

Effects of Situational Factors on L2 Learners' Willingness to Communicate in Group Work Settings

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Abstract—Verbal engagement of language learners is of vital importance in L2 class. However, Chinese L2 learners tend to remain reticent in class, since they want to show respect to their teachers and avoid making mistakes. Therefore, investigations into L2 learners' willingness to communicate in group settings has received much attention in recent years. On this basis, this study focuses on the willingness to communicate of non-English major juniors, and aims to investigate Chinese English learners' WTC level in L2 group work, explore the relationship between language proficiency of L2 learners and their WTC in group work settings, and find out several situational variables that influence L2 learners' WTC in L2 group work. The results show that: 1) student participants generally show relatively high level of willingness to communicate (Mean=32.835) in group work; 2) the higher the L2 proficiency of the L2 learners, the higher their WTC level in the process of communicating in group work; 3) as for situational variables, students report higher WTC level when familiar or self-related topics are used and when they work in groups. And if students work in groups, they would prefer having some wait and prepare time before starting discussing with group members.

Index Terms—Second language communication, situational Willingness to Communicate (WTC), situational variables, group work

I. INTRODUCTION

Willingness to Communicate (WTC) was first conceptualized as the probability of engaging in communication when free to choose to do so [1], and it has gradually become an essential concept in explaining first language (L1) and second language (L2) communication. Scholars often categorize WTC into two types: WTC as a trait-like predisposition and WTC as a situational construct. WTC can be influenced by several situational antecedents, including the desire to communicate with a specific person, interpersonal motivation, and social situation, etc. MacIntyre *et al.* [2] constructed the pyramid model of WTC variables, which involved six layers: communication behavior, behavioral intention, situated antecedents, motivational propensities, affective-cognitive context, and societal and individual context. They further distinguished WTC as a situational construct (influenced by situation variables such as topics, group size, conversational settings, interlocutors, and other possible situational elements).

Investigations into L2 learners' willingness to communicate in group settings has received much attention in recent years. L2 researchers have attempted to find the correlations between L2 learners' WTC, and their individual

variables such as anxiety and language competence, motivation, also age and gender [3, 4]. In eastern context, Fushino [5] came up with a second language (L2) group work model in the Japanese context, which took learners' individual differences in their beliefs about L2 group work and communication confidence into account. Cao and Philp (2006) investigated the dual characteristics of L2 WTC, that is, trait-like WTC and situational WTC [6]. They found that situational WTC could predict the decision to engage in interaction with fellow students. A number of factors were perceived by learners to influence WTC behavior in class, including the group size, familiarity with interlocutors, familiarity with topics under discussion, cultural background, and medium of communication.

Most of Chinese L2 learners own solid grammar-based knowledge of English but they remain poor speakers with low WTC. Therefore, Wen and Clément [7] noted that the MacIntyre *et al.*'s pyramid model for WTC was based on studies from the West, and thus changed some structural relationships between constructs and sought a model that could fit in a Chinese context. They amended the model from a Chinese perspective by considering the cultural values of Chinese people and how these values might influence L2 communication. Yu and Lin [8] delivered an empirical study and compared WTC of college students in Guangzhou and Hongkong in the aspects of social support, language learning orientation and perceived competence. The findings showed that WTC of these participants significantly related to their perceived competence, and Guangzhou students owned a stronger WTC than Hongkong students and were more likely to speak English in public places because they gained support from the surroundings.

Research on WTC mainly focused on the influencing factors of L2 WTC in the aspect of personality trait. Likewise, there is a lack of understanding of the relationship between students' foreign language level and their willingness to communicate in L2 groups. Moreover, the study design relied too much on quantitative method and some of the measurement tools were not that scientific, thus those studies inevitably affected the reliability of the research findings. Therefore, the present study is conducted to investigate Chinese English learners' WTC in L2 group work and take language proficiency into consideration, and it tries to find out situational variables that influence L2 learners' WTC in L2 group work. This present study adopts quantitative method and aims to provide insights into the reaching and learning process involving group work activities in Chinese context.

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II. RESEARCH METHODOLOGY

A. Research Questions

In order to deepen our understanding on WTC by filling the gap in the literature, this study will discuss the effects of situational factors on L2 learners' WTC in group work. The specific research questions are as follow:

Q1: What is the WTC level of non-English major college students in L2 group work?

Q2: Does learners' L2 proficiency lead to differences in WTC in group work?

Q3: What situational variables affect learners' WTC in L2 group work?

B. Participants

The sample size for the quantitative study was 103 undergraduate students in Northwestern Polytechnical University (a key university of Project 985). In order to ensure the L2 communication ability and willingness, as well as the applicability of the research results, this study focused on non-English major junior students who have passed the CET-6 (the total score of the written test is 710). A total of 32 (31.1%) participants were females and 71 (68.9%) males, and the mean age was 20.65 ($SD = 0.59$). According to their CET-6 scores, all these participants were divided into two groups: L2 learners with high language proficiency and L2 learners with low language proficiency. Candidates with a score of 520 on the CET-6 written test can take the oral test and the pass line is 425, so participants with a score of 520 or above were classified as high-level L2 learners and those with a score of 425-519 were regarded as low-level L2 learners. The students were from disciplines including math, computer science and technology, business administration, biology, automation, law, and physics. The author uploaded the composite questionnaire to an online survey tool Wenjuanxing and retrieved its QR code, which allowed the participants to scan the code with their mobile phones and get access to the online questionnaire.

C. Research Design

This study uses questionnaire statistics, and adopts a quantitative method to conduct a questionnaire survey on junior non-English majors at NPU, with the aim of exploring the situational factors that affect students' willingness to communicate in group discussions. The questionnaire analysis of the study is intended to use SPSS 20.0 descriptive analysis of data to explore the current situation of subjects' WTC level in L2 group work; independent samples T-test is used to explore whether there is an effect of high or low English proficiency on Chinese students' WTC level.

Specifically, questionnaire used in this study can be divided into three parts. The first part was basic information of the participants, including gender, age, major, score of CET-6, and contact information. The second part was "willingness to communicate in L2 group work" (10 items, $\alpha = 0.96$), which was used to measure participants' WTC level in L2 group work. This part was based on "WTC in l2 group work scale" (five-point Likert-scale: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4=agree; 5 = strongly agree) designed by Kumiko [9]. The third part was "WTC level in specific situations" (14 items, $\alpha=0.80$) for measuring situational factors that may influence participants' L2 WTC, and this

part was modified from Khanh's [10] "WTC in different situations scale".

1) Questionnaire: WTC in L2 group work

Kumiko Fushino (2012) delivered research to investigate relationships between communication confidence, beliefs about group work, and WTC in foreign language group work. Therefore, Fushino used a questionnaire consisted of 64 five-point Likert-scale items (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree) in six sections, including communication apprehension in L2 group work, self-perceived communicative competence in L2 group work, positive beliefs about the value of group work, negative traditional instruction orientation, beliefs of group work usefulness, and WTC in L2 group work. Because the present study merely focuses on L2 learners' WTC in group work, the author chooses section of WTC in L2 group work (10 items, $\alpha=0.96$) as one part of the whole questionnaire.

2) Questionnaire: WTC level in specific situations

Khanh [10] designed a questionnaire to examine the WTC level of students in different classroom situations. It included 20 questions which can be divided into three clusters, each of which was subcategorized into two to three sub-clusters with different factors, and its *Cronbach's Alpha* was 0.80. For example, cluster "topic" involved three sub-clusters: familiarity, self-relatedness, and interest-connected. The five points of each response to the questions consisted of five numbers, indicating the level of learners' WTC in each situation (1: lowest; 2: low; 3: medium; 4: high; 5: highest). By adopting this questionnaire and considering the results of interview, the present study could measure the situational factors that may affect L2 learners' Willingness to Communicate (WTC).

3) A construct of situational WTC

Willingness to communicate is a dynamic concept, which is not only influenced by personality traits, but also fluctuates according to situational or environmental factors. In view of this, this study selected non-English major junior students in NPU as subjects to explore the influence of situational factors on their willingness to communicate in L2 group work. The situational factors are based on the preliminary construct of situational willingness to communicate proposed by Kang [11] shown in Fig. 1, which focused on the effects of topics, group size and preparation time on students' WTC.

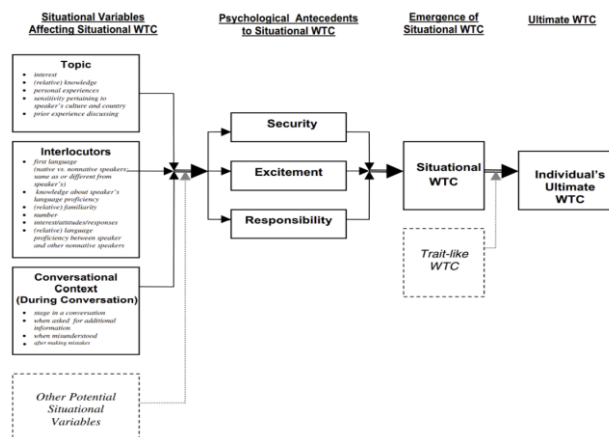


Fig. 1. A preliminary construct of situational willingness to communicate.

III. RESULTS AND DISCUSSION

A. WTC Level of Non-English Major Students in L2 Group Work

Survey data analysis is put through SPSS 20.0, the results of the descriptive statistics are presented in Table I. The mean score of participants' WTC is 32.835 out of 50 (SD = 3.92), and the mean score of CET-6 is 482.893 out of 710 (SD = 45.24). However, out of 103 participants, merely five of them have reached the score of 550, indicating that there are few high scorers. As indicated by the mean scores in Table I, in general student participants show relatively high level of willingness to communicate in group work. The WTC level of participants reveals that they perceive themselves as moderately proficient in communicating in group work. Specifically, students tend to express simple ideas or in English with group members, often with the help of gestures or other nonverbal means; while they are unwilling to show feelings to group members in English or ask something unclear to them.

TABLE I: DESCRIPTIVE STATISTICS OF WTC LEVEL OF PARTICIPANTS IN L2 GROUP WORK

Variable	N	Min	Max	Mean	SD	
WTC	103	23.00	45.00	32.84	3.92	
L2 proficiency (CET-6 score)	High	25	520.00	608.00	540.92	21.61
	Low	78	425.00	519.00	464.30	33.49
	Total	103	425.00	608.00	482.89	45.24

Note: WTC=Willingness to communicate

B. Relationship between L2 Proficiency and WTC in Group Work

Based on the independent samples T-test, this study deals with the results of comparison between students with high language proficiency and low language proficiency, and explores whether second language proficiency causes WTC differences. It is clearly shown in Table 2 that the WTC score of low-L2 proficiency subjects is lower than that of high-L2 proficiency subjects. More particularly, the average score of students' WTC (Mean = 31.71) when they perform high-L2 proficiency is apparently higher than that of students' WTC (Mean = 36.36) when they own low-L2 proficiency. Different L2 proficiency shows significance ($t = -5.982, p = 0.000 < 0.001$), indicating that second language proficiency will affect participants' WTC in group work, i.e., the higher the L2 proficiency of the L2 learners, the higher their WTC level in the process of communicating in group work.

TABLE II: INDEPENDENT SAMPLES T-TEST OF WTC OF PARTICIPANTS WITH DIFFERENT L2 PROFICIENCY

	L2 proficiency (Mean±SD)		t	df	p
	Low (n = 78)	High (n = 25)			
WTC	31.71±3.05	36.36±4.29	-5.982	101	0.000***

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

C. Situational Variables of Learners' WTC in L2 Group Work

According to the questionnaire's third part "WTC level in specific situations", the items involve two situational variables: topic selection (items 11-18) and group size (items 19-24). In the cluster of topic, there are three sub-factors, including topic familiarity, self-relatedness topic and interest-connected topic. In particular, the mean score of students' WTC level when familiar or self-related topics are used is

almost twice as much as that recorded when students have to discuss unrelated, uninteresting, and unacquainted topics (shown in Table III).

TABLE III: WTC INFLUENCED BY TOPIC SELECTION (N = 103)

	Min	Max	Mean	SD
Topics related to learners' interest/experience/familiarity	3.50	5.00	4.40	0.38
Topics unrelated to learners' interest/experience/familiarity	1.50	3.50	2.50	0.55

As for the cluster of group size, the gap between participants' WTC level when working in groups and speaking publicly in front of the class is not remarkably huge. The average score of WTC in the situation of group work is 4.04, which is only 0.48 higher than that in public verbalizing situation (shown in Table IV).

TABLE IV: WTC INFLUENCED BY GROUP SIZE (N = 103)

	Min	Max	Mean	SD
Group work	3.00	5.00	4.04	0.41
Whole class	2.50	4.50	3.56	0.58

In addition, if students work in groups, they would prefer having some wait and prepare time before starting discussing with group members. Fig. 2 indicates that 96.2% of the participants are more or most likely to communicate with others if there is wait time. Besides, no students self-reported that their WTC decreases to low or lowest level when wait time is offered. Also, 19.3% participants express that if they are required to speak without wait time, they would show lowest or low WTC level in group work.

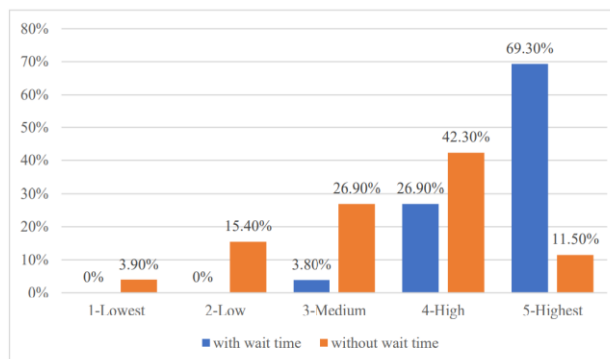


Fig. 2. Students' WTC during group work considering wait time.

D. Discussion and Implications of the Findings

The degree of a person's L2 proficiency has a significant effect on his/her WTC [2]. It has also been shown in empirical studies on L2 WTC that low linguistic proficiency could prevent students from risking speaking the L2 in class. In the current study, lacking linguistic competence indeed impedes communication in L2 group work. These students with low-L2 proficiency may feel less confident or more nervous to express ideas in English within group setting, and they are also afraid to make grammatical mistakes in communication. Therefore, the WTC level of high language competence students (Mean = 36.36) is quite higher than that of low language competence students (Mean = 31.71).

The topic of communication significantly affects the ease of language use. Content knowledge and familiarity with a certain register is likely to result in a boost in ones' linguistic

self-confidence, while lack of knowledge about a topic and lack of familiarity with the register may inhibit communication. Previous empirical research has also shown that background knowledge of a topic is essential for students to feel secure enough to talk about it with other interlocutors [11]. Facing topics unrelated to learners' interest/experience/familiarity, participants in this study express low willingness to communicate in group work (Mean = 2.50), and they show more enthusiasm to communicate in familiar topics. They would also feel reluctant to talk about topics that they are not interested in.

Generally, by dividing students into groups, teachers can reduce students' risk of being judged and encourage students to speak in second language, the use of group tasks in class is expected to be more successful. While in this study, in comparison with speaking publicly in class, speaking in groups merely stimulate a little bit of students' willingness to communicate verbally. There is one possible reason for this phenomenon, that is, the participants of this study are juniors who are required to take part in English lessons, finish relevant tasks, and pass the final exam; therefore, they may have got used to public speaking, especially in classroom context. By focusing on group work setting, the factor "wait time before group work" is also considered in the present study. As stated in Section IV.C, most participants find themselves more willing to talk with their group members if wait and prepare time is given.

The aim of the present study is to investigate whether situational factors would take positive effect in making an increase in WTC level of students in L2 group work. The author assumes that L2 learners' WTC level in group work would be affected by their initial second language proficiency and situational variables such as topic and group size. Based on the results, learners' WTC level would be enhanced by applying the following strategies. The first strategy is using discussion topics connected to L2 learners' interests and experiences, or students should be given the freedom to choose to discuss topics themselves. The second one is incorporating group work into the lesson and providing enough wait and prepare time for students, which could stimulate students' L2 expression ability and ensure the quality of speech.

IV. CONCLUSION

This study, focuses on the willingness to communicate of non-English major juniors, aims to investigate Chinese English learners' WTC level in L2 group work, explore the relationship between language proficiency of L2 learners and their WTC in group work settings, and find out several situational variables that influence L2 learners' WTC in L2 group work. Also, this paper mentions the implications of research findings and points out instructional strategies to promote students' WTC in L2 group work. Due to the limitation of time, the present study still has certain limitations. As for further studies, they can be improved by expanding the sample size in the aspect of grades and further considering other types of situational variables in L2 WTC.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Liao Jiayi conducted the research, delivered the questionnaire, analyzed the raw materials, and wrote the present paper; Dong Junhong provided guidance and direction for this study, and polished this paper; all authors had approved the final version.

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REFERENCES

- [1] J. C. McCroskey and J. E. Baer, "Willingness to communicate: The construct and its measurement," presented at the Annual Convention of the Speech Communication Association, Denver, CO., 1985.
- [2] P. D. MacIntyre, P. A. Babin, and R. Clement, "Willingness to Communicate: Antecedents and consequences," *Communication Quarterly*, vol. 47, no. 2, pp. 215–229, 1999.
- [3] Y. Hashimoto, "Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context," *Studies in Second Language Acquisition*, vol. 20, no. 2, pp. 29–70, 2002.
- [4] P. MacIntyre, S. Baker, R. Clément, and L. Donovan, "Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students," *Language Learning*, vol. 52, no. 3, pp. 537–564, 2002.
- [5] K. Fushino, "Measuring Japanese university students' readiness for second-language group work and its relation to willingness to communicate," *Dissertations and Theses-Gradworks*, 2008.
- [6] Y. Cao and J. Philp, "Interactional context and willingness to Communicate: A comparison of behavior in whole class, group and dyadic interaction," *System*, vol. 34, pp. 480–493, 2006.
- [7] W. P. Wen and R. Clément, "A Chinese conceptualisation of willingness to communicate in ESL language," *Culture and Curriculum*, vol. 16, no. 1, pp. 18–38, 2010.
- [8] W. Yu and M. Lin, "A comparative study of college students' English WTC in Guangzhou and Hong Kong," *Foreign Language Teaching and Research*, vol. 3, pp. 219–223, 2004.
- [9] K. Fushino, "Causal relationship between communication confidence, beliefs about group work, and willingness to communicate in foreign language group work," *Tesol Quarterly*, vol. 44, no. 4, 2012.
- [10] K. Tran, *Some Strategies to Promote Student's Willingness to Communicate in Second Language Classroom: A Case of English education students at Can Tho University*, 2016.
- [11] S. J. Kang, "Dynamic emergence of situational willingness to communicate in a second language," *System*, vol. 33, no. 2, pp. 277–292, 2005.

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