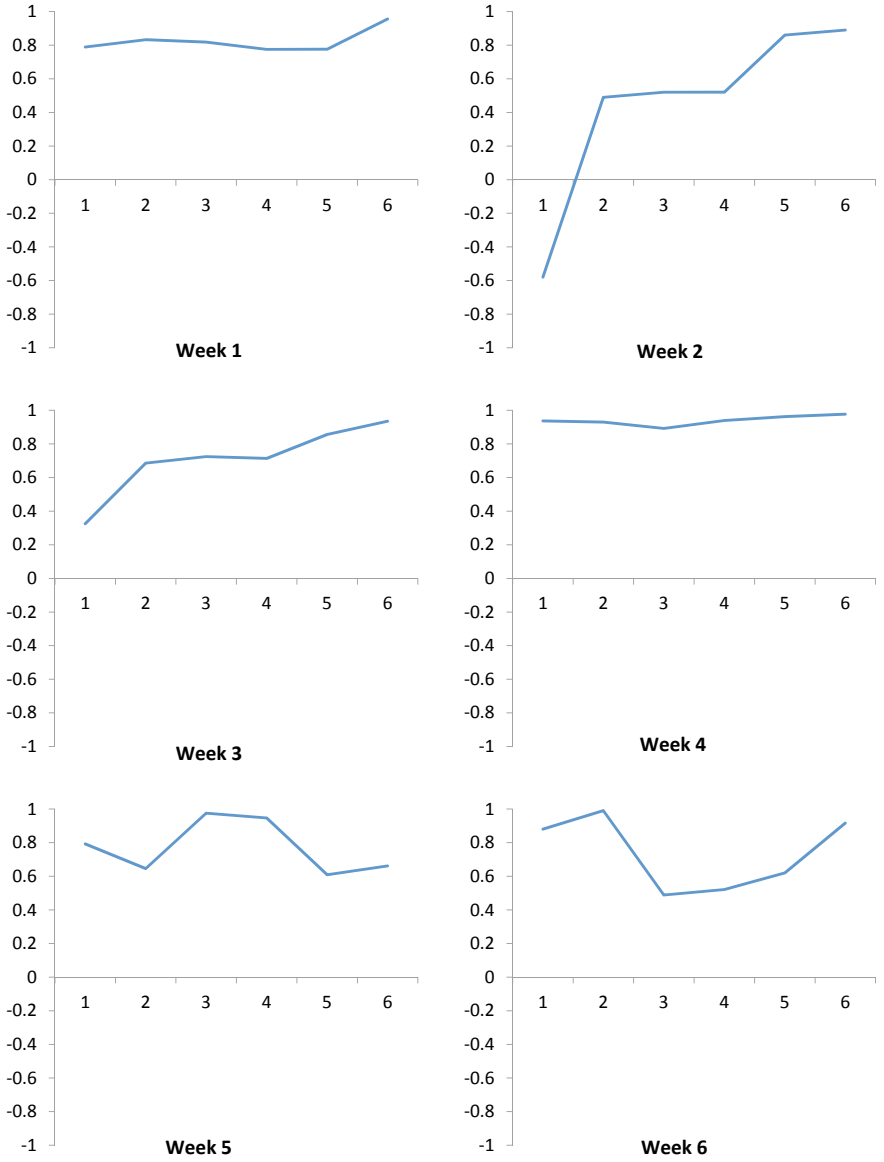


Fig. 2 Moving correlations: WTC and enjoyment

the range was −0.30 to 0.33 with an overall correlation near zero, 0.04. The moving correlations involving enjoyment and anxiety also are inconsistent, similar to those involving WTC and anxiety. The majority of correlations (26 of 36) are negative and five of the six overall correlations are negative with three that are considered strong.

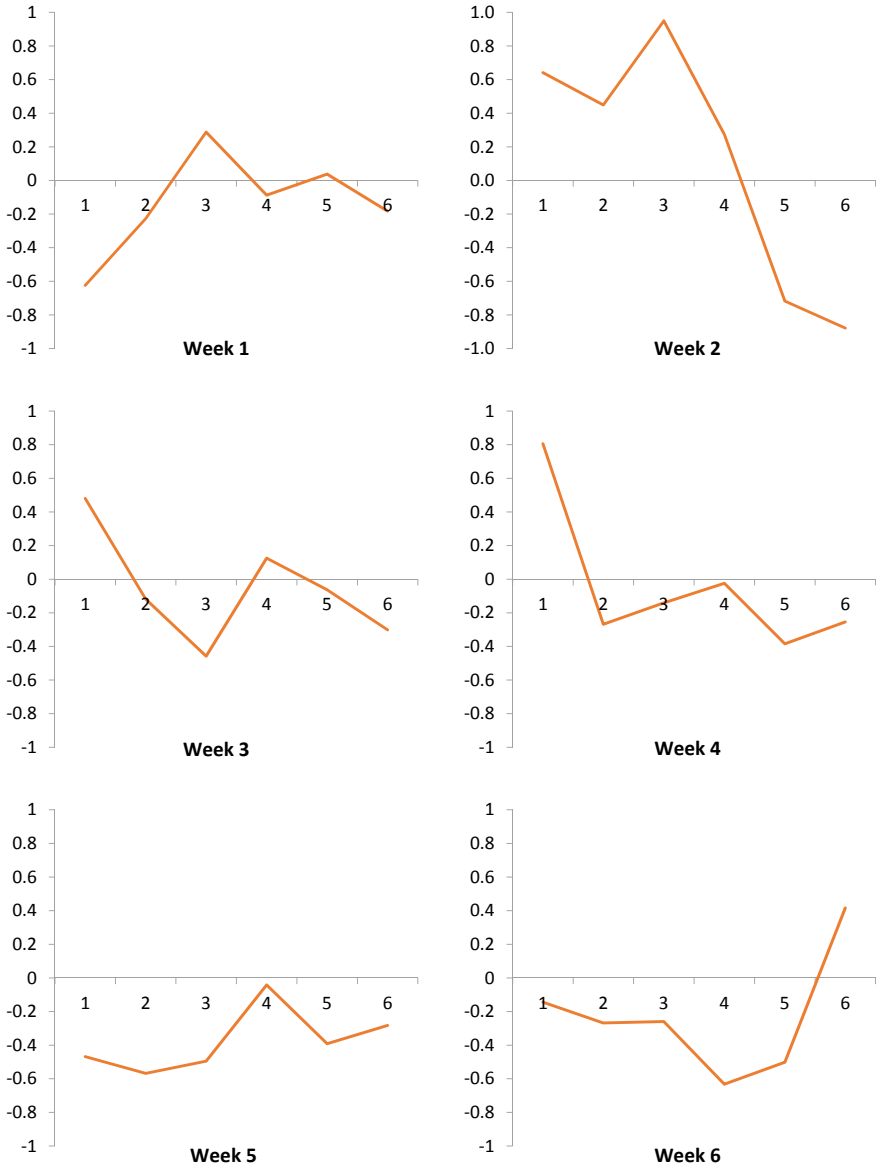


Fig. 3 Moving correlations: WTC and anxiety

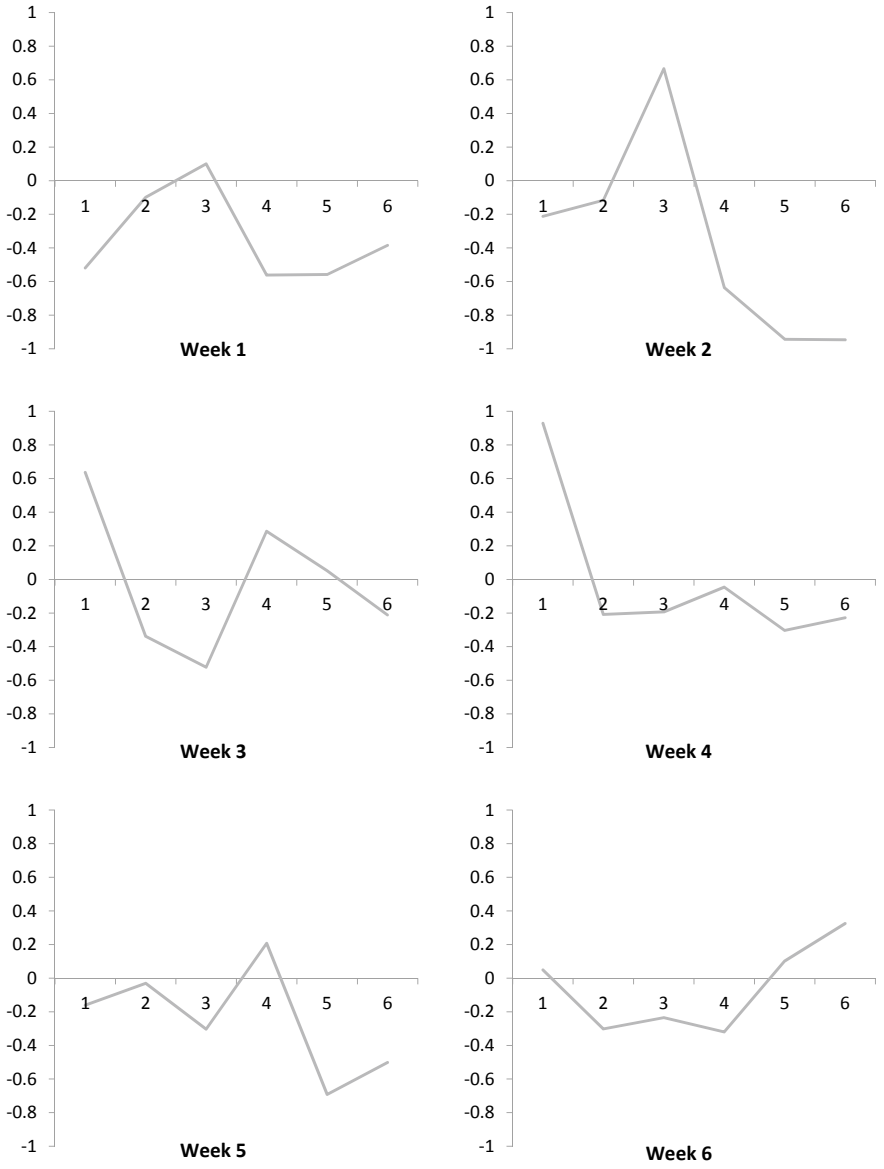


Fig. 4 Moving correlations: enjoyment and anxiety

5 Discussion

The major focus of this study is on the variability in the moving correlations involving WTC. WTC and enjoyment show very consistent, strong and positive correlations. The correlations involving anxiety, however, are much more variable. The consistency of the relationship between WTC and enjoyment, as compared to the relationship between WTC and anxiety, can be seen in the pattern of mean ratings during each of the six classes shown in Fig. 1. As emotional reactions, enjoyment and anxiety appear to follow different patterns over a short period of time, creating different correlations with WTC. It also seems clear from the present results that changes in WTC ratings correspond to changes in enjoyment very closely, but fluctuations in WTC are not as consistently related to changes in anxiety in this context.

The original research on WTC that employed trait measures and focused on its stability across situations appears to be masking a great deal of underlying variability. Studies from a dynamic perspective have shown that ratings of WTC for individuals have the capacity to change dramatically over time (MacIntyre & Legatto, 2011; Yashima et al., 2016). Classroom studies also show that WTC fluctuates considerably during a classroom lesson (Pawlak et al., 2016; Mystkowska-Wiertelak & Pawlak, 2014). With the present data, we are able to see the influences of two emotions, enjoyment and anxiety, on the dynamics of WTC. Changes in WTC track closely changes in enjoyment, suggesting that over this time scale understanding the sources of enjoyment in the classroom is likely to contribute to a better understanding of WTC and vice versa.

Enjoyment is fundamentally a positive emotion. Fredrickson (2013, p. 4) describes joy as follows:

> Joy emerges when one's current circumstances present unexpected good fortune. People feel joy, for instance, when receiving good news or a pleasant surprise. Joy creates the urge to play and get involved, or what Frijda (1986) termed free activation, defined as an "aimless, unasked-for readiness to engage in whatever interaction presents itself" (p. 89). The durable resources created through play are the skills acquired through the experiential learning it prompts.

The notion that joy creates a 'readiness to engage' is consistent with the definition of WTC as a 'readiness' to communicate with specific persons. Furthermore, the suggestion that joy leads to the acquisition of resources from experiential learning is one of the goals of the communicative approach to language teaching and learning (Savignon, 1991). Given the results of the present study and the consistency with emotion theory, it is clear that the effects of positive emotion on WTC have been severely underestimated in the existing literature.

The results for anxiety are more complex and variable. Anxiety has been a strong and consistent correlate of WTC over many studies; indeed, McCroskey and Richmond (1991) proposed that it is the strongest predictor of WTC in L1. Results for communicating in L2 sometimes show that perceived competence is a stronger predictor of WTC, especially early in language learning (MacIntyre et al., 2003). Much of the literature describes anxiety as a potentially intense emotional reaction

(Horwitz et al., 1986), and it certainly can be a most unpleasant experience. However, the present data do not show high levels of anxiety in the particular classroom under study; rather low levels of anxiety are observed. As with WTC and enjoyment, the experience sampling data here show that anxiety fluctuates as events unfold in the classroom. But if we consider that anxiety was measured on a scale of 1–10, with 10 being highly anxious, then classroom levels of anxiety that fluctuate around a mean of 2 or 3 (as we have in the present data, see Table 2) are likely fairly manageable, both for most students as well as for the teacher. If the anxiety levels had been significantly higher, fluctuating around scores of 7 or 8 for example, then the emotional tenor of the classroom likely would be very different, dominated by angst, and much more unpleasant than what we observe in the present data. In no case do the anxiety ratings in the present data exceed enjoyment ratings, and only for a few ratings in week 2 do we see anxiety even within one point of enjoyment. Based on this pattern, it seems fair to characterize the class as being an 'enjoyable' one, though there seems to be a downward trend in enjoyment and WTC as weeks go by. In such a context, WTC appears to maintain strong correlations with enjoyment but inconsistent correlations with anxiety. Whether this pattern of correlations would be obtained in other settings or in a more tense classroom is an open question, and one that could be studied using the methods applied here. It seems plausibly to suggest that in a high-anxiety context, WTC ratings might track anxiety ratings more closely than we are reporting here, though that certainly is an open question.

Along with new theorizing for WTC, the present study offers implications of both language teaching and research methodology. Implications for classroom teachers reinforce the notion that teachers often have more control over creating enjoyment than they do over anxiety (Dewaele & MacIntyre, 2016). Dewaele and Dewaele (2017) argue, based on the results of their study, that "… teachers cannot eradicate FLCA because they are not the main source of it … the main source of anxiety is the judgment of the peers" (p. 19). Although the term 'facilitating anxiety' has fallen out of favor for being misunderstood and misused in the literature (Horwitz, 2017; MacIntyre, 2017), the notion of enjoyment is an appropriate replacement. Some of the most enjoyable and optimal experiences for learners feature a blend of excitement and apprehension, or what Csíkszentmihályi (2009) calls the 'flow channel.' Being in a state of flow combines engagement of one's skill in a challenging setting, where risks blend with rewards (Czimmerman & Piniel, 2016). If we apply the idea of the flow channel to WTC, being willing to engage with other people in the L2, while learning the language, is a skill-testing and potentially anxiety-provoking experience. Yet, when the conditions foster enjoyment of the learning process, anxiety may be manageable, and can recede into the background. Although anxiety might still be present, it might not be the most important factor determining the communicative patterns in the classroom. Teachers can remain cognizant that, as an emotional reaction to a specific event, anxiety can be an immediate, fairly intense emotional reaction that might flare up for a learner at any moment; even subtle changes in context can lead to anxiety and unwillingness to communicate (see MacIntyre et al., 2011). However, the development of positive emotion such as enjoyment can possibly 'undo' the negative effects of anxiety arousal, and equip

leaners with the resources to recover from sudden or unexpected anxiety arousal (Fredrickson, 2013; MacIntyre & Gregersen, 2012).

This study also has implications for classroom research methodology, both for data collection and analysis. We used a variation on the experience sampling method by collecting ratings at fixed intervals. This approach can produce the density of time-bound data recommended for studying dynamic systems (van Dijk et al., 2011). Furthermore, data collected in this way is less affected by biases in retrospective memory, as variables are assessed in the immediate context (Frenzel, 2014). Finally, the method used in the present study has an advantage over the idiodynamic method (MacIntyre, 2012b) because data is collected in a naturally-occurring setting. The idiodynamic method often demands greater experimental control to produce the video recordings and interviews that triangulate the data in a lab-based setting (though see Gregersen et al., 2014 for an exception). Therefore, researchers in the field of applied linguistics can use ESM in studies which examine participants' emotional states and in studies that recording immediate behavior in the context is necessary.

A final methodological point to consider is the span of the moving window over which the correlations are calculated. The width of the window has an impact on the value of the correlations. In general, the wider the window (longer the span) the more consistent the correlations are, which makes sense because longer spans are based on more data points. But a caution is in order for studying dynamics of communication, which can be a highly fluid process. The smallest moving window we used in the present study is 5 data points, representing 25 min of real time. A lot can happen in 25 min of classroom time. Therefore, the practical consideration of testing using dynamic methods must be carefully considered when interpreting the results. Templates used from other types of methods, such as significance testing from inferential statistics, might or might not be appropriate for a given data set. As an example of the issue in the present study, we see that across the moving windows within a week, the correlation between WTC and anxiety changed from positive to negative or negative to positive (for example from week 2 and week 6, respectively). As an emotional reaction, anxiety itself can change quickly. Even within this data set, we see that, considered over longer periods of time, correlations resemble those prior research has reported to a greater degree, though having only 5–10 pairs of scores in each correlation makes them prone to instability. The correlations involving all 10 rows of data are consistent with results typically reported in the literature. In this case, we are not trying to generalize beyond the data we have in hand, and we strongly encourage other researchers to collect data to assess of this kind. As the number of specific studies from a dynamic systems approach build in the literature, methodological refinements will occur. Prior research has been focused on generalization of patterns and finding consistency in relationships among constructs. Dynamic studies, however, can focus on variability and fluctuations in how variables correlate, reflecting the soft assembly of interacting systems that are open to change and adaptation (Larsen-Freeman, 2016).

Acknowledgements The authors would like to express their sincere appreciation to the students who participated in this research. We also thank the reviewers for their comments on earlier drafts of

the paper. The research was facilitated by a grant from the Social Sciences and Humanities Research Council of Canada (No. 453-2013-1944) to the second author.

Appendix

Week-by-week moving correlations with 5–10 data points.

Week 1:

WTC and Enjoyment

5	6	7	8	9	10
0.79	0.77	0.78	0.77	0.79	0.85
0.83	0.83	0.83	0.84	0.88	
0.82	0.83	0.86	0.91		
0.77	0.87	0.91			
0.78	0.88				
0.96					

Note For each of these tables, the columns represent the size of the moving window, that is, how many pairs of scores are involved in the correlation. A window of '5' indicates that 5 pairs of scores are involved in each correlation.

WTC and Anxiety

5	6	7	8	9	10
−0.62	−0.32	0.23	0.10	−0.18	−0.38
−0.23	0.33	0.21	−0.09	−0.31	
0.29	0.15	−0.15	−0.36		
−0.09	−0.38	−0.53			
0.04	−0.25				
−0.18					

Enjoyment and Anxiety

5	6	7	8	9	10
−0.52	−0.08	−0.08	0.16	−0.03	−0.27
−0.10	0.19	0.19	−0.04	−0.28	
0.10	0.01	0.01	−0.43		
−0.56	−0.71	−0.71			
−0.56	−0.63				
−0.38					

Week 2:

WTC and Enjoyment

5	6	7	8	9	10
−0.58	0.54	0.51	0.57	0.87	0.93
0.49	0.45	0.53	0.87	0.92	
0.52	0.53	0.87	0.92		
0.52	0.87	0.92			
0.86	0.91				
0.89					

WTC and Anxiety

5	6	7	8	9	10
0.64	0.55	0.54	0.53	0.23	−0.04
0.45	0.43	0.39	0.01	−0.33	
0.95	0.20	−0.69	−0.87		
0.27	−0.68	−0.87			
−0.72	−0.89				
−0.88					

Enjoyment and Anxiety

5	6	7	8	9	10
−0.21	0.13	0.21	0.17	0.00	−0.18
−0.12	−0.05	−0.01	−0.23	−0.45	
0.67	−0.64	−0.92	−0.93		
−0.64	−0.92	−0.92			

(continued)

(continued)

5	6	7	8	9	10
−0.94	−0.93				
−0.95					

Week 3:

WTC and Enjoyment

5	6	7	8	9	10
0.33	0.68	0.70	0.72	0.81	0.90
0.69	0.71	0.73	0.81	0.90	
0.72	0.74	0.82	0.90		
0.71	0.80	0.89			
0.86	0.93				
0.94					

WTC and Anxiety

5	6	7	8	9	10
0.48	−0.02	−0.08	0.11	−0.26	−0.48
−0.12	−0.16	0.08	−0.30	−0.51	
−0.46	−0.10	−0.42	−0.60		
0.12	−0.31	−0.55			
−0.06	−0.41				
−0.30					

Enjoyment and Anxiety

5	6	7	8	9	10
0.64	−0.28	−0.32	−0.01	−0.26	−0.50
−0.34	−0.36	0.02	−0.25	−0.51	
−0.52	−0.03	−0.29	−0.54		
0.29	−0.07	−0.45			
0.05	−0.38				
−0.21	−0.28				

Week 4:

WTC and Enjoyment

5	6	7	8	9	10
0.94	0.95	0.90	0.94	0.95	0.95
0.93	0.87	0.93	0.94	0.95	
0.89	0.94	0.95	0.96		
0.94	0.95	0.95			
0.96	0.96				
0.98					

WTC and Anxiety

5	6	7	8	9	10
0.81	−0.13	−0.07	−0.06	−0.51	−0.61
−0.27	−0.14	−0.12	−0.55	−0.62	
−0.14	−0.12	−0.54	−0.61		
−0.02	−0.48	−0.56			
−0.38	−0.48				
−0.25					

Enjoyment and Anxiety

5	6	7	8	9	10
0.93	−0.09	−0.07	−0.06	−0.44	−0.53
−0.21	−0.18	−0.16	−0.49	−0.55	
−0.19	−0.16	−0.49	−0.54		
−0.05	−0.43	−0.48			
−0.30	−0.39				
−0.23					

Week 5:

WTC and Enjoyment

5	6	7	8	9	10
0.79	0.80	0.80	0.83	0.85	0.86
0.65	0.64	0.69	0.74	0.75	

(continued)

(continued)

5	6	7	8	9	10
0.97	0.94	0.92	0.92		
0.95	0.91	0.91			
0.61	0.58				
0.66					

WTC and Anxiety

5	6	7	8	9	10
−0.47	−0.65	−0.67	−0.69	−0.72	v0.66
−0.57	−0.59	−0.60	−0.66	−0.60	
−0.50	−0.50	−0.57	−0.51		
−0.04	−0.30	−0.26			
−0.39	−0.09				
−0.28					

Enjoyment and Anxiety

5	6	7	8	9	10
−0.16	−0.31	−0.34	−0.38	−0.57	−0.56
−0.03	−0.04	−0.11	−0.45	−0.47	
−0.30	−0.30	−0.60	−0.57		
0.21	−0.52	−0.45			
−0.69	−0.48				
−0.50					

Week 6:

WTC and Enjoyment

5	6	7	8	9	10
0.88	0.94	0.57	0.55	0.57	0.77
0.99	0.45	0.45	0.46	0.73	
0.49	0.50	0.52	0.75		
0.52	0.54	0.76			
0.62	0.82				
0.92					

WTC and Anxiety

5	6	7	8	9	10
−0.14	−0.47	−0.39	−0.34	−0.32	0.17
−0.27	−0.24	−0.20	−0.17	0.32	
−0.26	−0.23	−0.20	0.32		
−0.63	−0.49	0.36			
−0.50	0.41				
0.42					

Enjoyment and Anxiety

5	6	7	8	9	10
0.05	−0.43	−0.41	−0.40	−0.37	0.04
−0.30	−0.27	−0.26	−0.22	0.20	
−0.23	−0.23	−0.19	0.23		
−0.32	−0.21	0.35			
0.10	0.57				
0.33					

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The Opportunity to Communicate: A Social Network Approach to L2 WTC and Classroom-Based Research

H. Colin Gallagher and Nourollah Zarrinabadi

Abstract This chapter introduces the notion of a social network approach to the study of L2 WTC. The authors first describe the key tenets of social network theory. Then they argue that different aspects of the theory can be applied to explain L2 WTC. In so doing, they focus on the notion of opportunity in WTC and try to analyse it from a social network approach. The authors finally argue that theoretical integration of a network approach into L2 research would allow researchers to further develop, refine, and re-conceptualize longstanding concepts related to groups, classrooms, social categories, and individual differences.

Keywords Willingness to communicate · Social network approach · Classroom-based research

1 Introduction

Both groups and interactions matter when it comes to second language learning and use. On one hand, the very genesis of the field of L2 motivation rests on the psychological group, with researchers formulating seminal concepts such as integrativeness (Gardner, 1985) and linguistic self-confidence (Clément, 1980, 1986) on the basis of large-scale ethnolinguistic groups, and relations between them (Giles et al., 1977; Giles & Byrne, 1982; Schumann, 1976). On the other hand, a second language is, ultimately, (most) used and (best) acquired through interpersonal interactions (Firth & Wagner, 2007; Long, 1985). In line with this, over the past few decades, researchers have sought to delineate social influences on L2 use at multiple levels of analysis (Dörnyei & Ryan, 2015), with research agendas shifting from a macro-social perspective (Clément, 1980; Gardner, 1985), to situated language

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_10

learning within educational contexts (Crookes & Schmidt, 1991; Dörnyei, 1994; Oxford & Shearin, 1994) to temporal and dynamic processes (Dörnyei & Kormos, 2000; MacIntyre & Legatto, 2010). As a comprehensive model of L2 use, the willingness to communicate in the L2 (L2 WTC; MacIntyre et al., 1998) was formulated with multiple levels of analysis in mind. In particular, L2 WTC is viewed as a psychological entity—composed of cognitive, affective, and motivational aspects—that intersects with various levels of the social environment, whether that be the immediate opportunity to speak with a particular person, meso-level influences within the classroom environment, and large-scale differentiations between communities and groups within a society. This is further complemented by notions of the various socialising experiences in the learner's lifetime that have cultivated certain motivations and attitudes, and the general impact of culture and meaning that govern the flow of interpersonal communication. All of these domains are held as possible influences on L2 WTC.

However, while L2 research has sought to expand the contextual approaches, these efforts have not offered much in the way of cross-level explanations for L2-related behaviour and outcomes. Basic questions remain unaddressed as to how various levels of contextual analysis actually fit together and interoperate. How do group memberships actually constrain person-to-person interactions? And how do many such interactions add up to a living community of practice that may be housed within these group boundaries, or possibly cut across them? While researchers have generally demonstrated *empirically* that large-scale group differences and small-scale variations both generally matter when it comes to predicting L2-related behaviour, exceedingly little effort has been devoted to precise *theoretical* accounts about how micro, meso, and macro levels interrelate. L2 WTC research thus illustrates a crucial ongoing issue in social science research—the micro -macro gap—or the conceptual difficulty that comes with explaining the processes by which micro- and macro-level forces influence one another in a reciprocally causative manner (Gallagher & Robins, 2015; Robins & Kashima, 2008; Schegloff, 1987; Turner & Markovsky, 2007).

In the case of L2 WTC, the process of conceptualising how micro and macro levels interact may start by returning to its core definition. L2 WTC is often defined as a psychological readiness to speak up in the L2, *given the opportunity to do so* (MacIntyre et al., 1998). A lens on opportunity is important, because it simultaneously affirms how languages are acquired (i.e., through contact that gives way to interaction), while also leaving the door open for how larger structures—classrooms, ethnolinguistic groups, and societies—can limit or enable our access to these encounters. In this article, I expand upon prior work (Gallagher, 2017; Gallagher & Robins, 2015) to describe how the conceptualisation and measurement of the opportunity to communicate may be addressed through a social network approach. Here, context is viewed primarily in terms of one's dyadic (one-to-one) social relationships. These ties are regarded as basic building blocks of human social behaviour, linking together individuals in a way that helps us understand individual human behaviour as embedded in larger social systems. First, I provide an overview of key themes and definitions in social network research. Next, I outline the ways in which the opportunity to communicate, generally defined, is explicitly and implicitly incorporated

into the L2 WTC framework of MacIntyre et al. (1998). Next, I review the general ways in which opportunity has been conceptualised and measured in WTC research to date, and the issues raised therein. This is followed by a list of network concepts that may be used to conceptualise the opportunity to communicate.

2 Social Networks: Usefully Simple Maps

Social network research is a convergent area of methodological enquiry, with numerous origins and applications across economics, sociology, anthropology, psychology, mathematics, communication research, computer science, and physics. Though a diverse field, it is unified by a distinctive relational viewpoint that focuses on dyadic (one-to-one) social connection, or *ties*, between individuals within wider social systems. Social ties are regarded as basic building blocks of human sociality, and are used to conceptualise and understand social structure, as well as behaviours affected by one's sociostructural position. A rudimentary understanding of social networks and social network research starts with a few basic terms and concepts (Borgatti et al., 2009; Robins, 2015). As noted, the basic unit of analysis is the dyadic (one-to-one) social relationship, or *tie.* These ties interconnect individual entities, known as *nodes* (a mathematical/graph-theoretical term). When applied to social sciences, nodes are generally assumed to possess individual agency, and are thus referred to as social *actors,* referring to individuals, or to collective agents, such as organizations or countries. A social tie can be defined in endless ways, but typically pertains to affiliation (e.g., group co-membership), role relation (e.g., marriage), a cognitive state (e.g., trust, liking, disliking), or a relational event (e.g., sexual encounters). These ties may be undirected in nature, simply existing between two individuals (e.g., kinship). Alternatively, ties can have direction, with one node sending a relation to another in some way that is not necessarily returned (e.g., likes, gives advice to, etc.). When a particular node is focused on for the sake of describing or measuring its environment, it is referred to as *ego.* Other non-focal nodes around ego are known as *alters.* A simple network approach is focus exclusively on separate participants (egos) and their neighborhood of direct social ties (alters), in what is known as *egocentric* network research. Alternatively, a more complex and informative approach is to analyze a bounded social system, with participants linked together into a larger community network, in what is known as *sociocentric* network research (see Fig. 1).

From these basic principles, network researchers have developed rich and systematic ways of describing an array of sociostructural relationships, positions, and subcomponents, including leaders, followers, intermediaries, competitors, alliances, factions, cliques, and core versus periphery, to name just a few. In general, a network approach affirms that one's actions and behaviour depend not only on one's own characteristics and proclivities, but also on the opportunities and constraints placed on that individual by his/her social position. Here, any given social relationship does not simply exist on its own—it is conditional on (interdependent with) other relationships

Fig. 1 A network graph (reprinted with permission from Gallagher & Robins, 2015)

around it, on larger network structures, on physical and institutionalised boundaries, and on the attributes of the individuals who possess them. This area of research thus extends individualistic and micro-social explanations for social phenomena to system-level explanations, derived from the intersecting relationships of individuals who cooperate with, compete with, and influence one another in various ways.

Therefore, broadly construed, social network research offers an attractive initial premise: it provides a flexible yet precise and systematic means by which to conceptual and analyse social context, and appeal to the commonsense view that relationships are important to explaining individual actions. This has, in turn, sparked considerable interest across the social sciences, with mentions of 'networks' often finding their way into general theoretical discussions, as a way to sketch the contours of how social relationships influence a particular phenomenon. L2 research is no exception. Seeking to introduce complex systems thinking to the field, Beckner et al. (2009) maintain that "[a]n understanding of the social network structure that underlie linguistic interaction remains an important goal for the study of language acquisition and change" (p. 17). A social network approach is thus poised to gain in prominence within the field as researchers look for ways to explain language and language behaviour as complex, emergent phenomena, arising from the interaction of many interdependent social actors (Gallagher & Robins, 2015; Mercer, 2014). Yet, almost all social network investigations of L2 behaviour to date have been embryonic, focusing on simple summaries and visualisations of the number and ethnic diversity of the relationships that an individual has (Cenoz & Valencia, 1993; Dewey et al., 2013, 2012; Hulsen et al., 2002; Isabelli-García, 2006; Kurata, 2011; Smith, 2002). While informative in its own right, this research has not tapped

into the key developments within social network research over the past few decades, with basic questions remaining as to how networks *could* matter to L2 WTC and L2 use, much less how they actually do. An important theoretical task thus lies in developing network hypotheses specifically for L2 research. As stated above, in this chapter, I aim to integrate network concepts with existing linguistic, sociological, and psychological theories through the lens of the "opportunity to communicate," explaining how a network approach both relates to, and differs from, previous contextual approaches. In doing so, my aim is not to replace existing theory in the field, but to offer a means by which researchers can adapt and expand on theory through a distinct emphasis on "patterns of relations, multiple levels of analysis, and the integration of graphical and quantitative data" (Kilduff & Tsai, 2003, p. 64).

3 The Concept of "Opportunity" Within WTC Research

The opportunity to communicate is incorporated into the WTC model in at least three ways—as a platform for communication behaviour, and a shaper of goal formation, and as a support for the development of L2 skills. First, one common thread between L1 and L2 notions of WTC is its basis in the theory of planned behaviour (Ajzen, 1991). The focus of this framework is on behavioural *intention*—the psychological aim, plan, or readiness to engage in a particular behaviour. Intention is regarded as the immediate precursor to actual behaviour, and is determined by three factors: attitudes towards the behaviour, subjective behavioural norms, and beliefs about the degree to which one has control over the behaviour. In this model, the availability of opportunities and resources to behave in a certain way serves as a platform for intention, allowing it to give way to actual behaviour. When individuals lack necessary resources, such as time, money, or the cooperation of others, intention will not give way to behaviour (Ajzen, 1987). Rather, in terms of communication in particular, the cooperation of others is a particularly important factor, requiring some degree of coordination with a conversation partner.

Second, the opportunity to communicate may shape L2 WTC directly (not just combine with L2 WTC to produce behaviour). The conceptual link from an attitude to an intention to an actual behaviour may be viewed as a subset of a longer chain of cognitive processes that make up goal-driven behaviour (Kruglanski et al., 2015). In particular, the presence of an intention implies that a goal has formed—the individual envisions a possible state of affairs that they want to turn into reality. However, simply wanting something to become true is not enough to prompt action; one must also deem the desire to be *attainable*—as something that can reasonably be achieved (Kruglanski et al., 2015; Oettingen et al., 2001; Shah & Kruglanski, 2003). In this way, having the opportunity to communicate with a specific person pay prompt the reasonable expectancy that some socially mediated goal can actually be achieved. For example, if my goal is to integrate into French-speaking Canada, having regular opportunities to start conversations with French speakers should bolster the belief

that I can reasonably accomplish this desire, thereby reinforcing a general readiness to communicate.[1]

Third, on a more extended timescale, having regular opportunities to communicate in the L2 should give way more directly to the development of linguistic self-confidence, including higher self-perceived communication competence, and lowered communication anxiety. As one has more and more chances to initiate conversation, he or she should develop greater knowledge and L2 skills needed to operate effectively in various social situations associated with L2 use. Thus, having frequent, high-quality opportunities to communicate should lead the speaker to believe "I can communicate," not only in terms of "I have the chance to communicate," but also in terms of having "I have the personal skill to communicate".

Naturally, the opportunity to communicate may support and interact with L2 WTC in all three ways. In support, empirical evidence showing that L2 contact opportunities predict actual L2 communication, L2 WTC itself, and perceived L2 competence, uniquely and simultaneously (MacIntyre & Charos, 1996). However, the simple and disparate ways in which opportunities have been conceptualised and measured in L2 WTC research and social psychology more widely have not offered much in the way of bridging the micro–macro gap.

3.1 Opportunities as Group Boundaries

There are a few simple ways in which the opportunity to communicate has been accounted for in L2 WTC research. The first and predominant one is a social psychological approach based on group boundaries (e.g., Francophone Canadians) and our psychosocial connections to these distinctions (Clément et al., 2003). The primary assumption of this approach is that a sample of students with the same ethnolinguistic background have, by virtue of their common group membership, an approximately equal set of meanings, experiences, and opportunities to speak the L2. Learners are presumed to have a broadly similar psychological make-up, and face the same general set of opportunities and resources to act, by virtue of having grown up in the same culture at the same time. To draw finer distinctions in their opportunities and experiences, further categorical distinctions can be made, such as by looking at differences in instruction type (MacIntyre et al., 2003), or demographic variables like sex and age (MacIntyre et al., 2002).

As demonstrated by decades' worth of social psychological research, this group-based approach is extremely useful. First, it is inherently well suited to conventional statistical inference, which generally relies on randomly sampling individuals from

[1] These attributions of goal desirability and attainability of L2 contact are subsumed within Clément's (1980, 1986) model of self-confidence as precursors to lower communication anxiety and higher self-ratings of proficiency. In this model, goal desirability is referred to as a "primary motivational process" related to integrativeness (Gardner, 1985), and goal attainability is referred to as a "secondary motivation process" linked to the frequency and quality of L2 contact (Clément, 1986, pp. 272–3).

a larger population (e.g., a particular ethnolinguistic group). A second advantage is that in viewing context in terms of enduring, large-scale social differentiations that are virtually unchangeable (e.g., race/ethnicity, sex), the group context becomes an exogenous factor in the analysis. The researcher can therefore easily assert that these macrosocial factors *cause* individual behaviour, and not vice versa. In this way, the micro–macro bridge is a one-way street: the group environment exists and operates first, and the individual perceives it, deals with it, and relates to it in response (Robins & Kashima, 2008).

There are, however, limitations and trade-offs, as well. While it allows the researcher to make remote causal claims, these causal relationships are mediated by a range of psychological, cultural, and socio-structural factors. The social psychology of language learning—and research on trait-like L2 WTC, in particular—attends predominantly to psychological mediators, introducing a host of cognitive and motivational variables that link the individual to the group, such as self-identification with one's ethnolinguistic group (MacIntyre et al., 2003), and motivational factors related to macrosocial distinctions (Gardner, 1985; Yashima & Zenuk-Nishide, 2008). Meanwhile, socio-structural mediators (between the group and the individual) have, at times, entered the picture, but primarily through individualised subjective perceptions of those factors.[2] L2 WTC researchers have focused on individuals' assessments of the classroom environment (Peng & Woodrow, 2010), and have asked participants directly about the overall quantity and quality of their L2 contact opportunities (MacIntyre et al., 2002), Thus, the overall tendency within this research has thus been towards a "psychologization" of the individual-environment link, in which socio-cognitive and affective processes are heavily prioritised over the sociostructural forces constraining them (Hogg et al., 1995, p. 264; Turner & Reynolds, 2001).

While a focus on social cognition and self-identification is certainly appropriate, it is very likely not a sufficient explanation of human social behaviour. The individual is portrayed as an atomised social being who passively perceives and reacts to a fixed, disembodied stage of social influences, utilising an array of interlinked cognitive mechanisms and motivational processes programmed through a lifetime of socialising experiences (Wrong, 1961). This is particularly problematic when considering verbal communication and conversation, which so fundamentally structured through direct cooperation with others, and not merely passively perceived. As pointed out by Robins and Kashima (2008), when Lewin famously asserted that the essence of a group lies in the "interdependence of fate" of its members, he evoked the basic relational nature of groups. Groups are thus entities that exist not only in the mind of its members, but that also possess structural regularities

[2] In L2 research, objective sociostructural measures have included *social distance* (Schumann, 1976) and *ethnolinguistic vitality* (Giles et al., 1977). However, distance and vitality are focused mainly of structural properties at the group level, rather than the structural positions of individuals within those groups. At the individual level, researchers have focused on vitality in terms of subjective perceptions thereof (xxxx), with Giles and Byrne (1982) maintaining that a "social psychological approach to intergroup behaviour in general, and language and ethnicity in particular, should take into account individuals' *cognitive representations* of the socio-structural forces operating in inter-ethnic contexts," (p. 23; emphases added).

in terms of perceptions, actions, roles, and relationships—both among its membership, and between members and non-members (Robins & Kashima, 2008). However, this interdependence, while conceptually desirable, is analytically problematic in two major respects. First, statistical complications arise the moment independent participants become interdependent interlocutors and start influencing one another's behaviour directly, thereby introducing a source of non-random error. Thus, while WTC research has strongly suggested that speakers influence one another's WTC, conventional statistical models are very limited in the ability to account for this possible interdependence, which can lead to biased results. Therefore, as a result, while many WTC researchers envision students as interdependent language-users who co-create group life and provide each other with relational opportunities to communicate (e.g., MacIntyre et al., 2002; Yashima & Zenuk-Nishide, 2008), they ultimately cannot be statistically analysed in this way.[3] Second, affirming social interdependence raises the tricky proposition of defining and measuring the many ways in which individuals can be interdependent (Robins & Kashima, 2008). While we can isolate particular role relationships (parent–child, teacher-student) in isolation, or lump people together into easily-defined social units over which the individual has little to no control (ethnic group, families, school, classroom), we must also consider a wider array of emergent social interdependence that speakers create themselves, such as friendship cliques and social hierarchies.

3.2 Opportunity in Talk

Addressing how the WTC of multiple interlocutors work together in an interdependent fashion has been primarily the domain of research on WTC as a situated construct, with investigators focusing more specifically on the dynamic fluctuations within interactions and tasks (Cao & Philp, 2006; Dörnyei & Kormos, 2000; Kang, 2005; MacIntyre & Legatto, 2010). This approach highlights a second way that "opportunity" has been treated within L2 WTC studies—as a micro-level phenomenon. Here, qualitative and quasi-experimental research designs have been used to look at learners' verbal behaviour in situ. This move brought with it a mostly inductive approach to elicit a range of possible situational factors that might impinge on the moment-to-moment ups and downs of verbal communication, and the psychological impetus behind it.

While not always explicitly acknowledged, this line of research fundamentally shifts how the opportunity to communicate is conceptualised. Instead of viewing opportunity in terms of contact opportunities with specific people (as put forth in the L2 WTC model), opportunity is treated primarily on a turn-by-turn basis within conversations, with WTC seen as the impetus to inject oneself into an ongoing interaction at each turn. In this body of research, the volitional aspect of L2 communication

[3]This happens despite the common practice of surveying samples comprised of entire classroom groups, who are likely richly interconnected in terms of friendships, interaction, etc.

is not who to talk with, which is largely pre-ordained by the teacher as part of a classroom task, or by the researcher as part of the research design. Rather, volition comes in the forms of whether or not to speak up at each turn in an unfolding conversation. Here, the basic lens on social structure largely shifts away from *spatial* social structures (as summarised by group boundaries, social categories and/or network ties) to structured *sequences* within speech (as summarised by utterances, adjacency pairs, and longer sequences) (Gibson, 2005).

Micro-social approaches, therefore, do not resolve the issue of connecting micro-level encounters to macro-social group boundaries. While this area of research duly emphasises the dynamic and interdependent nature of communication, the foci of these studies remain thoroughly micro-social. These studies generally do not go any further to describe wider patterns in interactions, and how many such encounters day after day add up, culminating in important long-term individual outcomes. Micro-social WTC research is thus primarily interested in the micro-moments of verbal behaviour, not in its long-term development as part of the learning process within an individual (though see Peng, 2012 for a partial exception).

3.3 Opportunity as a System

A number of L2 WTC studies have already offered important insights into group structure and system-level dynamics that fundamentally align with a social network approach. In particular, scholars have examined dyadic relationships among students and their friends and siblings (MacIntyre et al., 2001), with their teachers (Zarrinabadi, 2014), as well as with partners in class (Dörnyei & Kormos, 2000), indicating the ways in which these specific role relationships can positively affect WTC. Remarkably, some investigations have pointed to examples of competition and negative impact, whereby the communicativeness of one person comes at the expense of others, or, contrariwise, where the silence/reticence of a person coerces others to talk (Cao & Philp, 2006; Kang, 2005). This sort of social interdependence is known as *conditional dependence* of social interactions, pertaining to how the presence (or absence) of one dyadic exchange can increase or decrease the likelihood of other exchanges around it (Robins et al., 2007). Just as one turn in a conversation builds off the ones before it, and affects those that follow, so can the presence or absence of one social relationship affect other potential relationships around it. Moreover, conditional dependence is not a generality or an abstraction—rather it is composed of a set of specific, testable assumptions about how social ties agglomerate. These assumptions are the gateways by which we can start to integrate a social network approach with recognisable, mainstream theory from psychology, sociology, communication, and elsewhere. Outlined below is a framework of specific, testable assumptions about the specific ways in which social ties tend to agglomerate (Fig. 2).[4]

[4]These assumptions pertain to ERGM framework and related models (see Gallagher & Robins, 2015); it is possible that other types of network models may make some different assumptions.

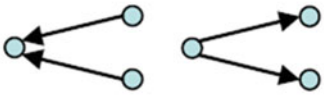
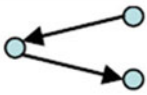
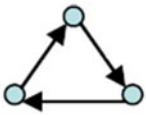
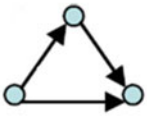
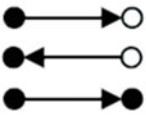
Network configuration	Underlying Process	Graphical depiction
Directed social tie	Baseline tie formation	
Reciprocated Arc	Direct reciprocity	
Star	Centralization, popularity, activity	
2-path	Brokerage	
Cyclic triad	Indirect reciprocity	
Transitive Triad	Triadic Closure	
Various configurations, with individual attributes	Homophily, and other attribute-based processes	

Fig. 2 Fundamental network self-organisation principles

4 Direct and Indirect Reciprocity

One basic social tendency is that of reciprocity, in which individuals both give and receive in terms of their social exchanges. This is most commonly represented in terms of direct reciprocity, in which a pair of individuals nominate one another in a bi-directional, mutual manner. An example is if Person A and Person B both say that they are friends with one another. Direct reciprocity is widely observed across many types of networks, but may be relatively more common in some types (e.g., friendship versus expert advice), and outright unlikely in other types (e.g., mentorship). Reciprocity may also be indirect in nature, involving three (or more) individuals. In these

situations, each person gives and receives, albeit not from the same person.[5] This is regarded as a particularly robust and powerful form of reciprocity, for the simple reason that anyone who cheats on his or her obligation to share is outnumbered, and punished accordingly (Lévi-Strauss, 1969; Molm et al., 2007a, b).

For many types of networks, reciprocity is an indicator of a particularly strong relationship, with both individuals agreeing on its existence and nature, or mutually sharing a common resource. These structures may support verbal communication through their *uncertainty reduction* benefits (Berger & Calabrese, 1975; Gallagher, 2013, 2017; Gudykunst & Nishida, 2001; Molm et al., 2007a, b). Reciprocal relationships are safer and more predictable. With agreement and trust firmly established, partners can exchange information freely and easily, without worrying about how the other person will react or behave within a conversation. From a situated perspective, feelings of safety and security have been linked directly to WTC (Kang, 2005). By extension, those involved involved in many reciprocity structures should, on average, form a higher dispositional willingness to communicate by virtue of having many highly trustworthy relationships. When these reciprocal relationships cut across cultural boundaries, or occur in a social environment focused around L2 (e.g., the language classroom), they may bolster L2 WTC in particular. The impact of both direct and indirect network structures on L2 WTC has been supported empirically in recent work (Gallagher, 2017).

5 Centralization, Popularity and Activity

Moving from network configurations involving a pair of actors, to configurations involving three or more, one may observe *centralization* in a network. Centralization is observed when there is a disproportionate distribution of ties in a network, in which most actors are involved in relatively few social ties, while a few actors are involved in many ties. In a direct network, individuals who have many outgoing ties are regarded as highly active, while those with many incoming ties are seen as popular. Centralization may influence verbal behaviour through status and power, which MacIntyre et al. (1998) themselves cite as likely influences on WTC. High-status actors are likely to be particularly influential, with their attitudes and behavioural choices likelier to be adopted by others around them (Fay et al., 2000). Furthermore, by virtue of their many ties, popular individuals have many alternatives in conversation (Emerson, 1962). As a result, if one network partner does not give them something valuable (e.g., an interesting conversation), they can easily seek out something better with a different partner. Consequently, popular actors may be given preferential treatment by their conversation partners, including, for instance, more attention, more interest, and more opportunities to hold the floor in a conversation. Furthermore, popular

[5] An example of indirect reciprocity is the custom of "Kris Kringle" in western Christmas traditions, in which each person within a group secretly buys a gift for one other group member. In this tradition, everyone gives and receives a gift, but (probably) not to and from the same person.

actors may be particularly attractive as conversation partners, but may also be relatively difficult to access. Thus, the opportunity speak with a popular individual may be relatively exciting, thereby boosting WTC (or become so exciting that it creates anxiety, thereby depressing WTC).

Brokerage, structural holes, and triadic closure.

A prototypical contact opportunity is a friend-of-friend. Here, one individual spans a short social distance (or gap) to establish a new relationship through a mutual contact. Referred to as *triadic closure*, this is a particularly good social opportunity. It implies physical proximity and a shared social setting, and the facilitating presence of a third person. Moreover, these relationships tend to exhibit cognitive balance (Heider, 1946)—a human preference towards having a set of likes and dislikes that is consistent with the people we like, and opposite to people we dislike. In this way, we are (usually) inclined to like the people our friends like.

However, while there is a strong tendency towards closure, it does not always happen. A particularly noteworthy network tendency is thus that of brokerage, in which one person serves as a bridge or intermediary between otherwise unconnected individuals, or otherwise unconnected parts of the network. One of the earliest and most influential concepts within network analysis (Bavelas, 1950; Burt, 1992; Freeman, 1979; Leavitt, 1951), brokerage and related constructs have been widely and repeatedly linked with various performance-related benefits—including promotion, higher salary, and better ratings for originality and creativity—beyond what could be explained by personal characteristics alone (Burt, 1992, 2004, 2010). Many theoretical explanations have been offered to explain its importance across different social phenomena. In general, though, brokerage is often seen as the opportunity to control information as its flows over the gaps between individuals (Leavitt, 1951). Brokerage positions may also serve as an opportunity to foster new relationships; for example, by introducing one's friends in the hopes that they become friends (Kalish & Robins, 2006). As such, individuals in brokerage positions are likely to benefit from this advantaged position provided they can manage the added demands that the position brings (Kadushin, 2002).

From a communication standpoint, brokerage be may be associated with a variety of communication-related skills and benefits associated with conveying information from one setting to another.[6] As found in a prior study (Gallagher, 2012, 2017), being in a brokerage position between clusters of individuals predicts greater L2 WTC. This has several possible interpretations. First, opportunities may afford a motivational advantage. Given their access to multiple parts of the network, brokers are likelier to be able to share new and novel information with their counterparts. Thus, in way similar to that described by Kang (2005), brokers might experience more excitement and responsibility in sharing valuable information with relatively information-poor counterparts. In short, brokers may have higher WTC simply because they have the

[6]Despite this importance, brokerage has received little prior explicit attention in L2-related research. The main exception is a body of research on *language brokerage*, generally defined as the "interpretation and translation between linguistically and culturally different parties" (Tse, 1995, p. 180), usually with reference to children of immigrant families. An array of psychosocial benefits, but also downsides, have been found with relation to child language brokers.

opportunity to say something new and fresh to a new audience, rather than saying the same thing over and over again. Second, keeping a brokerage position may require a higher degree of lingusitic skill to establish and maintain. The social gaps that brokers span—referred to in the literature as a *structural holes* (Burt, 1992)—can be regarded as a gap or buffer between different social settings. Brokerage might therefore be regarded as a naturalistic information gap activity, requiring a greater level of linguistic resources to adequately describe events and information that originated in a different time and place, and do so concisely and compellingly under the pragamatic pressures of everyday conversation. Thus, the broker cannot rely on simple (deictic) forms of language that he/she would use to make reference to the immediate context ("Here and Now"), but instead must employ more sophisticated langauge forms to explain what happened in a different time and place ("There and Then") (Robinson, 2001).

6 Homophily, Social Selection and Social Influence

All these reasons mentioned thus far are purely *structural* effects—they do not rely in any sense on the personal attributes of the individuals involved—simply the wider pattern of ties around them. However, social scientists using social network methods usually retain some focus on individual attributes and tendencies (e.g., gender, ethnicity, skills, attitudes, etc.). Therefore, on top of these purely structural effects, it is important to think of how attributes possessed by the individual combine with network ties and structures to define social structure.

In this vein, one important social observation is that of *homophily* in which individuals who are similar in terms of some personal attribute are likelier to have network ties with one another (McPherson et al., 2001). The observation of a homophily in a network can signify one of two things: social selection and/or social influence. If the attribute by which individuals are assorting is unalterable (e.g., ethnicity, sex, age), then we can be sure that any observation of homophily is a selection effect, driven by some social mechanism related to similarity-attraction. If the pattern relates to a changeable attribute (e.g., attitude, behaviour, intention), then the pattern could be social selection, or it could be a social influence effect, whereby individuals are changing to become more similar to their network partners. This requires longitudinal models (see below). Importantly, we can also combine individual attributes with more complex network structures, such as reciprocity, popularity, brokerage, and closure, to draw more and more sophisticated conclusions. For instance, it would be possible to hypothesize that one's own L2 WTC is associated in particular with a reciprocal tie to someone who has high L2 self-confidence. Here, the hypothesis would involve not only a network configuration (a reciprocal tie), but also the attribute of the network partner (L2 self-confidence).

7 Statistical Models

To test these and other network assumptions, several statistical models exist. First, *exponential random graph models*, or ERGMs, examine network tie formation (Lusher et al., 2013; Robins et al., 2007). Here, network ties are predicted from exogenous individual attributes (e.g., sex, age, personality factors), and self-organizing principles (reciprocity, closure, brokerage, etc.). This approach is explained in depth within a previous publication (Gallagher & Robins, 2015), with two software platforms available.[7] A closely related approach is *autologistic actor attribute models*, or ALAAMs (Daraganova & Robins, 2013). In ALAAM, an individual outcome is predicted from individual attributes, various network positions (reciprocity, closure, brokerage, etc.), and combinations thereof (Bryant et al., 2017; Gallagher, 2017). If one's interest lies in the co-evolution individual behavior and network ties over time, then a related model known as *SIENA* (Simulation Investigation for Empirical Network Analysis; Snijders et al., 2010) can be used.[8] This program uses a similar set of network assumptions to model how network ties cause individual behaviour, and how behaviour leads to network tie formation. Longitudinal forms of ERGM also exist. On an even more situated level, one can employ relational event modeling (Butts, 2008) and even quantitative forms of proto-conversation analysis (Gibson, 2005) to analyze the overlap of network ties and the flow of conversational turns between interactants within a tasks or meetings. Finally, a more accessible approach worth mentioning is *Quadratic Assignment Procedure* (QAP; Krackhardt, 1988), which is available in the UCINET software. Suitable for either correlation or regression techniques, QAP tests associations between dyadic data. For instance, if one wants to test whether a type of tie predicts similarity in terms of WTC, while controlling for similarity in L2 self-confidence (Gallagher, 2012). It provides robust results in the face of interdependent data, but does not account for dependence in the data in a way. It is best used when one wants to predict similarity between two individuals on a given dimension (e.g., WTC), as measured on a continuous scale. See Nagpaul (2003) for a description.

8 Limitations: Real and Imagined

Space constraints preclude a fuller explanation of the limitations of a network approach, and the reader is referred elsewhere for discussion (Gallagher & Robins, 2015; Robins, 2015). In brief, however, in this chapter, as in prior works, I have begun to address one central barrier—the lack of an actual, specific theoretical basis for how "relationships matter" to the psychology of the language learner. Next to that, perhaps

[7] One version of ERGM estimation software is PNet (https://www.melnet.org.au/pnet/), while another is Stocnet (https://www.gmw.rug.nl/~stocnet/StOCNET.htm). The two approaches are largely equivalent, with some differences in parameterization.

[8] https://www.stats.ox.ac.uk/~snijders/siena/.

the main practical limitation and caution for aspiring network researchers is the intensive data requirement for its most informative and authorities forms of analysis. In particular, sociocentric network (i.e., whole network) analyses requires well-defined boundaries to the network, with a very good sense of who is in the network, and who is not. Once that is determined, it is imperative to get near-complete levels of participation. While "some" missingness is generally tolerated (because it must be), more considerable amounts of missing data can skew results in unknown ways (Koskinen et al., 2013). Fortunately, given the predominance of classroom-based research in L2 research, a high level of data completeness should be attainable in many instances. Research outside the classroom will often need to rely on simpler egocentric (personal network) approaches, and wait for development in the area of network sampling techniques (Handcock & Gile, 2010), which are in their infancy, but under development.

It is also important to flag what are not inherent limitations of a network approach. First, network methods are not necessarily socially deterministic. This can be seen in the discussion above: concepts like reciprocity, closure, and brokerage are fundamentally small-scale network structures over which the individual can exercise some degree of control, albeit in concert with other individuals (as is appropriate). In turn, these substructures agglomerate into larger and large social structures that bring with them their own emergent properties. Thus, while some forms of analysis may seem deterministic (e.g., by virtue of taking into account the entire structure of a large social network to predict the behaviour of a single individual), a contemporary statistical approach to social networks is built on the idea of a socially constrained individual agent (Snijders et al., 2010). Second, network methods are not necessarily static. While cross-sectional models necessarily exist and are inevitably used, so are longitudinal designs which affirm that relationships change in co-evolution with behaviour (Lusher et al., 2013; Snijders et al., 2010), and even models that track turn-by-turn moves within group conversations (Gibson, 2005). Thus, while collecting complicated forms of network data can be difficult and intensive, analysing them in a way that affirms dynamism and agency is possible, and will only continue to grow in sophistication in years to come.

9 Conclusion

In all, a social network approach represents a key methodological advance in L2 research from a complex systems perspective (Beckner et al., 2009). Nevertheless, the application of social network concepts and methods to L2 research is arguably more evolutionary than revolutionary. Social network research and theory do not supplant existing theoretical frameworks, but can add to them, extending their insights to different sociological levels by means of a distinct emphasis on relational patterns and multiple levels of analysis (Kilduff & Tsai, 2003). Proper theoretical integration of a network approach into L2 research would allow researchers to further develop, refine, and re-conceptualize longstanding concepts related to groups, classrooms, social

categories, and individual differences, rather than contest that they are irrelevant to a new paradigm. In the near future, however, network research stands to pose as many questions for L2 research as it answers. Future research efforts should collectively address five broad aims. First, further research in the cross-sectional sphere should aim to replicate, refine, and broaden social network concepts and findings. Here, particular attention should be paid to the precise definition of the specific types of network ties that affect L2 behaviour, including, but not limited to friendship, advice, trust, task-based interaction, and even negative ties (e.g., animosity). Second, as mentioned, longitudinal and dynamic network designs should be used to address causal direction (i.e., selection versus influence). Third, a network approach should be extended to other L2-related phenomenon, including actual L2 acquisition and language data. Fourth, qualitative approaches should be employed to further explain and illuminate the fine-grained dyadic and triadic social processes identified in this study, in a manner not dissimilar from previous WTC microsocial research (Cao & Philp, 2006; Kang, 2005). Fifth and finally, network research should be considered within a wider research template, the aim of which is to catalogue key aspects of the social system (Hiver & Al-Hoorie, 2016; Larsen-Freeman, 2016).

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Teachers' Immediacy, Self-disclosure, and Technology Policy as Predictors of Willingness to Communicate: A Structural Equational Modeling Analysis

Zahra Amirian, Mohsen Rezazadeh, and Maryam Rahimi-Dashti

Abstract This study investigated the effects of teachers' immediacy, self-disclosure, and technology policy on developing students' willingness to communicate (WTC) in an Iranian EFL classroom context. The sample included 220 EFL learners in a private language institute in Isfahan, Iran. Four questionnaires were administered to assess the participants' WTC as well as their teacher's immediacy, self-disclosure, and technology policy. The collected data were then analyzed through structural equation modeling (SEM). The results of SEM showed that teacher immediacy, self-disclosure, and technology policy positively predict students' WTC. This study has some pedagogical implications for teaching English to EFL learners.

Keywords Willingness to communicate · Teacher immediacy · Teacher self-disclosure · Teacher technology policy

1 Introduction

After years of extensive emphasis on developing linguistic accuracy and mastery of language structures, the attention gradually shifted towards mastering communicative competence. Following this, it was assumed that more interaction in second language (L2) classrooms would result in improvements in language learning. In other words, it was proposed that students' active and meaningful participation in language classroom plays an important role in the process of learning. Accordingly, willingness to communicate (WTC), the inclination to keenly participate in communication, attracted the attention of L2 researchers (McCroskey & Baer, 1985), which was for the most part because of the expanding accentuation on authentic communication as a fundamental piece of L2 learning and teaching. Some researchers considered it as quality like inclination, stable after some time, and across different circumstances (McCroskey & Richmond, 1987, 1990). In any case, different scientists stated that situational elements may influence a person's WTC. In their adjustment of WTC

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_11

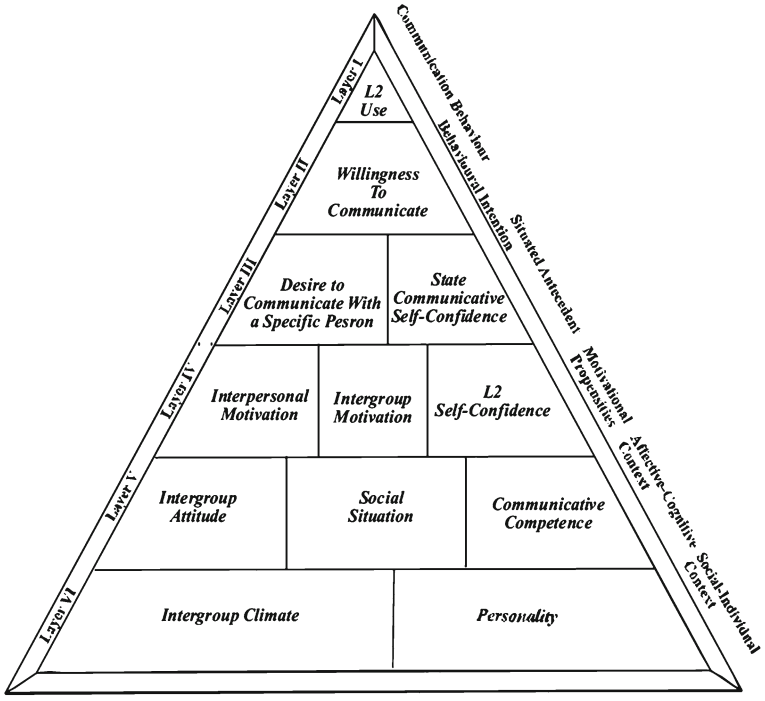

Fig. 1 The heuristic model of variables influencing WTC (MacIntyre et al., 1998, p. 547)

to the L2 circumstance, MacIntyre et al. (1998) characterized this idea as "a readiness to enter into discourse at a particular time with a specific person or persons, using an L2" (p. 547). They proposed a theoretical pyramid model that represents the person's choice to start L2 communication. Different layers of this pyramid are shown in Fig. 1.

From this perspective, WTC has been defined as "an individual's volitional inclination towards actively engaging in the act of communication in a specific situation, which can vary according to the interlocutor(s), topic, and conversational context, among other potential situational variables" (Kang, 2005, p. 290).

Taking the second view towards the definition of WTC, researchers found that factors such as familiarity with interlocutor(s) (Kang, 2005), awareness of the subjects being talked about and also familiarity with the conversational context (Tavakoli & Zarrinabadi, 2018; Zarrinabadi, 2014), and medium of communication (Freiermuth & Jarrell, 2006) affect WTC behavior in the classroom. Examining the complex nature of WTC in L2 classrooms, Cao (2011) found that situational WTC in L2 classroom is the shared impact of personal variables including self-confidence, identity components, emotions, perceived opportunity to communicate, and contextual conditions such as topic, assignment, teacher and number of students. Besides, Robson (2016) reaffirmed the importance of classroom context as the core ground for communication within the EFL context by testing the interrelationship among classroom effectiveness, emotional variables, three self-determined motivation constructs, self-perceived competence, and WTC in a structural equation model.

In another study, Joe et al. (2017) found that WTC was predicted strongly by the satisfaction of basic psychological needs (i.e., autonomy, competence, and relatedness), and weakly by perceived competence and also by recognized regulation, but not by intrinsic motivation.

Among different situational factors, teacher variables have been the focus of much research. The general impression from these studies is that teacher-related variables such as attitude, involvement, and teaching style seem to promote students' WTC and engagement (Cao, 2011; MacIntyre et al., 2011; Peng, 2007; Zarrinabadi, 2014). Several variables including the instructor's wait time (Zarrinabadi, 2014), teacher's implicit and explicit corrective feedback (Tavakoli & Zarrinabadi, 2018), and tutors' support, or communication strategy (Lee & Ng, 2009; MacIntyre et al., 2011) proved to influence learners' WTC.

In a context similar to the context of the present study, Zarrinabadi (2014) indicated that factors such as teachers' wait time, choice on the subject, error correction, and support can have certain effects on students' WTC. Also, Amiryousefi (2016) found that interest and intention to interact with the teacher are significant predictors of EFL students' WTC and these are influential factors promoting WTC in an EFL context.

The above review shows that teachers can amplify or diminish WTC among their students. Considering the significance of teachers in promoting learners' willingness to talk, this study attempted to examine the structural relations between students' WTC and teacher-related factors including teacher immediacy, teacher self-disclosure, and teacher technology policy in an Iranian EFL context.

1.1 Teachers' Immediacy

The concept of immediacy was initially evolved by Albert Mehrabian in the late 1960s. He was inquisitive about "how people could infer a communicator's attitudes from implicit cues" (Hess & Smythe, 2001, p. 197). Andersen (1979) hypothesized that teacher immediacy can be a possible predictor of instruction efficacy. According to Andersen (1979), teacher immediacy can be conceptualized as those nonverbal deeds that can diminish the distance between teachers and their students both physically and psychologically. Immediacy behaviors may promote stronger relations because they provide social cues that encourage the speaker to continue talking and stop when appropriate (Mehrabian, 2007). As stated by Hsu (2010), if the teachers build positive characteristics or utilize immediacy behaviors, they can make students interested in learning English and maintain their motivation. Along the same lines, Gendrin and Rucker (2004) found significant positive correlations between cognitive/affective learning and teacher immediacy. Mazer and Stowe (2016) also suggested that teachers' immediacy combined with their verbal friendliness can amplify students' motivation and will lead to successful learning. Similarly, Roberts and Friedman's (2013) study showed that teachers' immediacy behaviors influenced students' classroom participation. Rashidi and Mahmoudi Kia (2012) found a positive and significant correlation between learners' WTC and teacher

immediacy. Likewise, Fallah (2014) reported that, via the mediation of motivation and self-confidence, L2 WTC was indirectly predicted by teacher immediacy and shyness.

1.2 Teachers' Self-disclosure

Cozby (as cited in Cayanus and Martin 2008) defined self-disclosure as any information about a person he or she reveals to another person. Self-disclosure helps people develop new relationships and preserve current ones (Collins & Miller, 1994). Sometimes, students and also teachers talk about their individual matters in the classroom. Teachers sometimes share personal stories, beliefs, and experiences in interaction with their students, in addition to talking to cover the course content (Nussbaum et al., 1987). Such communication is called teacher self-disclosure, which is defined as "conscious and deliberate disclosures about one's self, aspects of one's professional practice, world or personal views, personal history, and responses to ongoing classroom events" (Rasmussen & Mishna, 2008 as cited in Song et al., 2016, p. 437). Lannutti and Strauman (2006, p. 96) proposed that "desirable classroom self-disclosure differs from self-disclosure that may be desirable in personal relationships because it should be more illustrative than revealing".

Cayanus and Martin (2008) found that teacher self-disclosure and students' social desirability to their teachers are two related constructs. Once learners find out about their language instructors, they regularly show more prominent encouragement for progression and also perceive the class atmosphere to be more constructive and productive. In a related study Song et al. (2016) investigated the role of teacher self-disclosure on the teacher-student connection in online vs physical classes. They found that students' reactions to their teacher's self-disclosure improved their mutual connection and also resulted in higher degrees of course satisfaction and knowledge gain. They also discovered that teacher self-disclosure was more influential in online classes than in traditional ones.

All in all, further research is required to uncover the true nature of the influence of teacher self-disclosure on language learners. Furthermore, research on teacher self-disclosure in an EFL context is very limited and due to its importance, a need for further study in EFL contexts seems important.

1.3 Teacher Technology Policy

Classroom technology policies, defined as "rules governing the use of wireless communication technologies in the classroom" (Finn & Ledbetter, 2013, p. 27), are mostly indicated by the teacher. Sometimes appearing in the module syllabus, teacher technology policy limits students' use of wireless communication devices completely, or, if permitted, sets certain rules regarding how these devices can be

used during class hours. Finn and Ledbetter (2013) categorized teacher technology policies as *encouraging, discouraging, laissez-faire* ones.

Discouraging policies are those that prevent the operation of technology during class sessions. Although there is an increasing agreement that a full prohibition of all technology use cannot be a practical resolution (Schneider, 2018), a substantial body of previous research indicates that personal technology use for intentions unrelated to class has a negative relationship with students' learning performances. Most of the studies focused on students' technology use and their final performance. For example, Harman and Sato (2011) and Junco (2012) both reported a negative correlation between texting and students' grade point average. In another study, Ellis et al. (2010) found that sending three texts during a class session led to an average of 16 points reduction in students' scores. In an experimental study, Kuznekoff and Titsworth (2013) discovered that students who used phones while watching a short video lecture scored 1.5 grades lower than those with no distraction. Similarly, Gingerich and Lineweaver (2014) reported that students who texted in class scored 14% lower than those who did not. In another study, a negative association was found between laptop use and academic performance (Zhang, 2015).

Even though previous research shows that teacher technology policies are mostly associated with academic performance, other communication behaviors may also be influenced by these policies. Finn and Ledbetter (2014) examined instructors' communication behaviors and their technology policies and found that technology policies and learning outcomes are related through the mediation of teacher verbal aggressiveness and credibility. To date, no study has examined whether teachers' technology policy and students' communication behaviors (e.g., WTC) are associated. Therefore, it seems necessary to examine teachers' technology policy and students' willingness to talk concurrently, a topic that has been neglected so far.

1.4 The Hypostatized Model

In line with previous research (Yu, 2009; Wen & Clément, 2003), we hypothesized that teacher immediacy and also teacher self-disclosure can have positive effects on EFL learners' WTC. Therefore, these two teacher variables were considered as the predictors of L2 WTC in our model.

Moreover, a direct path was hypothesized from the teacher technology policy toward L2 WTC. The rationale is that according to Barak et al. (2006), technology has the potential to become an integral part of teaching and learning and change the way classroom communication proceeds. This path is also hypothesized based on Chen (2008) who emphasized the advantages of internet use in EFL learning. Finally, as illustrated in Fig. 2, we proposed a model including teacher immediacy, teacher self- disclosure, teacher technology policy, and students' WTC.

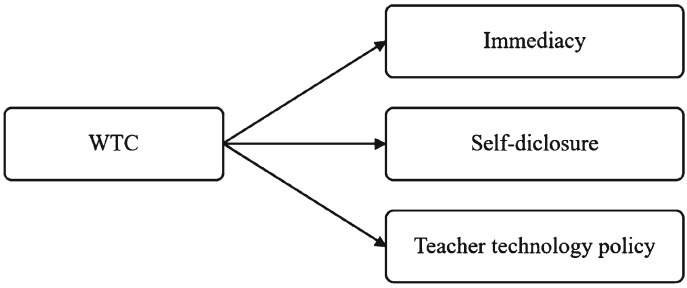

Fig. 2 The hypothesized model

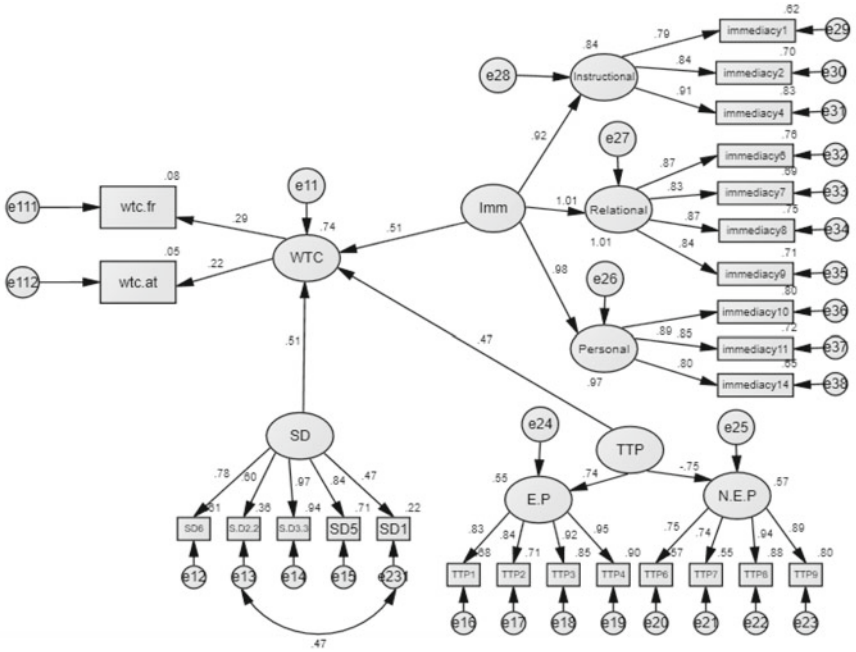

Fig. 3 The final model of structural relationships among students' WTC and teacher immediacy, teacher self-disclosure, teacher technology policy (*Note* WTC = willingness to communicate; WTC. fr = willingness to communicate in talking aloud with teacher or whole class; WTC. at = willingness to communicate in peer/group work; Imm = teacher immediacy; SD = teacher self−disclosure; TTP = teacher technology policy; E.P = educational policy; N.E.P = non-educational policy)

2 Method

2.1 Participants

The participants of this study were 220 intermediate EFL learners at different branches of an English language institute in Isfahan, Iran. The learners' ages ranged from 15 to 30 ($M = 23.8$, $SD = 2.7$). There were 122 female students (55.54%) and 98 male students (44.54%). The students' level of proficiency was determined based on the ranking specified by this institution.

The second group of participants of the present study included 24 Iranian instructors of English who taught the above-mentioned learners. Their ages ranged from 27 to 51 ($M = 35.71$, $SD = 4.3$) and most of them had more than 11 years of experience. Table 1 presents the demographic information of the teacher participants.

2.2 Instruments

We used four different questionnaires for data collection. One questionnaire was used to assess students' WTC and three questionnaires were adapted to investigate three teacher variables including teacher immediacy, teacher self-disclosure, and teacher technology policy. The questionnaires were translated into Persian to avoid any language-related misunderstanding on the part of the students. All four scales had a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

2.2.1 WTC Scale

Peng and Woodrow (2010) adapted Weaver's (2005) scale measuring WTC in speaking ($\alpha = 0.88$). We adapted the 10-item questionnaire used by Peng and Woodrow (2010) to measure L2 WTC in the Iranian EFL classroom context. This questionnaire includes statements that describe some communicative situations/tasks in an English class and students are supposed to indicate how willing or unwilling they are to engage in these communication activities. In the current study, the Cronbach's alpha for the WTC scale was 0.80.

Table 1 Teachers' demographic information

Characteristics		Frequency	Percentage
Gender	Female	8	33.3
	Male	16	66.6
Age range	27–51	–	–
Years of teaching	1–5	5	20.83
	6–10	7	29.16
	+10	12	50

2.2.2 Teacher Immediacy

We used the teacher immediacy scale developed by Zhang and Oetzel (2006). It includes 15 items and 3 subscales, namely, instructional (items 1–5, $\alpha = 0.81$, sample: "the teacher answers questions earnestly"), relational (items 6–11, $\alpha = 0.78$, sample: "the teacher respects students"), and personal (items 12–15, $\alpha = 0.84$, sample: "the teacher has a good morality").

2.2.3 Teacher Self-disclosure

A 14-item instrument reporting students' perceptions of their teachers' use of self-disclosure was employed. The items were modified by Cayanus and Martin (2008) to focus more on disclosure in the classroom. The scale includes three aspects of self-disclosure, namely amount, relevance, and negativity. The Cronbach's alphas for the three dimensions were as follows: amount ($\alpha = 0.80$), negativity ($\alpha = 0.84$), and relevance ($\alpha = 0.88$).

2.2.4 Teacher Technology Policy

Finn and Ledbetter's (2013) 18-item teacher technology policy instrument, revised by Finn and Ledbetter (2014), was employed in the current study. Seven items relating to non- social policy were omitted due to their non-applicability in an Iranian classroom context and 11 items relating to non-educational policy and pro-educational policy were kept. Then, one item relating to the non-educational policy was omitted because it seemed repetitive. Non-educational policies, contained five items ($\alpha = 0.92$), and these items represent teacher behaviors that discourage technology use for educational purposes. Pro-educational policies, contained five items ($\alpha = 0.88$) and items in this construct refer to teacher behaviors that encourage or require technology use for course and learning purposes.

2.3 Procedure

Before the data collection, the researchers obtained permission from the institute's authorities and asked the students to fill out the consent forms. The questionnaires were administered in 24 classes and all four questionnaires were given to each class in one session. The participants filled out the questionnaires during break times to avoid taking the class time. The participants were assured that their information would be anonymous and at no cost to their course grades.

2.4 Data Analysis

After reverse-scoring negatively-worded items, we performed outlier and missing values analyses using SPSS 22 to address any irregularities in the data. Then, we ran confirmatory factor analyses (CFA) using AMOS 20 to check the structural validity of the scales. In the next step, structural equation modeling (SEM) was conducted to find the probable structural relations between the predicator variables i.e., teacher immediacy, teacher self-disclosure, teacher technology policy, and the outcome variable i.e., learners' WTC. In order to assess the model we used the following fit indices: normed chi-square (χ^2/df), comparative fit index (CFI), standardized root mean square residual (SRMR), normed-fit index (NFI), incremental fit index (IFI), goodness-of-fit statistic (GFI), and root mean square error of approximation (RMSEA) were used. The cutoff criteria for model fit indices were based on Hu and Bentler (1999).

3 Results

3.1 Preliminary Analysis

We checked skewness and kurtosis values and found no violation of normality. All skewness and kurtosis values were with the range of −2.0 and +2.0 which is an acceptable range for normality according to Kim (2013). In addition, univariate outliers were removed using standard scores and multivariate outliers were treated using Mahalanobis D^2 (Tabachnick & Fidell, 2018). Moreover, we ran independent samples t-tests and found no gender differences regarding any of the variables in this study.

As indicated earlier, we used one method of data collection in this study; therefore, we had to check the data for possible common method variance (CMV). In order to do that Harman's one-factor test was utilized to assess CMV. Results revealed no issues with our data in terms of CMS since the unrotated matrix explained less than 50 percent of the total variance (Podsako et al. 2012).

3.2 Construct Validation of the Scales

Three models of confirmatory factor analysis (CFA) were employed using Amos to validate the scales that we used in this study. Based on the CFA results, some items were removed due to factor loading below 0.5 (Hair et al., 2010a). It should be noted that all items related to negativity (a sub-scale of teacher self-disclosure) were removed because of factor loading below 0.5. The Fit indices were checked for each measurement model after these modifications (see Table 2). According to

Table 2 Model fit for confirmatory factor analysis

Index	χ^2/df	IFI	RMR	CFI	NFI	GFI	RMSEA	PRATIO
Criterion	3≥	≤0.9	0.08≤	≤0.9	≤0.9	≤0.9	0.8≤	0–1
Self-disclosure	2.61	0.992	0.028	0.992	0.987	0.981	0.05	0.4
Technology policy	2.67	0.978	0.061	0.988	0.966	0.945	0.06	0.679
mmediacy	2.44	0.979	0.023	0.979	0.965	0.932	0.08	0.667

Hair et al. (2010b), if three or four indices are at the acceptable and proper level, the model favors appropriate fit. As shown in Table 2, the eight indices used in this study confirmed that all three measurement models had a very good fit.

3.3 Structural Equation Modeling

After the first confirmatory factor analysis, structural equation modeling with maximum likelihood estimation was employed to investigate the structural relationships among the variables of the study. Figure 1 shows the model with standardized path coefficients. The model showed an excellent fit to the data based on the fit indices: $\chi^2/df = 2.31$, IFI = 0.922, GFI = 0.913, CFI = 0.921, RMR = 0.08, RMSEA = 0.07.

As illustrated in Fig. 1, results indicated that teacher immediacy ($\beta = 0.51$, $p < 0.001$), teacher self- disclosure ($\beta = 0.51$, $p < 0.001$), and teacher technology policy ($\beta = 0.47$, $p < 0.05$) positively predicted WTC.

4 Discussion

Results indicated that teacher immediacy positively predicted learners' WTC. This finding is compatible with the results of the previous studies (e.g., Fallah, 2014; Fallah & Mashhady, 2015; Hsu, 2006; Menzel & Carrel, 1999; Rashidi & Mahmoudi Kia, 2012; Yu, 2009) arguing that employing immediacy behaviors can create a relaxing, welcoming, and supportive classroom climate. Consequently, students feel more secured and less anxious in the class environment and see themselves to be progressively capable and persuaded when it comes to WTC (Fallah & Mashhady, 2015).

Moreover, in the present study, the path from teacher self-disclosure was found to exert a direct influence on WTC. As indicated earlier, the items related to negativity (a sub-scale of teacher self-disclosure) were removed because of factor loading below 0.5. Therefore, this direct path was only related to two dimensions of self-disclosure, namely, amount and relevance. Previous investigations have found relations between

teacher self-disclosure and clarity of course content (Cayanus & Martin, 2008; Downs et al., 1988), student "affect" for both the program and the teacher (Cayanus & Martin, 2008), student motivation to communicate (Cayanus & Martin, 2008; Cayanus et al., 2009), and cognitive learning (Stoltz et al., 2014). This study took a different view by examining the relation between teacher self-disclosure and students' WTC in actual classroom situations. This result is in line with Goldstein and Benassi's (1994) who found that the amount of teacher self-disclosure would be positively associated with the amount of students' classroom participation. The positive relation between teacher self-disclosure and students' participation and WTC can be accounted for by three models namely, Social Exchange Model, Modeling Perspective, and Trust Model (Goldstein & Benassi, 1994). Hence, it can be concluded that a self-disclosing teacher creates trust, and therefore, invites the students to participate in classroom discussion. This finding is also confirmed by Zhang et al. (2008) and Cayanus et al.'s (2009) suggesting that teacher self-disclosure positively influences teacher-student relationships and classroom communication, and enables students to have more active classroom participation.

Finally, in this study, a direct positive path from teacher technology policy to students' WTC was found. In the related literature, the emphasis is on the two-faced nature of technology use. Some believe that it can lead to students' distraction if used for non-learning purposes and potentially hinder learning (Barak et al., 2006; Campbell, 2006; Kuznekoff & Titsworth, 2013) On the other hand, it can potentially promote leaning if used appropriately (Freiermuth & Zarrinabadi, 2020). In this study, in the teacher technology policy scale, only the discouraging and encouraging policies were included and in the data collection phase, the use of wireless devices for socialization was removed from the scale. Therefore, it can be stated that the positive correlation between teacher technology policy and students' WTC is in line with previous works which have highlighted its positive effect in academic contexts. The path showing the effect of teacher technology policy on L2 WTC is in agreement with Neuman et al. (1996) which addressed the effects of technology on student achievement, self-concept, attitudes, and also teacher-student interactions. Neuman et al. (1996) states that the use of technology could enhance instruction, motivate students, improve students' attitudes toward learning, and motivate teachers and free them from some routine instructional tasks. Galbraith and Haines (1998) asserted that the use of technology, especially computer-based applications, increased students' level of confidence, motivation, engagement, and interaction. In addition, Sivin-Kachala and Bialo (2000) stated that generally, technology is making a significant positive impact on education and especially educational technology has demonstrated a significant positive effect on achievement. Sivin-Kachala's (1998) study revealed that environments with rich technology have positive effects on students' achievement and the use of technology for educational purposes improved students' attitudes toward learning and their self-concept. He also emphasized on the educator's role in determining

the level of effectiveness of educational technology. All in all, it can be concluded that the application of technology produces a flexible and stress-free instructional platform that can increase positive attitude toward learning and eventually develop students' participation and WTC.

5 Conclusion

This study explored the effects of teachers' immediacy, self-disclosure, and technology policy on developing Iranian EFL intermediate students' WTC. Results of SEM revealed that L2 WTC was predicted by teacher immediacy, teacher self-disclosure, and teacher technology policy. Following these findings, it can be said that language teachers should pay close attention to immediacy, self-disclosure, and technology policy. According to Yu (2009), being aware of students' WTC in the language classroom, teachers can tune their teaching techniques and behaviors. On the other hand, since EFL students usually lack authentic language communication opportunities, "a better understanding of students' WTC in English may help language teachers to realize and implement instructional strategies that could create more opportunities to promote communication and student engagement, and consequently facilitate students' English learning and acquisition" (Yu, 2009, p. 12). Therefore, this study calls for more recognition of the importance of teachers' role in promoting learners' WTC. In so doing, future research should examine how different teachers' characteristics or practices exert an impact on L2 learners' WTC. For example, future research can investigate how other teacher variables such as language teacher immunity, adaptability, and resilience might affect WTC. Moreover, further research can explore how teachers' classroom practices such as task sequencing and flipped model influence L2 WTC.

One of the limitations of the present study was related to its data collection instruments. The instruments employed in the current study were only questionnaires. Therefore, to obtain a deeper understanding of how teacher variables can affect students' WTC, qualitative methods such as interviews and observations are suggested to be utilized in future research. Besides, teacher technology policy is considered a rather new concept for Iranian EFL learners, and its use in language institutions is limited. Therefore, there is a need for an experimental study with experimental groups of students using technology and technological equipment to see how technology might influence learners' L2 WTC. It is also suggested that this investigation be replicated in various EFL settings among students with differing social and cultural backgrounds.

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Vocabulary Size as a Predictor of Willingness to Communicate Inside the Classroom

Meltem Şen and Huseyin Oz

Abstract Recent developments in the field of foreign language education have led to a renewed interest in willingness to communicate in English (L2 WTC) and the present study aimed to investigate the relationship between learners' vocabulary size and L2 WTC inside the classroom in English as a foreign language (EFL) setting. Participants were 100 university students majoring in an EFL teacher education program at a state university in Ankara, Turkey. Data were collected by using Vocabulary Levels Test and Willingness to Communicate inside the Classroom Scale. Findings of descriptive statistics showed that 32% of the participants had high, 54% had moderate, and 14% had low levels of L2 WTC inside the classroom. Findings also revealed a significant relationship between vocabulary level of the participants and their L2 WTC inside the classroom. The implications are offered to provide insight to language teachers, pre-service language teachers, curriculum designers and teacher trainers to create awareness on the relationship between vocabulary knowledge and willingness to communicate.

Keywords Vocabulary size · Willingness to communicate · EFL learners

1 Introduction

Vocabulary is an essential element of language and vocabulary knowledge plays a significant role in second or foreign language (L2) learning. Wilkins (1972) underscores the importance of vocabulary, stating "…while without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (pp. 110–111). In other words, L2 learners must possess sufficient vocabulary knowledge to convey their messages, and how accurately they convey their messages depends on their vocabulary size as well. It is fair to say that vocabulary is a prominent component of language that enables L2 learners to communicate along with different aspects of language knowledge and psychological factors.

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_12

Within social sciences, psychology studies the human mind not only in general but also from individually constructed facets and it attempts to discover the way people experience the world through different feelings and thoughts. Individual differences (ID) as a component of psychology have been investigated in an extended period of time and it examines the individual characteristics which are different among people and tries to understand the reasons of these dissimilarities (Dörnyei & Ryan, 2015). Individual differences include several concepts regarding one's individuality such as motivation, anxiety, identity and willingness to communicate. Since every person is different and people gain experience through time, "all IDs show both stability and the capacity to change" (MacIntyre et al., 2016, p. 310). While the concept of willingness to communicate (WTC), which reflects personality characteristics, was firstly developed in first language (L1) (McCroskey & Baer, 1985), there has been a shift in the studies of WTC from L1 to second language (L2). MacIntyre et al. (1998) suggest that the primary objective of language learning is to reveal the learners' willingness to communicate in L2 by searching for communication occasions and thus increasing their WTC. Therefore, L2 learners need communicative competence to be able to interact with others in the target language, which requires vocabulary knowledge as well. At the same time, "vocabulary size is directly related to the ability to use English in various ways" (Schmitt et al., 2001, p. 55). Within this scope, it is assumed that there is a relationship between the vocabulary size of the learners and their WTC inside the classroom in English as a foreign language (EFL) settings.

The present study aimed to investigate the relationship between vocabulary size of the learners and their willingness to communicate inside the classroom. Communication is the primary aim of L2 learning (MacIntyre & Charos, 1996); however, how willing the learners will be to communicate inside the classroom is an open-ended question since the learners' attitudes change not only from day to day but also during a class hour. Previous research has indicated that there are a variety of predictors of L2 WTC from personality traits like being introverted or extraverted to individual differences factors such as motivation and anxiety along with international posture (Yashima, 2012). Öz et al. (2015) regard L2 WTC as "a multi-faceted construct that integrates affective, social-psychological, linguistic, and communicative variables and can describe, explain, and predict language learners' communicative behavior in a L2" (p. 270). However, there is a scarcity of literature about the relationship between vocabulary size of L2 learners and their WTC inside the classroom in Turkish EFL context (Altiner, 2017). It is assumed that the amount of vocabulary size of the learners could affect their WTC and consequently how they communicate. Thus, the aim of this study was to shine new light on WTC through an examination of the relationship between the learners' L2 WTC and their vocabulary knowledge in the target language.

2 Literature Review

2.1 Vocabulary and Vocabulary Size

Being able to communicate constitutes a significant part of the language learning process, which requires learners to have communicative competence. Communicative competence consists of four different competences namely, linguistic, sociolinguistic, discourse and strategic. Linguistic competence involves knowing grammar and vocabulary such as knowledge in phonetics, phonology, syntax, morphology and semantics. Sociolinguistic competence includes knowing appropriate use of language. Discourse competence is about knowing how to use and understand language in written texts or in oral communication, which necessitates the use of language in a coherent and cohesive way. Strategic competence is about noticing communication problems and breakdowns and overcome these with different strategies such as taking turns, asking for clarification and repetition. Whether these competences are developed or not affects learners' language use and their L2 WTC in a positive or negative way depending on various variables such as personal factors, the environment in which communication takes place, and the interlocutors.

As is known, linguistic competence involves knowing lexical resources, and vocabulary plays a crucial role in learning an L2. Communicating in L2, in other words transmitting the messages, becomes possible with the use of vocabulary knowledge. According to Lessard-Clouston (2013), vocabulary means "the words of a language, including single items and phrases or chunks of several words which covey a particular meaning, the way individual words do" (p. 2) while "size of vocabulary knowledge is relatively straightforward to conceptualize, as it is basically counting known lexical items" (Schmitt, 2014, p. 915). At this point, it is important to note that words do not mean that they are separate elements of a language, yet, they belong to many interlinking layouts (Nation, 2001). According to Nation (2001), knowing a word includes knowing the form, the meaning and the use of the word, which involves such aspects as knowing the spoken and written forms, concepts, associations and grammatical functions of the word.

Vocabulary knowledge consists of one's receptive and productive vocabulary knowledge. While receptive vocabulary knowledge means comprehending the form and meaning of a word in listening or reading, productive vocabulary knowledge implies the actual and proper use of the words in speaking or writing (Nation, 2001). Recent studies have focused on vocabulary knowledge and vocabulary use (Johnson et al., 2016; Zhong, 2016) and productive vocabulary knowledge and speaking ability (Uchihara & Saito, 2016). In one study, Stæhr (2009) examined the link between listening comprehension and vocabulary knowledge in EFL setting and found that they were closely related. This finding suggests that vocabulary knowledge is a significant aspect of having a better listening comprehension. Thus, it is worthy of note that one of the fundamental constituents of language is vocabulary knowledge (Schmitt et al., 2001).

L2 learners often face a difficulty of learning large amounts of vocabulary while comprehending and using the target language, which also requires the learners to have tolerance of ambiguity when encountered with unknown vocabulary (Thornbury, 2002). When the learners have difficulty in understanding and using the words, this would certainly affect their language skills. Miralpeix and Muñoz (2018) investigated the participants' receptive vocabulary size and its relation with the language skills namely reading, listening, writing and speaking, and results showed that the proficiency level of the participants was substantially explicable by vocabulary size which was also closely related to writing and partially associated with listening, reading and speaking in higher levels. Laufer and Ravenhorst-Kalovski (2010) found a relation among learners' reading comprehension, lexical text coverage and their vocabulary size. In their research into vocabulary size and use based on the participants' writing, Laufer and Nation (1995) found that vocabulary size of the learners could speculate their actual language use. Stæhr's (2008) study in EFL setting found a strong relationship between the learners' receptive vocabulary size and their writing and reading skills while the ability of listening had a moderate relationship with vocabulary size. Besides, Schmitt (2014) stated that "the essence of vocabulary mastery is the ability to use lexical items fluently in communication" (p. 920). Hilton (2008) examined the relationship between spoken L2 fluency and vocabulary knowledge and found that lack of vocabulary knowledge could impede the learners' spoken L2 fluency. Together these studies provide important insights into the effect of vocabulary size on one's language skills. The fact remains that one of the main purposes of vocabulary learning is to enable learners to use their vocabulary knowledge communicatively (Laufer & Nation, 1995), which necessitates learners to have vocabulary knowledge to a certain degree and communicative competence. However, this is not enough for actual use of the target language, what learners also need is to be willing to communicate.

Individual differences and vocabulary knowledge are also interconnected. Fontecha and Gallego (2012) conducted a research with 8th and 9th grade students in Spanish EFL context in relation to age and motivation in students' receptive vocabulary size acquisition. The study indicated that students' vocabulary knowledge increased in time and the relation between vocabulary knowledge and age suggested that there were other components affecting the results of the students. The three receptive vocabulary tests and the level of motivation in 9th grade significantly correlated. In other words, the students with higher levels of motivation performed better in the vocabulary tests.

Within individual differences, anxiety is another factor affecting vocabulary knowledge. MacIntyre and Gregersen (2012) stated that when anxiety arouses, this could affect the learners' L2 vocabulary acquisition. Izadi and Zare (2016) found that the learners with good lexical knowledge had lower levels of anxiety and they had better results when compared to the learners having high levels of anxiety. MacIntyre and Legatto (2011) found that not being able to remember the necessary vocabulary appeared to arouse anxiety instantly and remembering a word that was already known became hard. MacIntyre and Doucette's (2010) study supported that hesitation was

related to not only language anxiety but also perceptions of communication competence. The study showed that supposing that students hesitated to speak in a case in which L2 was necessary, students would most probably be more anxious, their experience in L2 would be fewer and they would feel less proficient due to less practice.

MacIntyre et al. (1998) states that progress in linguistic competence is a prerequisite for WTC. Since linguistic competence involves knowing lexical resources, the relation between vocabulary and WTC needs attention. Cao (2014) found that feeling frustrated, perceiving small chance of communication and having low linguistic competence created low level of WTC. In the study, one of the participants explained his concern as limited range of vocabulary. MacIntyre et al. (1998) stated that the content and topic of the conversation had an important effect on the language use, and familiarity with the topic or register would promote individuals' linguistic self-confidence while having difficulty in register or unfamiliarity with the topic could discourage individuals even if they were usually confident in their speaking. Similarly, Cao (2011) pointed out that when it came to language use, not having enough lexical resources would have an impact on learners' communication. One of the participants explained this fact "I think um if my vocabulary isn't good enough, I can't have a good communication with others" (Cao, 2011, p. 474). Consequently, it is fair to say that there could exist a relationship between L2 learners' vocabulary size and their WTC in an L2.

2.2 Willingness to Communicate in a Second Language

As an individual difference variable, willingness to communicate (WTC) originated in L1 (McCroskey & Baer, 1985). This concept could be described as one's choice of speaking or not in a specific situation. MacIntyre et al. (1998) described the term "as a readiness to enter into discourse at a particular time with a specific person or persons, using a L2 (p. 547)". In general, two types of WTC, i.e., personality or trait-like WTC and situational or state level WTC, were distinguished. McCroskey and Baer (1985) conceptualized WTC as a personality trait which demonstrated a tendency to be constant in different contexts. MacIntyre et al. (1998) considered the term at the situational or state level by describing it as transient and open to changes in different contexts and situations. However, trait-like WTC and state level WTC are seen as complementary. Individuals' WTC depends on different factors which could directly or indirectly affect learners' learning process and their L2 use. MacIntyre et al. (1998) argue that the fundamental aim of language learning should be to create in learners the willingness to look for communication occasions with others and make them literarily to be willing to communicate with others. In the same direction, MacIntyre and Doucette (2010) state that WTC is essential in developing fluency in L2, which is language learners' primary goal in language learning. According to Kang (2005), "Willingness to communicate (WTC) is an individual's volitional inclination towards actively engaging in the act of communication in a specific situation, which

can vary according to interlocutor(s), topic, and conversational context, among other potential situational variables" (p. 291).

There are some variables affecting the construct of WTC, such as being introverted, one's communication competence, self-esteem, communication apprehension (McCroskey & Richmond, 1991). From this perspective, it is seen that one's perceived L2 WTC could show an alteration with regard to individual differences. Previous research indicated that individuals' L2 WTC was influenced by their beliefs (MacIntyre et al., 2001) and beliefs about L2 group work (Fushino, 2010), communication confidence (Fushino, 2010; Peng & Woodrow, 2010), learners' perceptions and attitudes (de Saint Léger & Storch, 2009), and international posture (Yashima, 2002; Yashima & Zenuk-Nishide, 2008). MacIntyre et al. (1998) used a heuristic pyramid-shaped model of L2 WTC to explain the factors that affect people's L2 WTC (Fig. 1).

Their pyramid-shaped model of WTC has six layers where the influences, either situationally dependent or enduring ones, are described. While the layers I, II and III are the examples of situational influences, the layers IV, V and VI shows the enduring influences. In other words, this model demonstrates the combination of situational and enduring influences which could affect one's L2 WTC. At the top of the model, there is L2 use which reflects one's communication behavior. This is followed by willingness to communicate which is related with one's behavioral intention to start a conversation. The model proceeds from situated antecedents like desire to engage in communication with a specific person to social and individual context such as intergroup climate and personality. It is a clear explanation of the factors influencing L2 WTC; yet, there have been attempts to confirm this model.

Investigating L2 WTC is a continuing concern within second language acquisition (SLA) research. Personal factors like age and gender have been investigated in

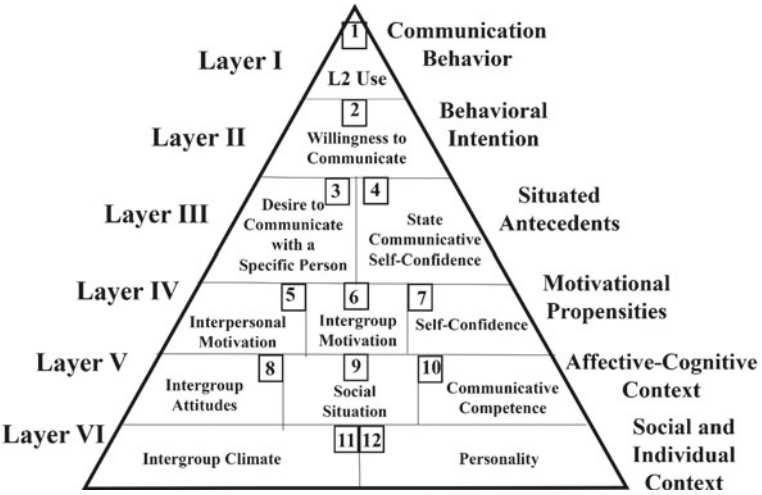

Fig. 1 Pyramid-shaped model of WTC (MacIntyre et al., 1998)

relation to WTC. One study by MacIntyre et al. (2002) examined if participants' L2 WTC changed with regard to age and gender and the study showed that WTC was affected by these factors. In another study, Donovan and MacIntyre (2004) investigated age and sex differences in WTC with participants from junior high, high school, and university. The results of the study indicated that female participants had higher WTC than male participants in general. Although it was partially supported, the study suggested that females' WTC levels lowered while males' WTC levels increased as time passed by.

Psychological factors like motivation and identity are also among the variables influencing WTC. MacIntyre et al. (2003) found that WTC strongly correlated with motivation for language learning. In the same direction, Peng (2007) found that motivation was the strongest predictor of L2 WTC and L2 WTC correlated with integrative motivation. Zarrinabadi and Haidary's (2014) research into WTC and identity styles of learners demonstrated that WTC had positive correlation with informational and normative identity style while it was negatively correlated with diffuse-avoidant identity style. Izadi and Zare (2016) found that high levels of anxiety was directly associated with the refraining from the interaction in the classroom. Kang's (2005) study showed that psychological conditions of security, excitement and responsibility influenced individuals' WTC as these occurred during a conversation by means of situational variables such as the context where communication took place, the topic and the interlocutor. MacIntyre et al. (2001) specified that language learning orientations affected learners' WTC inside and outside the classroom. Similarly, Zarrinabadi and Abdi's (2011) study showed that there was a significant relationship between language learning orientations and WTC inside and outside the classroom.

Educational factors have an impact on individuals' L2 WTC as well. MacIntyre et al. (2003) found that learners who had studied in immersion programs had higher levels of WTC when compared to non-immersion students. Yashima and Zenuk-Nishide (2008) investigated the effects of learning contexts on attitudes, communication behavior and proficiency development. The study showed that students who had study abroad experience showed better results and higher levels of WTC. Students who had content-based learning experience demonstrated an advantage in these parameters when they were compared with the students who had less exposure to content-based teaching.

Scholars investigated different personal, psychological and educational factors influencing WTC in their research. Peng and Woodrow (2010) examined the relation between WTC in English, classroom environment, learner beliefs, motivation and communication confidence. Ghonsooly et al. (2013) investigated EFL learners' level of WTC in L2, and the relationships between WTC, classroom environment and communication confidence. In Turkish EFL setting, Asmalı (2016) probed the predictors of L2 WTC by focusing on EFL learners' communication confidence in the target language, their attitudes towards international community and motivation to learn L2. Aydın (2017) conducted a research to find out the underlying factors of WTC among Turkish EFL students with a qualitative research design and the results revealed that the student, the teacher, other students, topic, classroom atmosphere, materials, administration and activities affected the students' WTC. Apart

from these, it is possible to encounter with learners with a high-proficiency level although they are not eager to start a conversation in the target language (Dörnyei, 2005; Dörnyei & Ryan, 2015). Viewed from this perspective, this could be helpful to explain the EFL learners' unwillingness to communicate even if they can understand the conversation or they have good exam scores in Turkish education context. In this direction, McCroskey and Richmond (1991) stated that how individuals perceived their skills could be more significant than their actual skill levels; therefore, they suggested that WTC and skill level were interconnected.

Several attempts have been made to identify the predictors of L2 WTC in L2 learning. Some researchers (Cao, 2011; Peng, 2012) investigated L2 WTC from an ecological perspective, whereas other researchers (e.g., Cao, 2014) conducted research into it from a socio-cognitive perspective. The teachers' effect on students' L2 WTC was another research interest among scholars. Wen and Clément (2003) showed that teacher involvement, immediacy and support influenced the learners' L2 WTC. In Iranian EFL setting, Zarrinabadi (2014) found that teacher-based factors such as decision on the topic, error correction, teachers' wait time and support had an impact on learners' L2 WTC. Furthermore, recent studies have focused on L2 WTC's relation with L2 achievement (Mahmoodi & Moazam, 2014) along with the differential effects of implicit and explicit corrective feedback on the learners' WTC in Iranian EFL context (Tavakoli & Zarrinabadi, 2016). In addition, several attempts have been made to examine the relation between L2 WTC and personality traits (Ghonsooly et al., 2012; MacIntyre & Charos, 1996; Öz, 2014) and the association between L2 WTC and ideal L2 self (Bursalı & Öz, 2017; Munezane, 2010, 2013, 2015; Öz, 2016). As it is seen, interest in L2 WTC has accelerated over time. Moreover, MacIntyre and Legatto (2011) suggested a more dynamic perspective identified as idiodynamic method to measure the changes in learners' L2 WTC. With this new methodology, research into L2 WTC has diverged to dynamic nature of L2 WTC. Several scholars have investigated L2 WTC by focusing on this dynamic nature (e.g., Pawlak & Mystkowska-Wiertelak, 2015; Pawlak et al., 2016; Wood, 2016).

In recent years, some studies have demonstrated that L2 learners' vocabulary knowledge influences their L2 WTC in the classroom. To illustrate, Pawlak and Mystkowska-Wiertelak's (2015) study on the dynamic nature of L2 willingness to communicate focused on the process of a conversation between pairs by investigating the learners' L2 WTC and the possible reasons of the changes during the conversation. The results of the research indicated that learners' L2 WTC was affected by a range of factors such as the relationship with the conversational partner, the topic and the individual differences along with the competence in the necessary vocabulary. In another study, Wood (2016) found that when the participants had difficulty in vocabulary such as finding the appropriate word or inadequacy in essential vocabulary knowledge, they felt frustrated and had lower levels of WTC. Altiner's (2017) research into Turkish EFL learners' L2 WTC found an indirect relationship between the participants' L2 WTC and their lexical size via communication confidence. In MacIntyre and Legatto's (2011) study, when participants had difficulty in recalling the necessary words or terminology, their WTC levels were low, and their confidence level decreased. Based on the topic, their WTC levels changed, for example,

if they had vocabulary knowledge in that topic, their WTC levels were moderately high, however, if they lacked vocabulary and knowledge, their WTC levels substantially decreased. Additionally, one of the participants stated that her confidence in vocabulary was the reason of her high WTC levels during the study. In the same vein, Akbarzadeh and Narafshan's (2016) study showed that students' level of WTC decreased when they had a limited vocabulary. Apart from these studies, Marzban and Firoozjahantigh (2017) investigated the relationship between WTC and vocabulary learning strategies and the results of the study demonstrated that there was a significant correlation between these two constructs. They suggested that vocabulary learning strategies affected learners' vocabulary knowledge and size which thereby could have an impact on WTC.

Together these studies provide significant insights into the nature of L2 WTC in relation to vocabulary, suggesting that there could be an association between L2 learners' vocabulary knowledge and their L2 WTC. However, more research on this topic needs to be undertaken before the association between vocabulary size and L2 WTC is more clearly understood. In other words, since research into L2 WTC is still at its emerging stage, further research is required to better comprehend the concept. The current study aimed at contributing to this growing area of L2 WTC research by exploring the EFL learners' vocabulary size and their L2 WTC. To this end, the following research questions were formulated to guide the present study:

(1) What is the perceived level of willingness to communicate (WTC) among Turkish EFL learners?
(2) Are there any significant differences between participants' vocabulary size and WTC in relation to demographic factors?
(3) To what extent can the variability in participants' perceptions of WTC be predicted by vocabulary size?

3 Method

3.1 Research Design

The current study was carried out with a quantitative research paradigm. The data were collected through questionnaires to obtain information about the participants' demographic background such as gender and age and their vocabulary levels along with their perceptions of willingness to communicate inside the classroom.

3.2 Setting and Participants

The present research was conducted in an EFL teacher education program at a major state university in Turkey. A total of 100 EFL learners (male: $N = 27$ and female:

$N = 73$) enrolled in the program voluntarily participated in the study and they gave informed consent for data collection. The participants ranged in age from 18 to 23 ($M = 19.56$, $SD = 1.14$). Without any consultation among themselves, the participants filled out the questionnaires during the regular class hours and the surveys were anonymous.

3.3 Instruments

3.3.1 Vocabulary Levels Tests

Vocabulary Levels Test (Schmitt et al., 2001) was used to find out the participants' estimated vocabulary size of general and academic English, which focused on receptive vocabulary knowledge of the participants. Vocabulary Levels Test (VLT) includes parts for the most frequent 2000, 3000, 5000, 10,000 words and for academic vocabulary. Information about the most frequent 2000 words provides the lexical resource which is needed for everyday communication. 3000-word level supplies more information about spoken discourse, in addition, it is the threshold where individuals start reading authentic materials. 5000-word level provides adequate vocabulary for individuals to read authentic texts. At this level, individuals can deduce the meaning of many unknown words from the context and comprehend the communicative content of the text in general. 10,000-word level provides a wide range of vocabulary while academic word level provides knowledge of sub-technical vocabulary for learners who would like to study in programs where the medium of instruction is English. Each of these different word levels is arranged in a multiple matching format including 30 items. Kremmel and Schmitt (2018) explain this VLT as follows:

> Three items therefore represent 100 words of any particular frequency band. Items are clustered together in 10 groups for this, so that learners are presented in each cluster with six words in a column on the left and the corresponding meaning senses of three of these in another column on the right. Learners are asked to match each meaning sense in the right-hand column with one single word from the left hand column. (p. 1)

For this study, we sought to measure the participants' knowledge of around 3000 words, most frequent 5000 words and academic vocabulary. The participants were asked to match the words with the correct definitions.

3.3.2 Willingness to Communicate Inside the Classroom

Willingness to Communicate inside the Classroom Scale (MacIntyre et al., 2001) was used to determine the participants' perceived level of willingness to communicate in their class hours. It is a 27-item 5-point Likert scale which involves statements about writing, reading, speaking and comprehension in the target language. The participants were asked to indicate their level of willingness to communicate according to each

specific situation from 1 to 5 (1 = almost never willing, 2 = sometimes willing, 3 = willing half of the time, 4 = usually willing, and 5 = almost always willing).

3.4 Procedures for Data Collection and Analysis

The current study was conducted in an EFL teacher education program at a major state university in Turkey. To analyze the collected data, both descriptive and inferential statistics were used. Descriptive statistics such as mean, standard deviation, and frequencies were used to characterize the data and provided preliminary information about the variables under inquiry. The participants' WTC level were classified as high, moderate, and low based on the average mean score of the total sample size. That is, the scores one standard deviation above the average mean score were considered as high WTC and the scores one standard deviation below the average mean score were treated as low WTC. The scores fallen between these two extremes were dealt with as moderate WTC level. Inferential statistics such as independent samples t-test and ANOVA were utilized to see if there were differences among the participants with regard to demographic factors including gender, grade level, and age. Finally, structural equation modelling, using Amos version 23, was used to find out the degree to which the participants' vocabulary level could predict their willingness to communicate inside the classroom.

4 Results

To answer the first question, descriptive statistics for willingness to communicate inside the classroom were run. The findings revealed relatively reasonable WTC level among the respondents. The mean score for the whole scale was ($M = 3.79$, $SD = 0.64$). Further analysis revealed that female participants had higher mean score ($M = 3.80$, $SD = 0.65$) than males ($M = 3.76$, $SD = 0.61$), indicating that female participants perceived higher levels of WTC. Additionally, the analysis of frequency statistics showed that 32% of the participants had high, 54% had moderate, and 14% had low levels of WTC inside the classroom. Item by item analysis of the responses, as seen in Table 1, revealed that the 67% of the participants had reported mean scores above the average mean score of the whole scale, i.e., above 3.79, whereas 33% fell below the average mean score. The highest mean score ($M = 4.60$, $SD = 0.72$) was seen in item 27 "Understand an English movie", while the lowest mean score was observed in item 6 "How willing would you be to be an actor in a play?".

An independent samples t-test was conducted to see whether there was a difference in participants' perceptions of WTC inside the classroom and their vocabulary size with regard to gender factor. The findings revealed no statistically significant difference among the participants in relation to their WTC since the p-value was larger than 0.05, $t\,(98) = 0.78$, $p > 0.05$. As for the participants' vocabulary level, the

Table 1 Descriptive statistics of WTC inside the classroom

Item		N	Min	Max	Mean	SD
1	Speaking in a group about your summer vacation	100	1	5	3.48	1.13
2	Speaking to your teacher about your homework assignment	100	1	5	3.42	1.16
3	A stranger enters the room you are in, how willing would you be to have a conversation if he talked to you first?	100	1	5	3.85	1.10
4	You are confused about a task you must complete, how willing are you to ask for instructions/clarification?	100	1	5	3.91	1.03
5	Talking to a friend while waiting in line	100	1	5	4.01	1.04
6	How willing would you be to be an actor in a play?	100	1	5	2.78	1.49
7	Describe the rules of your favorite game	100	1	5	3.61	1.21
8	Play a game in English, for example Monopoly	100	1	5	3.89	1.18
9	Read a novel	100	1	5	4.03	1.10
10	Read an article in a paper	100	1	5	3.94	1.01
11	Read letters from a pen pal written in native English	100	1	5	3.98	1.09
12	Read personal letters or notes written to you in which the writer has deliberately used simple words and constructions	100	1	5	4.20	0.92
13	Read an advertisement in the paper to find a good bicycle you can buy	100	1	5	3.86	1.26
14	Read reviews for popular movies	100	1	5	4.38	0.95
15	Write an advertisement to sell an old bike	100	1	5	3.22	1.42
16	Write down the instructions for your favorite hobby	100	1	5	3.70	1.18
17	Write a report on your favorite animal and its habits	100	1	5	3.62	1.31
18	Write a story	100	1	5	3.59	1.31
19	Write a letter to a friend	100	1	5	3.79	1.28
20	Write a newspaper article	100	1	5	2.85	1.37
21	Write the answers to a “fun” quiz from a magazine	100	1	5	3.59	1.29
22	Write down a list of things you must do tomorrow	100	1	5	3.79	1.26
23	Listen to instructions and complete a task	100	1	5	4.03	0.98
24	Bake a cake if instructions were not in Turkish	100	1	5	4.16	1.12
25	Fill out an application form	100	1	5	3.91	1.11
26	Take directions from an English speaker	100	1	5	4.20	1.06
27	Understand an English movie	100	1	5	4.60	0.72

findings, Table 2, indicated a significant difference among participants only in the 5000 word level, $t(98) = -2.13$, $p = 0.035$. However, there was no difference among participants in terms of their vocabulary levels in the 3000 and academic vocabulary word levels.

One-way analysis of variance (ANOVA) was run to find out if the participants differed in their WTC and vocabulary level with regard to grade level. The findings, as shown in Table 3, demonstrated a statistically significant difference among participants only in the 3000 word level, $F(97, 2) = 4.25$, $p < 0.05$, with a moderate effect size of 0.069, Eta Squared ($\eta^2 > 0.059$). No significant differences were observed among participants in 5000 and academic word level. It should be also noted that

Table 2 Independent samples t-test for WTC and vocabulary level

Group statistics					Independent samples test		
	Gender	N	Mean	SD	t	df	Sig.
The 3000 word level	Female	73	27.06	2.15	−1.12	98	0.265
	Male	27	27.60	2.48			
The 5000 word level	Female	73	23.00	3.70	−2.13	98	0.035
	Male	27	25.36	3.84			
Academic vocabulary	Female	73	27.27	2.33	0.018	98	0.985
	Male	27	27.26	2.43			

Table 3 Differences in WTC and vocabulary size by grade level

Grade level		*N*	Mean	*SD*	Mean square	F	df	Sig.
WTC	1st year	67	100.46	17.83	747.343		2	
	2nd year	25	106.72	15.74	291.483	2.56	97	0.08
	3rd year	8	112.37	14.15				
	Total	100	102.38	17.30				
The 3000 word level	1st year	67	27.20	2.11	20.233		2	
	2nd year	25	27.74	2.23	4.760	4.25	97	0.01
	3rd year	8	25.33	2.59				
	Total	100	27.20	2.24				
The 5000 word level	1st year	67	23.31	3.71	23.020		2	
	2nd year	25	24.61	4.07	14.788	1.55	97	0.65
	3rd year	8	22.66	4.21				
	Total	100	23.60	3.86				
Academic vocabulary	1st year	67	27.28	2.27	6.150			
	2nd year	25	27.54	2.11	5.517	1.11	2	0.33
	3rd year	8	26.22	3.56			97	
	Total	100	27.27	2.35				

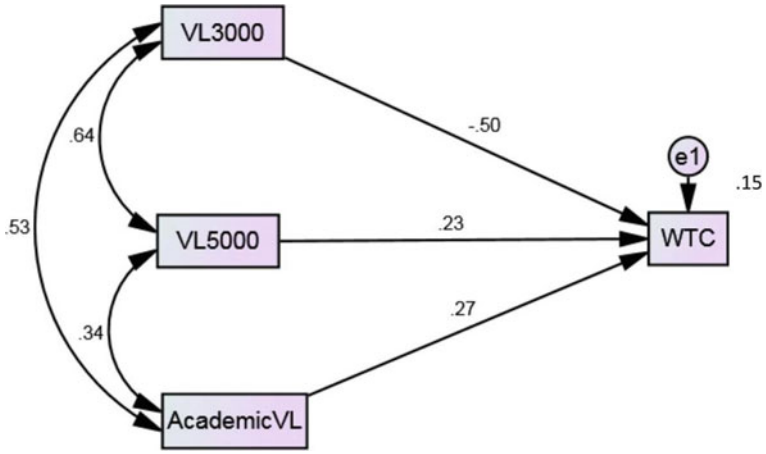

Fig. 2 The relationship between vocabulary level and WTC inside the classroom. *Note* VL equals to vocabulary level

ANOVA was also conducted to discover the role of age factor in the participants' WTC level. The findings, however, showed no significant differences among the participants in terms of age variable.

Structural equation modeling (SEM) was conducted to find out if there was a relationship between vocabulary level and the participants' willingness to communicate inside the classroom. As illustrated in Fig. 2, vocabulary level of the participants significantly predicted their WTC inside the classroom. The 3000 word level appeared as the strongest predictor of WTC ($\beta = -0.50$, $p < 0.001$), followed by academic word level ($\beta = 0.27$, $p < 0.01$), and the 5000 word level ($\beta = 0.23$, $p < 0.01$) as the predictors of the participants' WTC. This indicated that the participants perceived the 3000 word level coupled with academic vocabulary constituted building blocks for their communication abilities. The findings also indicated significant correlation among the indicator variables. The 3000 word level strongly correlated with the 5000 and academic word level variables ($p < 0.001$), while the 5000 word level moderately correlated with academic word level. An inspection of squared multiple correlations further revealed that vocabulary word level accounted for 15% of the variance in the participants' WTC inside the classroom.

5 Discussion

The present study focused on the relationship between EFL learners' vocabulary knowledge and their L2 WTC inside the classroom. With respect to the first research question, it was found that Turkish EFL learners had moderate level of willingness to communicate. 32% of the participants had high, 54% had moderate, and 14%

had low levels of WTC inside the classroom. This was in line with Altıner's (2017) finding which demonstrated a moderate level of L2 WTC among participants. This finding was also compatible with Öz et al.'s (2015) results which revealed that 21.6% of the participants had high L2 WTC, 61.2% had moderate WTC, and 17.2% had low WTC. Similarly, Öz (2016) found that 36.5% of the participants had high WTC, 44.8% had moderate WTC, and 18.8% had low WTC. However, it slightly differed from Bursalı and Öz's (2017) findings when it came to moderate and low levels of WTC inside the classroom although the participants' high levels of WTC were almost the same. Apart from these studies, Cetinkaya (2005) found that Turkish EFL learners were willing to communicate to a certain degree. While this study replicated the findings of the previous work; meanwhile, they were extended through using Vocabulary Levels Test.

The participants' answers demonstrated that the situation in which they would be most willing to communicate was the item "Understand an English movie". This finding was consistent with Bursalı and Öz's (2017) finding in their research into willingness to communicate inside the classroom and ideal L2 self. A possible explanation for this might be that both studies were conducted in EFL teacher education programs in Turkish educational setting. However, this study showed that the situation in which the participants would be least willing to communicate was the item "How willing would you be to be an actor in a play?" This result differed from Bursalı and Öz's (2017) finding about the least willing situation which was "Write a newspaper article". in their study. Although conducted in the same EFL context, this difference might be explained by the fact that the construct of L2 WTC reflects individual differences. Therefore, it is possible to obtain different findings.

This study showed that female participants perceived higher levels of WTC and this result was in line with Öz's (2016) and Donovan and MacIntyre's (2004) findings. Nevertheless, it contrasted with Bursalı and Öz's (2017) and Öz et al.'s (2015) findings which revealed that male participants had higher scores regarding their WTC. However, there was not a statistically significant difference between groups.

When it comes to the relation between participants' vocabulary size and WTC in relation to demographic factors, there was not a significant difference in participants' perceptions of WTC inside the classroom and their vocabulary size in terms of gender factor. As for the participants' vocabulary level, the findings indicated a significant difference among participants only in the 5000 word level. However, there was no difference among participants with regard to their vocabulary levels in the 3000 and academic vocabulary word levels. This result could be related to the participants' previous L2 learning experience, e.g., whether they studied in a preparatory class or not.

The findings about the participants' L2 WTC and vocabulary level in relation to grade level revealed that there was a statistically significant difference among participants only in the 3000 word level. This implied that grade level in higher education did not have a profound effect on the participants' perceived levels of L2 WTC and their vocabulary levels. As for the age variable, the findings indicated that the participants' L2 WTC level showed no significant differences among the

participants. From this finding, it could be asserted that the participants' perceived levels of WTC were not related to their age at the university level.

The current study found that vocabulary level of the participants significantly predicted their WTC inside the classroom. The 3000 word level appeared as the strongest predictor of WTC, followed by academic word level, and the 5000 word level as the predictors of the participants' WTC. This indicated that the participants perceived the 3000-word level coupled with academic vocabulary constituted building blocks for their communication abilities. This finding was in agreement with MacIntyre and Legatto's (2011) finding in that their study showed that when the participants did not know the required vocabulary to complete the tasks or when they had difficulties in finding the necessary vocabulary, they had lower levels of L2 WTC. In the same direction, Peng (2012) found that when the participants faced a problem of recalling the essential vocabulary in the target language, their L2 WTC levels frequently decreased. This finding was also in line with Wood's (2016) finding which showed that difficulty in vocabulary resulted in having lower levels of L2 WTC. Similarly, Akbarzadeh and Narafshan (2016) found that when students did not have enough vocabulary knowledge, their level of WTC decreased. The association between WTC and the vocabulary knowledge was also seen in Pawlak and Mystkowska-Wiertelak's (2015) study. It could thus be suggested that competence in lexical items brought about higher levels of L2 WTC among the learners. This finding of the current study supported Altıner's (2017) finding which indicated an indirect link between the participants' lexical size and their L2 WTC via communication confidence. Overall, the findings of the present study revealed that vocabulary word level accounted for 15% of the variance in the participants' WTC inside the classroom.

6 Conclusion

The present study set out to inquire about the relationship between vocabulary size of the learners and their willingness to communicate inside the classroom. The findings showed that vocabulary level of the participants significantly predicted their WTC inside the classroom. It is, therefore, suggested that the foreign language learners should have the opportunity to develop their vocabulary knowledge in the target language, and their ability to interact with others. For this reason, the teachers should provide the students with an opportunity of the environment in which they can form an interaction in English and actively use their vocabulary knowledge. The teachers should select the vocabulary items according to their frequency and provide learners with chance of diversified presentation of new words. They should help learners to memorize new vocabulary items to enlarge their vocabulary size with different techniques such as using mnemonics and games. The activities should be meaningful and help learners' continuous learning. With role plays and simulations, the teachers should encourage learners to use new words in communication. In this way, the learners could develop their vocabulary knowledge and having better vocabulary

knowledge would bring not only self-confidence in L2 but also better levels of L2 WTC.

The students in EFL contexts, as in the Turkish EFL setting, do not have the chance of communicating with others in the target language outside the classroom. They get exposure to the target language in their language lessons or if they are studying in a department whose medium of instruction is English. However, they inevitably need English during their education and in their future lives. This requires them to interact with others in English. Therefore, they need not only to develop their language knowledge and skills but also to be willing to communicate. From this perspective, this study highlights the importance of the relationship between vocabulary size of the learners and their L2 WTC. Given the fact that having high levels of L2 WTC affects the students' language learning process, the activities should be arranged with the aim of raising students' vocabulary knowledge and their perceived L2 WTC. Language teachers, pre-service language teachers, curriculum designers and teacher trainers should take into consideration this relation when implementing the decisions about vocabulary in language education.

The aim of vocabulary teaching is to enhance students' vocabulary knowledge, to develop their usable vocabulary size and to gain them vocabulary learning strategies (Nation, 2001). Usable vocabulary size means increasing vocabulary knowledge and improving the skills and fluency to use that vocabulary in different language skills (Nation, 2001). To gain students these abilities, the teachers need to find out the learners' vocabulary size, which could be determined via Vocabulary Levels Test. Apart from this, the students have different interests such as music, literature, history, culture and sport and they also have different learning styles like visual and aural. Therefore, the teachers should bear in mind not only their students' personal characteristics but also the students' differences in learning to provide effective learning environment for them. Ascertaining these aspects at the beginning of the academic year and designing vocabulary activities accordingly will be effective to gain students above mentioned skills. During the lessons, the studied vocabulary items could be practiced through communicative activities in which students use their vocabulary knowledge. Pair work and group work could be selected for these activities in which students will use language in a more comfortable classroom atmosphere. In this way, it becomes possible to develop students' vocabulary knowledge. When we take the relationship between vocabulary size and L2 WTC into consideration, developing students' vocabulary knowledge would help them to have higher levels of L2 WTC.

This study was conducted with a quantitative research design. For further research, the relationship between the participants' L2 WTC and their vocabulary knowledge could be examined by qualitative or mixed research designs in order to probe the issue in depth in other contexts. The learners could explain their perspectives on the relationship between their vocabulary knowledge and L2 WTC. This study centered upon the relationship between participants' L2 WTC and their receptive vocabulary knowledge. It could be extended by including productive vocabulary knowledge as well. The learners' vocabulary use in oral communication and writing could be investigated. Longitudinal studies could be conducted to see the development of learners' vocabulary size and their L2 WTC. Communicative activities like communicative

crossword puzzles could be implemented to the lessons and their effects on learners' vocabulary knowledge and L2 WTC could be investigated. Phrasal verbs and idioms could be selected to develop learners' vocabulary knowledge. These could be practiced through comics and role plays. Pre-tests and post-tests about vocabulary and L2 WTC could be applied to see if these activities enhance language learners' vocabulary knowledge and their L2 WTC. In groups, the learners could make videos using studied vocabulary items and the videos could be analyzed through conversation analysis by focusing on their vocabulary use and L2 WTC. Further study could also examine the relation between age and L2 WTC by comparing different age groups in primary education, secondary education and higher education.

Based on previous research, there are various antecedents of L2 WTC from individual differences factors such as motivation and anxiety to personality traits like being introverted or extraverted along with international posture (Yashima, 2012). Apart from these, the learners' perceived L2 WTC is also affected from the topic discussed in the lessons and from the teacher as mentioned earlier. It is clear that the construct of L2 WTC is not easy to conceptualize with its various predictors and other influencing factors. For this reason, one should also take the context into consideration while assessing and working on L2 WTC. As in other studies, the present research is not without some limitations. First, the study was conducted with English majors in teacher education program in Turkish EFL context. Conducting the study in different departments, preparatory classes and educational levels could yield different results. Second, the participants' actual use of vocabulary in spoken interaction and in written forms was not taken into account in this study. Third, the results were not supported by the participants' thoughts about their vocabulary knowledge and their perceived levels of L2 WTC. Implementing different research designs and adding productive vocabulary knowledge could result in different outcomes. Hence, the generalizations in this study should be approached cautiously.

Appendix: Vocabulary Levels Test

Instructions for Vocabulary Test

This is a vocabulary test. You must choose the right word to go with each meaning. Write the number of that word next to its meaning. Here is an example.

1 business		
2 clock	_____	part of a house
3 horse	_____	animal with four legs
4 pencil	_____	something used for writing
5 shoe		
6 wall		

You answer it in the following way.

1 business		
2 clock	_____	part of a house
3 horse	_____	animal with four legs
4 pencil	_____	something used for writing
5 shoe		
6 wall		

Some words are in the test to make it more difficult. You do not have to find a meaning for these words. In the example above, these words are *business*, *clock* and *shoe*.

If you have no idea about the meaning of a word, do not guess. But if you think you might know the meaning, then you should try to find the answer.

The 3000 word level

1 bull		
2 champion	_____	formal and serious manner
3 dignity	_____	winner of a sporting event
4 hell	_____	building where valuable
5 museum		objects are shown
6 solution		

1 abandon		
2 dwell	_____	live in a place
3 oblige	_____	follow in order to catch
4 pursue	_____	leave something
5 quote		permanently
6 resolve		

1 blanket		
2 contest	_____	holiday
3 generation	_____	good quality
4 merit	_____	wool covering used on
5 plot		beds
6 vacation		

1 assemble		
2 attach	_____	look closely
3 peer	_____	stop doing something
4 quit	_____	cry out loudly in fear
5 scream		
6 toss		

1 comment		
2 gown	_____	long formal dress
3 import	_____	goods from a foreign
4 nerve		country
5 pasture	_____	part of the body which
6 tradition		carries feeling

1 drift		
2 endure	_____	suffer patiently
3 grasp	_____	join wool threads together
4 knit	_____	hold firmly with your hands
5 register		
6 tumble		

1 administration		
2 angel	_____	group of animals
3 frost	_____	spirit who serves God
4 herd	_____	managing business and
5 fort		affairs
6 pond		

1 brilliant		
2 distinct	_____	thin
3 magic	_____	steady
4 naked	_____	without clothes
5 slender		
6 stable		

1 atmosphere		
2 counsel	_____	advice
3 factor	_____	a place covered with grass
4 hen	_____	female chicken
5 lawn		
6 muscle		

1 aware		
2 blank	_____	usual
3 desperate	_____	best or most important
4 normal	_____	knowing what is happening
5 striking		
6 supreme		

The 5000 word level

1 analysis	
2 curb	_____ eagerness
3 gravel	_____ loan to buy a house
4 mortgage	_____ small stones mixed with sand
5 scar	
6 zeal	

1 contemplate	
2 extract	_____ think about deeply
3 gamble	_____ bring back to health
4 launch	_____ make someone angry
5 provoke	
6 revive	

1 cavalry	
2 eve	_____ small hill
3 ham	_____ day or night before a holiday
4 mound	
5 steak	_____ soldiers who fight from horses
6 switch	

1 demonstrate	
2 embarrass	_____ have a rest
3 heave	_____ break suddenly into small pieces
4 obscure	
5 relax	_____ make someone feel shy or nervous
6 shatter	

1 circus	
2 jungle	_____ musical instrument
3 nomination	_____ seat without a back or arms
4 sermon	
5 stool	_____ speech given by a priest in a church
6 trumpet	

1 correspond	
2 embroider	_____ exchange letters
3 lurk	_____ hide and wait for someone
4 penetrate	_____ feel angry about something
5 prescribe	
6 resent	

1 artillery	
2 creed	_____ a kind of tree
3 hydrogen	_____ system of belief
4 maple	_____ large gun on wheels
5 pork	
6 streak	

1 decent	
2 frail	_____ weak
3 harsh	_____ concerning a city
4 incredible	_____ difficult to believe
5 municipal	
6 specific	

1 chart	
2 forge	_____ map
3 mansion	_____ large beautiful house
4 outfit	_____ place where metals are made and shaped
5 sample	
6 volunteer	

1 adequate	
2 internal	_____ enough
3 mature	_____ fully grown
4 profound	_____ alone away from other things
5 solitary	
6 tragic	

Academic vocabulary

1 area	
2 contract	_____ written agreement
3 definition	_____ way of doing something
4 evidence	_____ reason for believing something is or is not true
5 method	
6 role	

1 debate	
2 exposure	_____ plan
3 integration	_____ choice
4 option	_____ joining something into a whole
5 scheme	
6 stability	

1 access	
2 gender	_____ male or female
3 implementation	_____ study of the mind
4 license	_____ entrance or way in
5 orientation	
6 psychology	

1 accumulation	
2 edition	_____ collecting things over time
3 guarantee	_____ promise to repair a broken product
4 media	
5 motivation	_____ feeling a strong reason or need to do something
6 phenomenon	

1 adult			1 alter		
2 exploitation	_____	end	2 coincide	_____	change
3 infrastructure	_____	machine used to move people or goods	3 deny	_____	say something is not true
4 schedule			4 devote	_____	describe clearly and exactly
5 termination	_____	list of things to do at certain times	5 release		
6 vehicle			6 specify		

1 correspond			1 bond		
2 diminish	_____	keep	2 channel	_____	make smaller
3 emerge	_____	match or be in agreement with	3 estimate	_____	guess the number or size of something
4 highlight			4 identify		
5 invoke	_____	give special attention to something	5 mediate	_____	recognizing and naming a person or thing
6 retain			6 minimize		

1 explicit			1 abstract		
2 final	_____	last	2 adjacent	_____	next to
3 negative	_____	stiff	3 controversial	_____	added to
4 professional	_____	meaning `no' or `not'	4 global	_____	concerning the whole world
5 rigid			5 neutral		
6 sole			6 supplementary		

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Some Directions for Future Research on Willingness to Communicate

Nourollah Zarrinabadi

1 Introduction

This final chapter presents some directions for further research on WTC. The venues I outline for future research are related to different language skills, linguistic, pedagogical, psychological, and technological issues that might interact with or influence learners' WTC. Each of these venues for future research is described in detail in the following sections.

1.1 Willingness to Communicate in Other Skills

Reviews on studies conducted on L2 WTC show that the majority of research on L2 WTC has focused on communication as speaking and talk (see Zarrinabadi & Khodarahmi, 2017; Zarrinabadi & Tanbakooei, 2016) while a few studies have been conducted on WTC in other skills such as the works by Khajavy & Ghonsooly, (2017) and MacIntyre et al., (2001). MacIntyre et al., (2001) measured L2 WTC by developing a scale that measured WTC in regards to four language skills (i.e., reading, writing, speaking, and listening). Moreover, Khajavy and Ghonsooly (2017) investigated willingness to read in the Iranian EFL context and found that L2 learning experience, ideal L2 self, and communication confidence positively predicted willingness to read. They also reported that L2 learning experience was the strongest predictor of willingness to read. It will be interesting for future research to examine willingness to communicate in other skills such as willingness to write, read or listen and see whether the same findings about WTC as speaking would replicate. Also, it

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N. Zarrinabadi and M. Pawlak (eds.), *New Perspectives on Willingness to Communicate in a Second Language*, Second Language Learning and Teaching,
https://doi.org/10.1007/978-3-030-67634-6_13

would be interesting to examine WTC across different language skills, see how they relate to each other, and find whether the same predictors work for WTC in different skills.

1.2 Pedagogical Practices and WTC

Scholars argue that teachers' behavior and pedagogical issues can influence learners' WTC (Peng, 2014; Tavakoli & Zarrinabadi, 2018; Weaver, 2005; Zarrinabadi, 2014). Zarrinabadi (2014) for example, reported that error correction significantly influenced Iranian learners' WTC. Zarrinabadi noted that immediate error correction positively facilitated WTC while on the spot error correction reduced it. Later on, Tavakoli and Zarrinabadi (2018) reported that explicit error correction positively influenced WTC while implicit error correction did not foster it. Also, Jamalifar and Salehi (2020) compared the effects of rehearsal and strategic task planning and reported that rehearsal tasks significantly influenced WTC by enhancing L2 self-confidence. These indications in the literature indicate that pedagogical activities and teacher-related factors have the potential to exert an impact on learners' willingness to talk in L2 classrooms. Future research in the field can examine different classroom practices and teaching techniques that improve L2 WTC. In regards to willingness to write, for example, researchers can examine the ways in which different types of corrective feedback influence L2 willingness to write. Also, it would be interesting to see whether different task types and task planning, and task repetition affect WTC in one of the skills.

1.3 Psychological Interventions and WTC

Although psychological interventions are highly popular in disciplines such as educational psychology and social psychology, few psychological interventions are conducted in SLA, particularly to enhance EFL/ESL students' willingness to communicate. Research has shown that psychological strategies and interventions can be useful to enhance non-linguistic aspects of language learning (Tavakoli et al., 2018; Zarrinabadi et al., 2019). Zarrinabadi et al. (2019), in a person-centered future time perspective intervention study, reported that creating a future time perspective among EFL learners could enhance autonomy, self-confidence and WTC. It is suggested that researchers employ different psychological interventions to see if learners' WTC can be facilitated in L2 learning contexts. Developing a growth mindset intervention or using different types of praise are among the psychological interventions that have the potential to foster WTC.

1.4 Examining WTC in L3-LX

Another venue for research might be examining different aspects of WTC in L3 and LX. Studies might be to compare L2 and L3 samples in terms of WTC. Given the recent studies on motivational issues in L3 (Henry, 2011, 2014), researchers can examine how L3 WTC relates to other psychological, contextual, and linguistic factors and also compare L2 with L3 WTC to see if language learning experience (i.e., learning an L2) influences one's WTC in L3. Such studies can be replications of L2 WTC studies or may include both L2 and L3 samples and compare the findings to see if different patterns are observed for L3 WTC.

1.5 WTC and Technology

Recently, Freiermuth and Zarrinabadi (2020) published an edited volume on the links between technology and psychology of language learning and using. The book included many interesting chapters by different scholars around the world who examined the ways in which technology, computers, and mobile phones influenced different psychological factors involved in language learning (e.g., WTC, self-concept, mindsets, motivation). There are several research venues within this area. For example, researchers can examine WTC in online contexts and social networks and see if the same variables as in face-to-face communication influence learners' WTC. Moreover, teachers and researchers may examine different online, computer-assisted or mobile-assisted instructional practices that help enhance learners' WTC.

2 Concluding Remarks

This volume presented several studies on different aspects of L2 WTC. The studies presented in this edited volume responded to the need in the literature for examining WTC from new theoretical perspectives (e.g., complex dynamic perspectives and social network theory), in regards to language skills (e.g., vocabulary), new teaching methods (flipped classroom strategy), new methodological perspectives (e.g., experience case sampling) and so on. We hope that the chapters presented in this edited volume as well as the research directions outlined in this chapter provide researchers and language teachers with ideas on how to foster willingness to communicate and authentic communication in L2 classrooms.

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