

Communication Apprehension, Privacy Preferences and L2 Willingness to Communicate: Can They Predict Communication Ability?

Maryam Sadeghi Ordoubadi¹, Maryamsadat Tabatabaeian^{2*}, Elmira Farkhondehfal³

¹Ferdowsi University of Mashhad, Iran, ²Allameh Tabataba'i University, Iran,

³Università degli Studi di Siena, Italy

Abstract Being able to communicate can play an important role in achieving the desired goals in today's world. This study investigated the interrelationships between communication apprehension (CA), privacy preferences (Pr), L2 WTC, and foreign language achievement (FLA) of learners as an indicator of their communication ability. Besides, the differences between males and females regarding these variables were examined. To this end, we administered three questionnaires to 250 English learners. Pearson's correlation, t-test, and Structural Equation Modeling (SEM) were employed to analyze the data. The findings revealed that CA has a significant negative relationship with FLA. Considering Pr, FLA had a significant negative relationship with Anonymity. WTC and its subscales demonstrated a significant positive association with FLA. The results of the SEM denoted that CA is a negative predictor of L2 WTC, and FLA; L2 WTC positively predicted FLA; and privacy preferences neither predicted L2 WTC nor FLA. Regarding gender, the results indicated that males had a higher level of preference for Intimacy with Friends, WTW, and WTC.

Keywords: *Communication ability, Communication apprehension, L2 willingness to communicate, Privacy preferences, Communication situations*

* **Corresponding Author:**

Maryamsadat Tabatabaeian

maryam.tabatabaeian@yahoo.com

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1. Introduction

Being able to communicate in English can have an important role in achieving the desired goals in today's world. Therefore, modern language education has greatly focused on communication (Aubrey, 2011; MacIntyre et al., 2003). MacIntyre et al. (1998) pointed out that in the field of language pedagogy, the ultimate objective should be to generate a willingness to communicate (WTC) in second language (L2) learners, as it can lead to more active language learners (Kang, 2005).

MacIntyre and Charos (1996, p. 3) stated that "recent trends toward a conversational approach to second language pedagogy reflect the belief that one must use the language to develop proficiency, that is, one must talk to learn"

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which highlights the importance of WTC and the factors that can be affected and affect it. Therefore, providing an appropriate learning situation plays an important role in L2 learning.

As an individual factor, the concept of CA has been viewed as a negative instance of WTC in literature. That is, highly apprehensive people usually keep away from communication to avoid the experience of fear or anxiety, which is realized to be associated with communication occasions (McCroskey, 1976). On the other hand, a learner's Pr, as another individual factor, may be associated with CA or WTC. Therefore, teaching a foreign language requires teachers' awareness of students' individual factors. Teachers' lack of knowledge about learners' differences may result in students' frustration or unwillingness to communicate. Unfortunately, many language teachers ignore this important issue in the classroom context.

Many researchers have already studied communication in L2 and the factors that affect it (e.g., Abdolmanafi-Rokni & Ataee, 2014; Bahrami et al., 2019; Boustani & Al Abdwani, 2023; Cheng & Xu, 2022; Khan et al., 2018; Xie & Derakhshan, 2021). Other studies have been conducted on the relationship between CA and WTC (e.g., Burroughs et al., 2003; MacIntyre, 1994). However, to the authors' best knowledge, no research has been run to examine the relationships among language learners' Pr, CA, L2 WTC, and FLA. Therefore, considering privacy to be an interpersonal characteristic (Laufer & Wolfe, 1977), more research is needed to explore the possible influence of students' different types of privacy preferences on CA, L2 WTC, and FLA.

2. Theoretical Framework

Acquiring the ability to communicate effectively is essential for L2 learners as, through this ability, they can exchange their thoughts and emotions (Boudreau et al., 2018); moreover, Cheng and Xu (2022) state the importance of effective communication in affecting the audience to achieve one's desired goal or to succeed. Studies have shown that many factors can affect communication, e.g., learners' vocabulary knowledge (Boustani & Al Abdwani, 2023) or EFL teaching materials (Harsono, 2015).

Among the factors that affect communication, WTC, defined as the tendency to begin communication when given a chance to do so, was initially offered in the native language (L1) and was considered a personality-dependent, trait-like predisposition consistent across situations (McCroskey & McCroskey, 1986). Later, MacIntyre et al. (1998) introduced WTC in L2 (L2 WTC) and defined it as "a readiness to enter into discourse, at a particular time with a specific person or persons, using an L2" (p. 547). Since then, WTC has been studied in many L2 contexts (e.g., MacIntyre et al., 2001).

Related to WTC is the concept of CA, which seems to be a negative instance of WTC. It is defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1977b, p. 78). McCroskey (1977b) stated that CA is an umbrella term that represents the words fear and anxiety in related studies. CA research in English as the first language was first initiated in 1970 (McCroskey, 1982). According to several studies on the impact of CA, it is assumed to have a negative impact on individuals' communication behavior and also other significant aspects of their lives (McCroskey, 1977a). McCroskey (1977a) pointed out that a highly apprehensive person usually keeps away from communication to avoid the experience of fear or anxiety associated with it. CA has been classified into four components, namely, trait-like, generalized-context, person-group, and situational CA, which moves from a trait-like to a state-like CA (McCroskey & Beatty, 1986). Scholars in the area of CA argued that genetic predispositions can give rise to trait-like CA (McCroskey & Beatty, 1986). In this regard, the results of Jung and McCroskey's (2004) study showed a strong correlation between L1 CA and L2 CA, which supports the cross-linguistic trait-like CA and the possibility of its genetic predisposition.

CA is believed to be related to foreign language anxiety (Horwitz et al., 1986), which implies that CA and fear of negative evaluation are closely related to one another (MacIntyre & Gardner, 1991). Furthermore, communicating in an L2 has been reported to increase apprehension, decrease L2 WTC, and decrease self-perceived communication competence (Burroughs et al., 2003).

The next concept that may contribute to learners' CA and WTC is privacy preferences (Pr). According to Altman's (1976) definition, privacy is a selective accessibility provided to the self or one's group.

Laufer and Wolfe (1977) argued that privacy suggests the presence of others, and together with the concept of aloneness, privacy maintains an interpersonal concept. Pedersen (1979) divided privacy into six dimensions, including Reserve, which shows reluctance to be with and have a conversation with others, especially unfamiliar people, Isolation, which reflects a need to be alone and absent from others, Solitude, which indicates being alone by oneself and not being watched by others, intimacy with family, which suggests being alone with one's own family members, intimacy with friends, which implies being alone with friends, and Anonymity, a desire to go unnoticed in a crowd and not being the center of group notice.

Privacy as an interpersonal characteristic might be associated with individuals' WTC or CA. In this regard, Larson and Bell (1988) pointed out that in an interaction, individuals with a high preference for privacy use considerably fewer verbal supports than individuals with a low privacy preference. They added that high-privacy individuals seem to have an equal wish to become familiar with others as low-privacy individuals.

The relationships among individuals' L2 WTC, CA, and Pr, and also their possible impacts on FLA, as an indicator of their communication ability, have not been studied so far; therefore, the present study sought to probe into the following questions:

- Are there any significant relationships between communication apprehension, L2 willingness to communicate, privacy preferences, and foreign language achievement among Iranian EFL learners?
- Are there any significant differences between males and females concerning communication apprehension, L2 willingness to communicate, and privacy preferences?
- Can communication apprehension and privacy preferences predict L2 willingness to communicate?
- Can communication apprehension, L2 willingness to communicate, and privacy preferences predict foreign language achievement?

3. Methodology

3.1. Participants

Convenience sampling was employed in the current study. A sample of 250 English learners of intermediate to advanced proficiency levels, including males (N = 125) and females (N = 125), were asked to take part in this study. They were sampled from five private language institutes, namely Hafez (two branches), Jahan-e-Elm, Jahad Daneshgahi, and Safir, all of which are located in Mashhad, Iran. The learners were all Persian speakers from different socioeconomic statuses, aged 12 to 45 (M = 19.58, SD = 6.95). They had different educational backgrounds.

3.2. Instruments

To collect the required information from the participants, three questionnaires were administered. The participants were asked to write their age, gender, and English proficiency level. Besides, to assess FLA, they were requested to add their previous terms' final test scores. The instruments are fully described below:

3.2.1. Willingness to Communicate Scale

The Persian version of the 27-item questionnaire developed by MacIntyre et al. (2001) was utilized to examine the learners' willingness to speak, write, read, and listen in this study. The items were on a 5-point Likert scale ranging from (almost never) to (almost always willing). Makiabadi (2017) validated the Persian version of this scale using Confirmatory Factor Analysis (CFA). The alpha reliability coefficients for willingness to speak, read, write, and listen were .79, .81, .87, and .73, respectively. Moreover, the total reliability of the scale was .89. In the present study, the overall reliability estimation was .92.

3.2.2. *Personal Report of Communication Apprehension (PRCA-24)*

This self-report scale was designed by McCroskey (1982) to measure participants' communication apprehension. It is composed of 24 statements concerning respondents' feelings about communicating with other people. The items are on a 5-point Likert scale, ranging from (strongly agree) to (strongly disagree). The total score of this questionnaire shows the amount of trait-like communication apprehension, and the subscores demonstrate communication apprehension in four contexts, including group discussions, meetings, interpersonal conversations, and public speaking.

This questionnaire was translated into Persian by the researchers and then back-translated to English by an expert to ensure the accuracy of the translated version. Moreover, the translated version was piloted by five people to check its comprehensibility. To confirm the validity of the translated questionnaire, CFA was utilized, and accordingly, six items (items 3, 4, 7, 11, 15, and 20) were removed to improve the model fit. The reliability of the scale was determined using Cronbach's alpha coefficient. The alpha reliability coefficients of .75, .83, .74, and .77 were obtained for Group, Meeting, Interpersonal, and Public Speaking, respectively. Besides, the reliability of the total scale was .91.

3.2.3. *Dimensions of Privacy Questionnaire*

This questionnaire measures the six types of privacy preferred by individuals and contains 30 statements regarding the "privacy sphere". The items are on a six-point Likert scale ranging from (never) to (usually).

This questionnaire was translated into Persian by the researchers and back-translated to English by an expert to ensure the accuracy of the translated version. Then, it was piloted with five people for comprehensibility. CFA was used to validate the scale, and five items (items 9, 10, 14, 15, and 25) were removed. The alpha reliability coefficients for each type of privacy preference were, Solitude (.87), Intimacy with Friends (.72), Reserve (.75), Isolation (.71), Intimacy with Family (.70), and Anonymity (.74). Furthermore, the reliability of the overall scale was .75.

3.3. Procedure

3.3.1. *Data Collection*

In order to collect the data, the three scales were administered simultaneously to the EFL learners. The participants were assured that their answers would remain anonymous. Besides, participation in this study was voluntary. The data collection started in June 2019 and ended in July 2019. It took about 15-20 minutes for each of the respondents to complete the three questionnaires. Lastly, to ensure that the scales, together with the instructions, were clear enough for the respondents to understand, they were given in Persian, the participants' native language.

3.3.2. *Data Analysis*

Statistical Package for Social Sciences (SPSS 23) was used to code the data and compute descriptive statistics. In this study, CFA was utilized to validate the translated version of two of the scales, namely Personal Report of Communication Apprehension, and Dimensions of Privacy Questionnaire. Then, Cronbach's α coefficient estimated the internal consistency of the three scales.

In addition, correlational analyses were used for all of the research questions except for the second one, for which a *t*-test was utilized to explore the possibility of significant differences between males and females with respect to CA, L2 WTC, and Pr. Finally, to investigate the predictive power of the variables on L2 WTC and FLA, SEM was used.

4. Results

4.1. Correlational Analyses

Table 1 reveals correlations among the variables. FLA negatively correlated with CA ($r = -.21$) and all its subconstructs, namely Group ($r = -.15$), Meeting ($r = -.22$), Interpersonal ($r = -.15$), and Public speaking ($r = -.15$). FLA was, however, positively associated with WTC ($r = .20$) and its underlying

subconstructs including WTS ($r = .16$), WTR ($r = .20$), WTW ($r = .19$), and WTL ($r = .16$). Among the subconstructs of Pr, FLA only correlated with Anonymity ($r = -.14$).

Table 1
Correlational Analysis for the Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
FLA	1																	
Group	-.15*	1																
Meeting	-.22**	.72**	1															
Interpersonal	-.15*	.61**	.67**	1														
Public Speaking	-.15*	.54**	.65**	.53**	1													
Overall CA	-.21**	.83**	.89**	.82**	.82**	1												
Solitude	-.00	.24**	.18**	.15*	.18**	.19**	1											
Intimacy with Friends	-.07	-.17**	-.12*	-.13*	-.15*	-.17*	-.18**	1										
Reserve	-.07	.37**	.36**	.38**	.32**	.41**	.53**	-.25**	1									
Isolation	-.03	.14*	.11	.07	.14*	.16*	.53**	-.19**	.29**	1								
Intimacy with Family	-.11	.10	.08	.09	.08	.13	-.04	.08	.09	.15*	1							
Anonymity	-.14*	.31**	.32**	.25**	.26**	.34**	.28**	-.18**	.41**	.16*	.06	1						
Overall Pr	-.11	.30**	.28**	.25**	.26**	.31**	.78**	-.01	.70**	.70**	.37**	.51**	1					
WTS	.16*	-.44**	-.43**	-.31**	-.31**	-.44**	-.07	.17**	-.29**	.02	.04	-.33**	-.13	1				
WTR	.20**	-.25**	-.21**	-.15*	-.22**	-.25**	.09	.01	-.12*	.14*	.02	-.18**	.04	.56**	1			
WTW	.19*	-.25**	-.26**	-.20**	-.27**	-.30**	.03	.19**	-.17**	.15*	.11	-.16*	.07	.58**	.61**	1		
WTL	.16*	-.22**	-.29**	-.17**	-.16*	-.26**	.01	.15*	-.16*	.07	.04	-.15*	.01	.59**	.53**	.69**	1	
Overall WTC	.20**	-.37**	-.37**	-.24**	-.29**	-.38**	.02	.17**	-.21**	.12	.07	-.23**	.01	.81**	.80**	.87**	.85**	1

**Correlation is significant at the level of 0.01

*Correlation is significant at the level of 0.05

4.2. Mean Differences among CA, L2 WTC, and Pr

4.2.1. Mean Differences between Males and Females Regarding CA

In order to check the CA mean differences between males and females, a *t*-test was run. As Table 2 indicates, there is no significant difference between males and females with regard to Group ($t(241) = 1.47, p = .14$), Meeting ($t(245) = 1.09, p = .27$), Interpersonal ($t(244) = -.04, p = .96$), Public Speaking ($t(242) = -.85, p = .39$), and Communication Apprehension ($t(230) = .12, p = .89$).

Table 2
Independent Samples T-tests for the Subconstructs of CA

Subconstructs	Gender	N	Mean	SD	df	T	Sig. (2-tailed)
Group	Male	119	14.69	3.24	241	1.47	.14
	Female	124	14.11	2.91			
Meeting	Male	124	21.39	3.31	245	1.09	.27
	Female	123	20.92	3.42			
Interpersonal	Male	122	16.63	3.45	244	-.04	.96
	Female	124	16.66	3.76			
Public Speaking	Male	120	18.39	4.32	242	-.85	.39
	Female	124	18.85	4.12			
Overall CA	Male	112	82.91	12.37	230	.12	.89
	Female	120	82.70	11.65			

4.2.2. Mean Differences between Males and Females Regarding Pr

Regarding Pr, as Table 3 shows, there is a significant difference between females ($M = 19.27, SD = 3.65$) and males ($M = 20.36, SD = 3.17$) with regard to Intimacy with Friends ($t(240) = 2.48, p < .05$). It implies that, in comparison with females, males are more intimate with their friends. Yet, there is no significant difference between males and females with regard to Solitude ($t(238) = .60, p = .54$), Reserve ($t(245) = -.23, p = .81$), Isolation ($t(243) = .24, p = .80$), Intimacy with Family ($t(235) = 1.20, p = .23$), Anonymity ($t(246) = 1.02, p = .30$), and Dimensions of Privacy ($t(214) = 1.19, p = .23$).

Table 3
Independent Samples T-tests for the Subconstructs of Pr

Subconstructs	Gender	N	Mean	SD	df	T	Sig. (2-tailed)
Solitude	Male	120	17.99	6.71	238	.60	.54
	Female	120	17.49	6.00			
Intimacy with Friends	Male	122	20.36	3.17	240	2.48	.01
	Female	120	19.27	3.65			
Reserve	Male	123	14.40	4.83	245	-.23	.81
	Female	124	14.54	4.77			
Isolation	Male	122	16.18	5.67	243	.24	.80
	Female	123	16.00	5.20			
Intimacy with Family	Male	117	16.67	4.40	235	1.20	.23
	Female	120	16.00	4.12			
Anonymity	Male	123	16.42	3.64	246	1.02	.30
	Female	125	15.96	3.35			
Overall Pr	Male	108	101.71	16.81	214	1.19	.23
	Female	108	99.16	14.50			

4.2.3. Mean Differences among Males and Females Regarding WTC

Considering WTC, Table 4 shows that there is no significant difference between males and females regarding WTS ($t(241) = .14, p = .88$), WTR ($t(239) = 1.04, p = .29$), and WTL ($t(245) = 1.50, p = .13$). However, there is a significant difference between females ($M = 2.96, SD = 1.02$) and males ($M = 3.61, SD = 1.09$) with regard to WTW ($t(237) = 4.68, p < .001$). That is, males have a higher level of WTW in comparison to their female counterparts. In addition, there is a significant difference between females ($M = 13.40, SD = 3.06$) and males ($M = 14.31, SD = 3.69$) with regard to WTC ($t(222) = 2.00, p < .05$), meaning that, males have a higher level of WTC compared to females.

Table 4
Independent Samples T-tests for the Subconstructs of WTC

Subconstructs	Gender	N	Mean	SD	df	T	Sig. (2-tailed)
WTS	Male	122	3.55	.97	241	.14	.88
	Female	121	3.53	.87			
WTR	Male	118	3.84	.99	239	1.04	.29
	Female	123	3.72	.87			
WTW	Male	118	3.61	1.09	237	4.68	.00
	Female	121	2.96	1.02			
WTL	Male	124	3.33	1.04	245	1.50	.13
	Female	123	3.13	1.00			
Overall WTC	Male	109	14.31	3.69	222	2.00	.04
	Female	115	13.40	3.06			

4.3. SEM Analysis

4.3.1. SEM Prediction of WTC and FLA

To check the predictive power of the independent variables, SEM was conducted. Models were proposed for the prediction of WTC (Model 1) in Figure 1 and the prediction of FLA (Model 2) in Figure 2. As Figure 1 illustrates, CA is a negative predictor of WTC ($\beta = -.42, p < 0.01$).

Figure 2 shows the relationships among CA, Pr, WTC, and FLA. As the model demonstrates, WTC is a positive predictor of FLA ($\beta = .17, p < 0.05$), whereas CA is a negative predictor of FLA ($\beta = -.16, p < 0.05$).

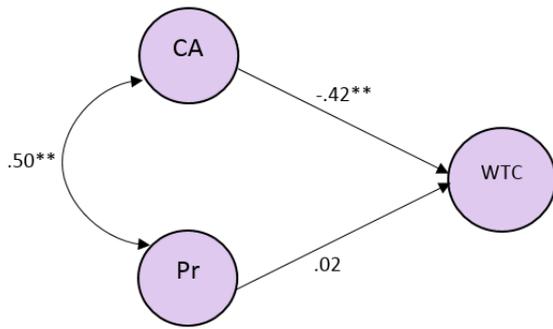


Figure 1

The Schematic Representation of the Relationships among CA, Pr, and WTC

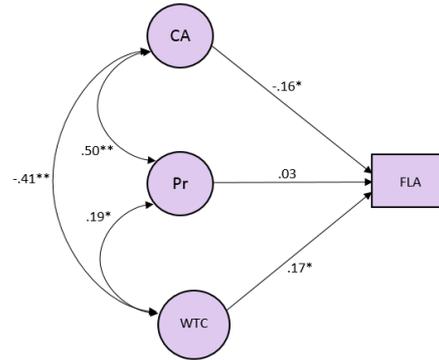


Figure 2

The Schematic Representation of the Relationships among CA, Pr, WTC, and FLA

To see whether the two models fit the data, goodness of fit indices were calculated using Amos. Based on the obtained results (Table 5), the models fit the data adequately.

Table 5
Goodness of Fit Indices for the Two Models

Models	χ^2/df	df	CFI	TLI	RMSEA	SRMR
1	2.74	74	.90	.90	.08	.08
2	2.54	85	.90	.90	.07	.08

5. Discussion

The findings of the current study revealed that FLA has a significant negative correlation with CA and its four subconstructs. This implies that an increase in CA can lead to lower FLA. This finding accords with McCroskey’s (1977a) claim that CA has a negative effect on learning since communication apprehensions mostly withdraw themselves from communication situations. This study is also in line with several studies which confirm the negative correlation between language CA and succeeding in learning a foreign language (e.g., Horwitz, 2010; Trang et al., 2012). Moreover, Boustani and Al Abdwani (2023) demonstrated the effect of positive feelings on learning and communication through the use of music in the classroom.

In the same vein, some studies showed a significant negative correlation between foreign language CA and language achievement of EFL learners (Horwitz, 1986). Kim (1998) not only concluded that there is a significant negative correlation between foreign language CA and final grades but also found out that classrooms that involve verbal communication provoke more apprehension than traditional classrooms focusing just on reading. Therefore, since high CA is mainly related to ineffective communication, any educational program, as an ultimate objective, should be centered on more effective communication (McCroskey, 1982).

The results of this study also showed that FLA has a negative but not significant correlation with privacy preferences as a whole, but among its subconstructs, there is a significant negative correlation between Anonymity and FLA. The obtained result can be justified by reviewing the definition of the six types of privacy preferences and comparing them. The definitions of all subconstructs except for Anonymity denotes a preference for being alone in different ranges. Although Anonymity shows a liking to go in a crowd while being unnoticed, its highly significant and positive correlation with Reserve, Solitude, and Isolation can denote not being willing to have contact with or speak with others. Moreover, Anonymity has a highly significant and positive relationship with Group, Meeting, Interpersonal, and Public Speaking as subconstructs of CA.

Therefore, it can be concluded that people with Anonymity preferred type of privacy possibly experience high levels of CA. This finding is in line with that of Hosman (1991), indicating that individuals with a high need for privacy experience a great amount of distress and anxiety in their social interactions. This finding is in accordance with that of Larson and Bell (1988), denoting that privacy preferences impact social interaction. They held the view that individuals with a high need for privacy seem to have the same wish to interact with others as individuals with a low need for privacy, but they may suffer from a lack of communicational skills required for developing relationships.

Moreover, language learning is assumed to be associated with more communication and more practice in speaking in the target language (Brown, 1987; Rubin & Thompson, 1994), so it is in contradiction with individuals who prefer the Anonymity type of privacy. As a result, it can be concluded that individuals with Anonymity preferred privacy, who also experience CA, which in turn leads to less interpersonal communication, may not be successful in FLA. As Lou and Noels (2020) also maintain, learners' perceptions of their language skills affect their willingness to communicate.

As for WTC, the findings obtained from the present study indicated that FLA is positively associated with WTC and its underlying subconstructs. On the assumption that communication and language acquisition are tightly joint (MacIntyre & Charos, 1996), scholars argued that WTC affects the frequency of communication (MacIntyre et al., 2003; MacIntyre & Charos, 1996; Yashima et al., 2004), meaning that, WTC can contribute to second (or foreign) language achievement (Kang, 2005), which is in line with the findings of this study. Moreover, Gurbuz et al. (2023) show how communication styles affect one's proficiency. As Lou and Noels (2020) also maintain, EFL learners' beliefs about their proficiency affect their willingness to communicate.

Regarding the probable relationship between the four components of WTC and the six types of privacy preferences, the findings showed a significant positive correlation between intimacy with friends and WTS, WTW, and WTL. That is, the more individuals are intimate with their friends, the more they are willing to speak, write, and listen. Furthermore, the inverse is possible, meaning that individuals who are more willing to communicate, and in particular, more willing to speak, write, and listen, are more inclined to be intimate with their friends. Since an intimate relationship is positively associated with sensitivity to conversation and communicating for pleasure, affection, and inclusion (Hosman, 1991), the willingness to speak, write, and listen among intimate friends can be justified. On the other hand, considering WTL, among the four styles of listening introduced by Watson et al. (1992), namely people-oriented, content-oriented, time-oriented, and action-oriented listening, people-oriented listening which concerns with other's emotions and feelings, seems to be more compatible with Intimacy with Friends preferred privacy.

Concerning possible relationships between WTC and other types of privacy, the findings showed that WTC and all of its components are negatively associated with Reserve and Anonymity privacy preferences. In the same line, Marshall (1974) indicated that there is a desire among individuals with the need for Reserve and Anonymity preferred privacies to control the amount of self-disclosure to others. Moreover, not being willing to communicate may be the result of one's low self-esteem. In this regard, Pedersen's (1982) findings showed that people with low self-esteem tend to be reserved and look for Anonymity, suggesting the lack of ability to share their ideas and feelings with others.

Besides, Larson and Bell (1988) noted that people with a high level of privacy suffer from a lack of communicational skills, and there is an assumption that people with a higher need for privacy experience more anxiety (McKechnie, 1974). Considering the findings of this study, types of privacy preferences, in general, are positively correlated with communication apprehension. In this regard, Daly et al. (1987) argued that people who experience higher levels of CA, receiver apprehension, and social anxiety are less sensitive to conversations. Concerning this argument, Hosman (1991) took the assumption that the need for privacy is related to conversational sensitivity, and people with a high need for privacy prefer less communication with others and gradually lose sensitivity to what occurs in conversations. Daly et al. (1987) clarify conversational sensitivity as some people delight in listening to social interactions, get secret meanings in conversations, and can create the best ways while communicating. Considering such personal and social characteristics, people's unwillingness to speak with Reserve and Anonymity preferred privacies can be justified.

The findings of this study showed a significant negative correlation between both Reserve and Anonymity privacy preferences and WTW. That is, individuals with a higher need for Reserve and Anonymity types of preference show less willingness to write. It can be assumed that people who are not willing to speak are also not willing to write and may have the same problems in both speaking and writing. As earlier mentioned, people with Reserve and Anonymity privacy preferences experience anxiety. Therefore, it can be concluded that they may also have writing anxiety (WA). WTW and WA have been regarded as two negatively related constructs (Daly & Miller, 1975b). According to Daly and Miller (1975a, 1975b), individuals with WA avoid writing tasks. Moreover, WA can negatively affect writers' self-esteem (Faigley et al., 1981). In other words, people with low self-esteem may experience WA. The findings of this study can be justified by what was mentioned earlier about people with Reserve and Anonymity privacy preferences who are less willing to self-disclose, lower in self-esteem, and more anxious. That is, people with Reserve and Anonymity preferred privacies are not willing to write.

Moreover, it was shown that there is a significant negative relationship between willingness to read (WTR) and both Reserve and Anonymity privacy preferences. This finding implies that people who prefer Reserve privacy or Anonymity privacy are not willing to read. Reading is a receptive skill, and a decoding process in which comprehending a text requires the reader's linguistic knowledge (bottom-up process) and background knowledge (top-down process) interactively (Park, 2004). As already mentioned, people with a high need for privacy are assumed to be communication apprehensive. This can lead individuals to have less interaction with others and, as a result, achieve less worldview or, in other words, less background knowledge. The deficiency in background knowledge may result in a lower reading comprehension ability, which can be a justification for these people's unwillingness to read.

As for relationships between the other types of privacy preference and the components of WTC, Isolation indicated a significant positive correlation with WTR and WTW; in other words, people who are willing to read and write prefer Isolation. Reviewing the definition of Isolation type of privacy by Pedersen (1979, 1982) shows that people with Isolation preferred privacy need to be alone and in remote places, even geographically, from others. According to this definition, people with an Isolation type of privacy can be viewed as people with a high need for privacy. People with a high need for privacy are more likely to be introverted, meditative, and non-disclosing (Pedersen, 1982). They also show little need for intimacy and affection (Marshall, 1972). Considering these personal characteristics, Isolation is possibly the most effective preferred privacy for controlling social interaction. On the other hand, Larson and Bell (1988) argue that people with a high need for privacy seem to have the same wish as those with a low need for privacy to become acquainted with others, but they cannot develop relationships because of their deficient personal skills which may result in receiving negative feedback from others. Therefore, it can be concluded that people with Isolation prefer privacy and show a willingness to write and read to compensate for their lack of personal interactions; in other words, they may keep up their relationships with others through writing and reading. According to the scholars' viewpoints mentioned above, WTW and WTR of the people with Isolation preferred type of privacy can be justified.

To measure the CA mean differences between males and females, an independent t-test was used. The findings showed no significant difference between males and females concerning Group, Meeting, Interpersonal, Public Speaking, and Communication Apprehension as a whole. This finding regarding CA differences between males and females is in line with those of MacIntyre et al. (2002) and Abu Taha and Abu Rezeq (2018). Yet, some researchers found that females are more communication apprehensive than males, which is not consistent with the findings of this study (e.g., McLean & Anderson, 2009; Rahmani & Croucher, 2017; Tom et al., 2013; Wicks-Nelson & Israel, 2006). In contrast, the findings of Na (2007) indicated that males experience a higher level of communication apprehension than females, which also does not support the results of the present study.

Pr was also not significantly different between males and females with regard to Solitude, Reserve, Isolation, Intimacy with Family, Anonymity, and Dimensions of Privacy as a whole. Yet, there is a significant difference between males and females concerning Intimacy with Friends. That is, males are

more intimate with friends compared to females. It seems that in an intimate relationship, self-disclosure plays an important role. Since self-disclosure takes in the verbal exchange of information (Derlega & Chaikin, 1977), it is believed that the development of friendship is associated with the rise in self-disclosure (Altman & Taylor, 1973). In other words, the more people reveal their intimate points about themselves, the more friendships develop (Derlega & Chaikin, 1977).

In this regard, Petronio and Martin (1986) pointed out that men and women use different criteria to regulate the disclosure of their private information. This finding is not in line with the notion that women are apt to disclose more often and more intimate information about themselves than men (Highlen & Gillis, 1978; Rubin et al., 1980). Yet, this finding accords with that of Pedersen and Frances (1990), in which there were no significant differences between males and females on Solitude, Reserve, and Anonymity.

The results of the independent samples t-test indicated that there is no significant difference between males and females with regard to WTS, WTR, and WTL. On the other hand, males show WTW more than their female counterparts. Moreover, males indicate WTC more than females. Since males' WTW is more than that of females, it can be concluded that females probably show a higher level of writing anxiety or apprehension (WA) compared with males. That is to say, language learners with high levels of WA are assumed to show less WTW. A brief survey of literature concerning WTW showed that studies are generally on WA rather than WTW (e.g., Cheng, 2004; Gkonou, 2011; Kim, 2006). This finding is in line with that of Cheng (2002) and Kim (2006) in L2, which showed that females had a significantly higher level of WA than males. However, this finding is in contrast with that of Daly and Miller (1975b) in L1 (English) writing. They found that the level of WA was higher in males than that in females and noted that this difference is because females get more teacher-positive responses on their writing than males.

Based on the findings of this study, and referring to the items of the WTC questionnaire, the difference in WTW, and also in overall WTC between males and females may be interpreted in terms of males' higher tendency to express their thoughts, feelings, and ideas. Besides, males may care more for interpersonal relationships compared with females. This finding is in contrast with the findings of MacIntyre et al. (2002), which showed girls were higher in WTC than boys among adolescents. However, in another study, the findings of Donovan and MacIntyre (2004) indicated that the difference in WTC between males and females is only significant among adolescents but not in adulthood, meaning that, as they grow toward adulthood, males show more WTC than women, while women's WTC decreases. On the other hand, this finding is not in accordance with that of Bashosh et al. (2013), indicating that there is no significant relationship between sex and WTC.

In this study, a model was proposed for the prediction of WTC through CA and Pr. The results showed that there is almost no relationship between Pr and WTC; that is, the types of privacy preferences cannot predict L2 WTC. On the other hand, there is a significant negative relationship between CA and WTC, meaning that higher apprehensive learners are expected to be less willing to communicate. Therefore, it can be concluded that CA negatively predicts WTC. This finding is consistent with the findings of Donovan and MacIntyre (2004) and MacIntyre et al. (2001), who declared CA as a distinct predictor of WTC.

SEM was also run to find out whether FLA could be predicted by CA, Pr, and WTC. The SEM model demonstrated that Pr is not a predictor of FLA, meaning that the types of privacy preferences do not necessarily affect FL. Moreover, there is a significant positive association between L2 WTC and language achievement. That is, higher levels of students' WTC in English can lead to better achievement scores (Kang, 2005; Yashima et al., 2004). On the other hand, CA negatively predicts FLA. That is to say, higher apprehensive students are expected to achieve less when learning a language. This finding is in line with the findings that indicate a negative relationship between CA and students' L2 final scores (Horwitz, 1986; Rodriguez, 1995). Therefore, it can be interpreted that L2 WTC is a positive predictor of FLA, but CA negatively predicts FLA.

The present study examined the relationship between communication apprehension, privacy preferences, L2 willingness to communicate, and foreign language achievement among Iranian EFL

learners. To the authors' best knowledge, this study is the first research that examines the aforementioned variables; therefore, its results may meet the needs or wants of teachers and researchers with theoretical and pedagogical implications to promote current conditions.

The findings of this study can be helpful to the pedagogical system, language teachers, teacher training courses, and course book designers. Since the creation of WTC should be the ultimate objective of L2 learning and teaching (MacIntyre et al., 1998), teachers should employ some activities to inspire WTC among learners, that is, to give them more opportunities to communicate in an L2. In the same vein, teachers should take advantage of certain strategies to reduce CA as an obstacle to WTC.

Considering CA as the negative predictor of WTC (MacIntyre, 1994) and as one of the influential factors in creating anxiety in the context of L2 classrooms (Horwitz et al., 1998), teachers' role in how to deal with this problem is crucial. Apprehensive individuals are not willing to speak up since they perceive themselves as incompetent communicators, yet, skills training and making use of strategies to reduce anxiety can increase learners' WTC (MacIntyre, 1994). Moreover, teachers' social support reduces learners' anxiety and positively affects their WTC (Kang, 2005).

By creating a safe atmosphere, teachers can alleviate the high level of anxiety among language learners. In this regard, Zarrinabadi (2014) noted that the teacher's wait time, teacher's support, error correction method, and teacher's decision on the topic are the factors that mainly affect learners' L2 WTC.

Although the findings denote privacy preferences cannot be predictors of WTC and language achievement, knowledge about different types of privacy preferences can help teachers employ strategies more compatible with students' preferred types of privacy in order to lessen CA among them. For example, considering the findings of this study, students with Isolation preference show a willingness to read and write. In this regard, teachers may assign them reading and writing tasks to satisfy their preferences. Moreover, with the view that group size affects students' WTC (Kang 2005), students with high privacy preferences who are more reluctant to speak can be placed in small discussion groups to increase their responsibility and reduce anxiety about speaking.

One of the objectives of training future teachers should be to prepare them to encounter communicative challenges in language classrooms. Training a teacher requires his/her awareness of students' certain characteristics, such as CA and Pr, whose effect on WTC and language learning cannot be ignored. As Pishghadam et al. (2023) have also demonstrated, the role of the teacher in students' success cannot be undermined. Moreover, Shirzadeh and Jajarmi (2023) showed how teachers' behavior affects students' WTC.

Coursebooks can play an important role in language learning. That is, they can be encouraging or distressing for language learners. Therefore, course book designers should provide tasks regarding students' types of Pr and apprehensiveness.

To obtain more generalizable results, the research should be replicated in a wider region with a larger number of participants in other learning contexts, such as public schools and universities as well. Complementing quantitative findings with qualitative methods like interviews and observation in future studies may gain a more generalizable interpretation. It is also recommended that future studies use standardized tests to have a more reliable evaluation of students' achievements. Another research can investigate teachers' CA and Pr as well. CA is a problem that can affect teachers as well as students and may cause severe troubles in a classroom situation (Lahtinen, 2013). As the types of Pr and learners' achievement scores did not show any significant relationship, it seems more research is needed to verify this finding. It is also suggested that a study be conducted to investigate whether learners' Pr is associated with their language skills. Finally, since this study involved both teens and adults as participants, age might have influenced the findings. Therefore, it is suggested that future studies be more focused on this important factor.

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