

Comparing the Willingness to Communicate in a Foreign Language of Bilinguals and Monolinguals

S. Tarighat, F. Shateri

II. LITERATURE REVIEW

Abstract—This study explored the relationship between L2 Willingness to Communicate (WTC) of bilinguals and monolinguals in a foreign language using a snowball sampling method to collect questionnaire data from 200 bilinguals and monolinguals studying a foreign language (FL). The results indicated a higher willingness to communicate in a foreign language (WTC-FL) performed by bilinguals compared to that of the monolinguals with a weak significance. Yet a stronger significance was found in the relationship between the age of onset of bilingualism and WTC-FL. The researcher proposed that L2 WTC is indirectly influenced by knowledge of other languages, which can boost L2 confidence and reduce L2 anxiety and consequently lead to higher L2 WTC when learning a different L2. The study also found the age of onset of bilingualism to be a predictor of L2 WTC when learning a FL. The results emphasize the importance of bilingualism and early bilingualism in particular.

Keywords—Bilingualism, foreign language learning, L2 acquisition, willingness to communicate.

I. INTRODUCTION

BILINGUALISM used to be considered a mere advantage in communication in the history of language learning and teaching, in cognitive development on the other hand, being bilingual used to be a concern for the parents [1]. Recently, more advantages of being bilingual have been discovered through research. Research has now proved that bilinguals have higher concentration [2], are more resistant to dementia and the Alzheimer's disease [3], are better at prioritizing and multitasking [4], and benefit from other cognitive advantages such as problem solving and creative thinking [2]. These many advantages of being bilingual highlight the importance of second language learning, especially from a lower age and to a higher level of proficiency which contribute to being considered bilingual. Second language learning is dependent on various factors and requires effort on behalf of the teacher and the learners. The learners' WTC is one important factor when it comes to communication in a second language. With WTC being reported as "the most immediate determinant of L2 use" [5], its predictors are worth studying. This paper intends to investigate the relationship, if any, between bilinguals' and monolinguals' WTC-FL.

A. Bilingualism

1. Who Is Bilingual?

Being a balanced bilingual, i.e. mastering two languages equally well, is a rare phenomenon and only exists in theory, Communicative competence is always relative and depends on the speaker's background, environment and contact with the language and its speakers [6]. Being bilingual, i.e. having relatively equal competence in two languages can change during the speaker's lifespan, as they may become more proficient in one language over time as their needs for it increases.

The literature is quite varied in the matter too, as there are different definitions of bilingualism varying from Bloomfield's [7] assertion that a bilingual has full fluency in two languages to Grosjean's [8] more compromising perspective of the bilingual being a person who can function in each language according to their needs. Children can become bilingual by learning only one spoken language and one sign language [9].

Bialystok [9] distinguishes two major approaches to language proficiency, the linguistic approach, which refers to language proficiency as the reflection of specialized knowledge that is an elaboration of an abstract template, and the functional approach which calls the reflection of cognitive processes that extract regularities, later referred to as knowledge, from the environment and records them. However, Bialystok [9] is skeptical about the clear-cut boundaries of native-like proficiency and points out to this ambiguity as a barrier to defining "nativeness" of speech. She asserts that the most plausible view is one that combines the two approaches, one that includes the linguistic competence explained by formal theories, as well as communicative competence explained by functional theories [9]. Mackey [10] puts an end to the bilingual dilemma by explaining that language proficiency in two or more languages is best described by the use of a continuum. For example, some bilinguals enjoy productive competence; therefore, they can speak and write in both languages. Others, in contrast, have more passive or receptive ability in a language; they may understand or read in a language but may not be able to speak or write it very well. Ability in each domain may be enhanced in both languages or may only be developed in a second or third language. Cummins [11] broadened the notion of cognitive competency which refers to the ability to use both languages as a thinking tool. He also took the concept further to include the ability to

S. Tarighat is with the Foreign Languages Department of Islamic Azad University, Tehran-North Branch, Tehran, Iran (phone: +98-912-3976710; e-mail: s_tarighat@iau-tnb.ac.ir).

F. Shateri is with the Foreign Languages Department of Roudehen Islamic Azad University, Tehran, Iran (e-mail: farnaz.sh67@yahoo.com).

reason and create new cognitive patterns for handling the abstract uses of language as legitimate parts of bilingualism.

Bialystok [9] postulated that the problem of knowing who is bilingual obscures a more fundamental question: how much is enough? The answer depends on how we define language proficiency. The concept of proficiency focuses on variations between individuals in language abilities, and often defined with reference to monolingual goals. On the other hand, language dominance emphasizes the relative proficiency of the two languages within the same individual [12]. There is growing evidence that bilinguals' proficiency result in one language being more proficient (or dominant) than the other – the less proficient competent (or non-dominant) language [13]. Hamers and Blanc [14] draw a distinction between an additive and a subtractive form of bilingualism. An additive form of bilingualism is a result of a child surrounded by two different languages and cultures, and the fact is that both languages can promote the child's development. In addition, the effect of second language (L2) learning on the first language is not in negative ways, and the community equally values both languages. A subtractive form of bilingualism is opposed to an additive form of bilingualism in that the two languages compete against each other and the second language gradually replaces the first. Therefore, dominance of a language can change over time or within the bilingual's life span. We conclude that being bilingual is a relevant issue which can vary from time to time and can be measured on a continuum rather than being dichotomous.

2. Why Become Bilingual?

There is no doubt that becoming a bilingual has its very many communicative advantages; being able to communicate with a larger group of people, understanding and reading a variety of books and material, and rising above the limits of translation, but it does not end there. A large body of research shows that the cognitive privileges that bilingualism brings about for the bilingual, especially for those who start both languages in an early age, are significant [9].

Based on the findings of Hakuta and Diaz [15], it can be demonstrated that there is a firm link between the level of bilingual proficiency and cognitive flexibility. Kovacs and Mehler [16] also recognized improved executive functioning among bilinguals. In another study it was indicated that bilinguals are more accurate than monolinguals in comprehending syntactically complex sentences in the presence of linguistic noise [17]. It was then concluded that the bilingual advantage in interference control begins early in life and is maintained throughout their development. Specifically, bilinguals demonstrate better performance in tasks that tap executive function such as the ability to inhibit irrelevant information, switch between rules and update information in working memory [18]. Luk, De Sa and Bialystok [19] reported that bilingual children and adults perform better than their monolingual peers in tasks that require cognitive flexibility and inhibition of distracting or conflicting information. Another one of the most significant educational consequences of being bilingual is that it

positively influences the manner or efficiency with which children become literate, enhancing their literacy acquisition and phonological awareness [20]. This was especially observed in children who were familiar with two different alphabetic writing systems, English or Spanish and not Chinese for instance. It is argued, however, that bilinguals have a more limited knowledge of vocabulary in each language [20]. Bialystok [9] also reported higher metalinguistic awareness and greater linguistic flexibility in bilingual children. Most importantly, bilingualism can alter brain structures. Mechelli et al. [21] reported that the increase in the grey matter density of the bilingual's brain is positively related to the bilingual's proficiency in the second language. With all the above advantages coming at costs as insignificant as smaller vocabulary size [22] and incidental cases of stuttering bilingual children [23], bilingualism is no longer a dilemma for the modern second language expert. However, Lyster [24] emphasizes that advantages to bilingualism emerge only when high levels of proficiency are achieved in both languages.

B. WTC

L1 WTC stemmed from communication apprehension in L1 communication studies [25]. Research results show that predictors of L1 WTC include introversion, communication apprehension, perceived communication competence and self-esteem [26]. Early WTC research was associated with L1 communication but soon after scholars began to consider possible applications of WTC within the field of L2 learning [27]. L2 WTC became a hot area of research in the 2000s. WTC research was initiated due to scholars' interest in the unwillingness to communicate. It was argued that "even after studying language for many years, some L2 learners do not turn into L2 speakers" [28]. L2 WTC is not simply a transfer from L1 WTC, and there is much greater variation to it in competence among L2 users [27]. McIntyre, Clement, Dörnyei, and Noels [29] defined L2 WTC as "the readiness to enter into discourse at a particular time with a specific person or persons using a L2" (p. 574). MacIntyre, Clement, Dörnyei and Noels [29] have argued that L2 WTC includes both state and trait characteristics which led to a more modern definition of the construct as the "probability of initiating communication given choice and opportunity [28]. Predictors of L2 WTC are not agreed upon unanimously. Different scholars seem to have listed their own factors. The Pyramid model proposed by McIntyre, et al. [29], integrates both trait variables and state variables which eventually influence the decision to communicate in the L2 at given points in time. The variables include intergroup climate and personality, individual's affective and cognitive contexts including attitude towards different groups, perception of social situations and perceived communicative competence, motivational propensities, as well as confidence in communicating in the L2 which is, in turn, composed of communicative competence and anxiety.

In the FL context, Yashima [30] introduced international posture as a context specific attitudinal construct influencing

L2 WTC. Peng [31] proposed self-system, attitudes and affect as predictors of L2 WTC. She stated that WTC inside the classroom is predicted by L2 anxiety, learning experience, and international posture whereas WTC outside the classroom has international posture as its only predictor. Oz, Demirezen and Pourfeiz [32] studied the EFL context in Turkey and concluded that communicative competence and communication apprehension were strong predictors of WTC, while motivational factors indirectly influenced the construct.

In Iran, Baghaei [33] designed and validated the WTC-FLS for measuring WTC in the FL context. He included sections regarding encounters with native speakers of the FL, non-native speakers of the language and situations inside the FL classroom to build up the body of data required to measure L2 WTC in a context where the individuals have fewer encounters with native speakers of the FL. Other studies have been carried out in Iran, Birjandi and Tabatabai'ian [34], Baghaei [35], Maftoon and Amiri [36] to name a few, whose results only confirmed the body of research developed to date but did not make any further contributions to finding other predictors of L2 WTC to WTC research.

III. METHODOLOGY

A. Design

The current research study was intended to investigate the relationship between bilinguals' and monolinguals' L2 WTC in a FL. A correlational design was adopted in order to pursue this goal.

B. Participants

The participants of the present study included 100 bilinguals of Persian and Turkish (Azeri) or Arabic, English, Kurdish, Lori, Armenian or Asouri with native-like proficiency in both languages, studying a third language as their FL such as English, French, German, Spanish or Turkish and 100 monolinguals who were native speakers of Persian, studying English as a FL. Their age ranged between 18 to 64 years (Mean=27.57) and they included 108 men (54%) and 92 women (46%). The Snowball method of sampling was used to find the bilinguals. They were then carefully matched for their level of education and FL with monolinguals of approximately same gender and age (within a maximum difference of 5 years).

C. Instrumentation

The WTC-FLS (Willingness to Communicate in a Foreign Language Scale) developed by Baghaei [33] was adapted for FL users learning English, French, Spanish and Italian with each FL questionnaire designed in a different document (see the English as the FL example in Appendix A and the French as a FL example in Appendix B). The scale is composed on three sections, L2 WTC when facing a native speaker, a non-native speaker and when in the FL class, respectively. The WTC-FLS reliability for the participants of this study was $\alpha=0.727$.

D. Procedure

In order to study the L2 WTC of bilinguals and monolinguals in this study, the participants were sampled through the snowball method, to be more explicit, the researcher searched for bilinguals and monolinguals studying a FL who were interested in taking part in the study and asked them to introduce other eligible language learners who would be willing to participate. Each participant was asked for their consent prior to taking the questionnaire. The WTC-FLS was adapted for FL learners of different languages and given to each participant depending on the FL they were studying. The participants were also asked for demographic details about their age, education, age of onset of bilingualism (in the case of the bilinguals), as well as their level of proficiency in the FL. All participants were elementary users of the FL, so the communicative competence of the participants was kept unvaried. Once the data were collected, the analysis was implemented.

IV. RESULTS

The present study aimed at investigating the relationship between the L2 WTC in a FL of bilinguals and monolinguals. Table I depicts the mean, standard deviation and standard error mean of the WTC-FLS score of the monolinguals and bilinguals in this study.

TABLE I
 GROUP STATISTICS

Bi/Monolingual	N	Mean	SD	Std. Error Mean
WTC-FL	M	100	61.68	.794
	B	100	77.35	.681

An independent-samples t-test was run on the WTC-FL of the bilingual and monolingual groups. Table II shows the statistic details of the analysis. There was a significant difference in scores for bilinguals and monolinguals [$t(198)=4.598$, $p=0.000$]. The magnitude of the differences in the means was moderately large ($\eta^2=.096$). The results revealed that the bilinguals outperformed the monolinguals on their L2 WTC.

TABLE II
 MEAN, STANDARD DEVIATION AND RELIABILITY OF THE WTC-FL

	Mean	SD	Skewness	Kurtosis	Reliability
WTC-FL	69.51	10.777	-.073	-.901	.727

When correlating the age of onset of bilingualism and the bilinguals' scores on the WTC-FLS, a strong significance (-0.505, $p<0.01$) was found (Table III), showing a negative significant relationship between the age of onset of bilingualism and L2 WTC.

The study did not initially aim at finding the relationship between the age of onset of bilingualism and WTC-FL, yet the findings indicated intriguing correlations between the two variables.

TABLE III
 CORRELATIONS BETWEEN AGE OF ONSET AND WTC-FL

		WTC	ONSET age
WTC	Pearson Correlation	1	-.505**
	Sig. (2-tailed)		.000
	N	100	100
ONSET age	Pearson Correlation	-.505**	1
	Sig. (2-tailed)	.000	
	N	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

V.CONCLUSION

The statistical analysis revealed that bilinguals outperformed the monolinguals on the WTC-FLS. This highlights the importance of knowledge of other languages in L2 WTC. This may suggest the help of knowledge of one language in learning another by the similarities it has with the L2. For instance, bilinguals of Persian-English had higher L2 WTC in French than did the monolingual Persian speakers who were learning English, which could also be a result of the similarities between English and French as European languages compared to Persian as an Indo-European language. Yet, the data revealed that even bilinguals of Persian-Azeri scored higher than the mean of the scores on the WTC-FLS, even though Azeri is not a FL and has many similarities to Persian in its grammar and vocabulary and many differences from the FL in question, which was English. Therefore, it is not the linguistic knowledge directly influencing communicative competence in the FL that is helping the bilinguals have higher L2 WTC, since the bilinguals and monolinguals were precisely at the same level of FL. The researcher proposes that an extra predictor of L2 WTC is knowledge of other languages, which seems to influence linguistic confidence and eventually boost WTC. Another contribution that knowledge of other languages can make to L2 WTC could be a reduction in L2 anxiety. When language learners have once experienced the communication failure and learning problems in a L2 and have overcome the difficulties of being non-proficient users of a L2, it appears that they gain the confidence and ability necessary to overcome the anxiety experienced while learning a different L2. The results were also indicative of the age of onset of bilingualism binge, another predictor of L2 WTC. The sooner the learner encounters a second language other than the dominant language in the environment, preferably at birth, the higher their L2 WTC will be in other languages they learn as an adult. This highlights the cognitive aspect of WTC, which has its roots in early childhood. The cognitive advantage that early bilingualism brings about can help boost L2 WTC when learning other languages later in life. This aligns with findings revealed by Luk, DeSa and Bialystok [37] suggesting greater advantages in cognitive control and higher language proficiency in active bilingual adults compared to monolinguals. The results of the present study emphasize the importance of early bilingualism, no matter what the second language is, as long as children are exposed to a second

language from a young age, with sufficient input, they will enjoy the positive outcome later in life.

REFERENCES

- [1] R. Barac and E. Bialystok, "Cognitive development of bilingual children," *Language Teaching*, vol. 44, pp. 36-54, 2011.
- [2] E. Bialystok, "Cognitive Complexity and Attentional Control in the Bilingual Mind," *Child Development*, vol. 70, no. 3, p. 636-644, 1999.
- [3] S. Alladi, T. Bak, V. Duggirala, B. Surampudi, M. Shailaja, A. K. Shukla, J. R. Chaudhuri and S. Kaul, "Bilingualism delays age at onset of dementia, independent of education and immigration status," *American Academy of Neurology*, vol. 81, no. 22, pp. 1938-44, 2013.
- [4] G. J. Poarch and E. Bialystok, "Bilingualism as a model for multitasking," *Developmental Review*, vol. 35, pp. 113-124, 2015.
- [5] R. Clement, S. C. Baker and P. D. MacIntyre, "Willingness to communicate in a second language: The effects of context, norms, and validity," *Journal of Language and Social Psychology*, vol. 22, no. 2, pp. 190-209, 2003.
- [6] S. J. Savignon, "Communicative Language Teaching: Linguistic Theory and Classroom Practice," in *Interpreting Communicative Language Teaching*, S. J. Savignon, Ed., Haven & London, Yale University Press, 2002, pp. 1-28.
- [7] L. Bloomfield, *Language*, New York: Holt, 1933.
- [8] F. Grosjean, "Studying bilinguals: Methodological and conceptual issues," *Bilingualism: Language and Cognition*, vol. 1, no. 2, pp. 131-149, 1998.
- [9] E. Bialystok, *Bilingualism in development: Language, Literacy and Cognition*, New York: Cambridge University Press, 2003.
- [10] W. Mackey, "The description of bilingualism," in *The bilingualism reader*, L. Weir, Ed., New York, Routledge, 2000, pp. 22-50.
- [11] J. Cummins, *Language, power, and pedagogy: Bilingual children in the crossfire*, Clevedon: Multilingual Matters Ltd., 2000.
- [12] L. Sheng, Y. Lu and T. H. Gollan, "Assessing language dominance in Mandarin-English bilinguals: Convergence and divergence between subjective and objective measures," *Bilingualism: Language and Cognition*, vol. 17, no. 2, pp. 364-383, 2014.
- [13] V. Gathercole and E. M. Thomas, "Bilingual first-language development: Dominant language takeover, threatened minority language take-up," *Bilingualism: Language and Cognition*, vol. 12, no. 2, pp. 213-237, 2009.
- [14] J. F. Hamers and H. A. Blanc, *Bilinguality and Bilingualism*, 2nd ed., New York: Cambridge University Press, 2000.
- [15] K. Hakuta and R. Diaz, "The relationship between degree of bilingualism and cognitive ability: a critical discussion and some new longitudinal data," in *Children's Language*, vol. 5, K. E. Nelson, Ed., Hillsdale, N.J., Lawrence Erlbaum Associates, 1985, pp. 319-344.
- [16] A. M. Kovacs and J. Mehler, "Cognitive gains in 7-month old bilingual infants," *Proceedings of the National Academy of Sciences of the United States of America*, vol. 106, p. 6556-6560, 2009.
- [17] R. Filippi, J. Morris, F. M. Richardson, P. Bright, M. Thomas and A. Karmiloff-Smith, "Bilingual children show an advantage in controlling verbal interference during spoken language comprehension," *Bilingualism: Language and Cognition*, pp. 1-12, 2014.
- [18] A. Miyake, N. Friedman, M. J. Emerson, A. H. Witzki, A. Howerter and T. D. Wager, "The unity and diversity of executive functions and their contributions to complex frontal lobe tasks: a latent variable analysis," *Cognitive Psychology*, vol. 41, pp. 49-100, 2000.
- [19] G. Luk, E. De Sa and E. Bialystok, "Is there a relation between onset age of bilingualism and enhancement of cognitive control," *Bilingualism: Language and Cognition*, vol. 14, no. 4, pp. 588-595, 2011.
- [20] E. Bialystok, "Bilingualism at school: Effect on the acquisition of literacy," in *Child Bilingualism: Bilingualism at School: Effect on the School Age*, P. McCardle and E. Hoff, Eds., Clevedon, Buffalo, Toronto, Multilingual Matters, 2006, pp. 107-124.
- [21] A. J. Mechelli, U. Crinion, J. Noppeney, J. O'Doherty, J. Asburner, R. Frazekowka and C. Price, "Structural plasticity in the bilingual brain," *Nature*, vol. 431, p. 757, 2004.
- [22] E. Bialystok, F. Craik and G. Luk, "Lexical access in bilinguals: Effects of vocabulary size and executive control," *Journal of Neurolinguistics*, vol. 21, pp. 522-538, 2008.
- [23] J. Van Borsel, E. Maes and S. Foulon, "Stuttering and bilingualism: A review," *Journal of Fluency Disorders*, vol. 26, pp. 179-205, 2001.

- [24] R. Lyster, Learning and Teaching Language Through Content: A Counterbalanced Approach, Amsterdam/Philadelphia: John Benjamins Publishing Company, 2007.
- [25] Z. Dornyei and S. Ryan, The Psychology of the Language Learner Revisited, New York: Routledge, 2015.
- [26] J. C. McCroskey and V. P. Richmond, "Willingness to communicate: A cognitive view," in Communication, Cognition and Anxiety, M. Booth-Butterfield, Ed., Newbury Park, CA, SAGE, 1991, pp. 19-37.
- [27] T. Yashima, "Willingness to communicate: Momentary volition that results in L2 behavior," in Psychology for Language Learning: Insights from Research, Theory and Practice, S. Mercer, S. Ryan and M. Williams, Eds., Hampshire, UK, Palgrave Macmillan, 2012, pp. 119-135.
- [28] P. D. MacIntyre, "Willingness to communicate in a second language: Understanding the decision to speak as a volitional process," The Modern Language Journal, vol. 91, pp. 564-576, 2007.
- [29] P. D. MacIntyre, R. Clement, Z. Dornyei and K. Noels, "Conceptualizing willingness to communicate in a L2: A situated model of confidence and affiliation," The Modern Language Journal, vol. 82, pp. 545-562, 1998.
- [30] T. Yashima, "Willingness to communicate in a second language: the Japanese EFL context," The Modern Language Journal, vol. 86, pp. 54-66, 2002.
- [31] J. Peng, "L2 motivational self-system, attitudes and affect as predictors of L2 WTC: An imagined community perspective," Asia-Pacific Education Researcher, vol. 24, no. 2, pp. 433-443, 2015.
- [32] H. Oz, M. Demirezen and J. Pourfeiz, "Willingness to communicate on EFL learners in Turkish context," Learning and Individual Differences, vol. 37, pp. 269-275, 2015.
- [33] P. Baghaei, "Validation of a multidimensional scale of willingness to communicate," in Meeting of the Methodology and Evaluation Section of the German Association of Psychology, Bamberg, Germany, 2011.
- [34] P. Birjandi and M. S. Tabataba'ian, "The interrelationships among emotional intelligence, foreign language anxiety, and willingness to communicate," Journal of American Science, vol. 8, no. 8, pp. 725-730, 2012.
- [35] P. Baghaei and A. Dourakhshan, "The relationship between willingness to communicate and success in learning English as a foreign language," Modern Journal of Applied Linguistics, vol. 4, no. 2, pp. 53-67, 2012.
- [36] P. Mafsoon and M. Amiri, "Willingness to communicate in the second language acquisition: A case study on Iranian 2-year-old kids," Journal of Studies in Learning and Teaching English, vol. 1, no. 1, pp. 135-160, 2012.
- [37] G. Luk, E. DeSa and E. Bialystok, "Is there a relation between onset age of bilingualism and enhancement of cognitive control?," Bilingualism: Language and Cognition, vol. 14, pp. 488-495, 2011.