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International Students' Willingness to Communicate in English as a Second Language: The Effects of L2 Self-Confidence, Acculturation, and Motivational Types

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ABSTRACT

This study examined factors affecting international students' willingness to communicate (WTC) in English as a second language (ESL), focusing on second language (L2) self-confidence, acculturation, and motivational types. L2 self-confidence was hypothesized to predict L2 WTC and to mediate the correlation between acculturation and L2 WTC for instrumental motivation learners, but not for integrative ones. Participants were 88 Japanese students studying at a university in California. The results partially confirmed the hypotheses, indicating that both L2 self-confidence and acculturation strongly correlate with L2 WTC, but the mediation effect of L2 self-confidence on the correlation between acculturation and L2 WTC was opposite from the hypothesis, as the mediation effect was significant for integrative motivation learners but not for instrumental ones.

Keywords: acculturation, English as a second language, L2 self-confidence, motivational types, willingness to communicate

INTRODUCTION

According to Gareis (2012), about 40% of international students in the United States have no close friends among their American classmates, and the rate is especially high among East Asian students. Many of them often end up being relegated to what

Gallagher (2013) called an "international ghetto." In this mode, students from a particular ethnic background stay together and talk in their native language, while avoiding speaking English as a second language (ESL). Researchers have questioned what factors may be affecting their behaviors (e.g., Wang et al., 2017).

International students' communicative behaviors can be, in part, explained in light of a notion called "willingness to communicate" (WTC). WTC was originally formulated by McCroskey and Baer (1985) in order to explain "why one person will communicate and another will not under identical or virtually identical situational constraints" (p. 3). Among the first researchers to apply this concept to a second language (L2) learning context were MacIntyre et al. (1998), who defined WTC in L2 (L2 WTC) as "readiness to enter into discourse at a particular time with a specific person or persons, using a L2" (p. 547). Examining L2 WTC as a factor influencing the students' communicative behaviors, MacIntyre et al. emphasized its significance as follows: "The ultimate goal of the learning process should be to engender in language students the willingness to seek out communication opportunities and the willingness actually to communicate in them" (p. 547).

Defining 12 variables influencing actual communication behavior, MacIntyre et al. (1998) categorized them into six vertical layers based on their proximity to the actual L2 use. With communication behavior on top as Layer I, the pyramid-like heuristic model by MacIntyre et al. (1998, p. 547) incorporates both trait-like static variables and situated momentary variables as determinants of the actual L2 use. Among the rest of the six layers, L2 WTC is placed on Layer II, the most immediate determinant of the actual L2 use. Layer III is characterized by its situated variables— a desire to communicate with a specific person and state communicative self-confidence. Among the variables in Layer IV (motivational propensities), L2 self-confidence has been widely studied. Consisting of self-evaluation of L2 competency and language anxiety, this latent variable is believed to correspond to the "overall belief in being able to communicate in the L2 in an adaptive and efficient manner" (MacIntyre et al., 1998, p. 551). In explaining this multifaceted variable, MacIntyre et al. alluded to the relation between intercultural adaptation and L2 self-confidence. Layer V addresses variables that are individually based—e.g., intergroup attitude and communicative competence. Layer VI encompasses the factors involving the society and the individual—i.e., intergroup climate and personality.

Based on his acculturation model, Schumann (1978, 1986) posited that one's target language can be acquired only to the degree to which the learner is acculturated with the target culture. He emphasized this acculturation as the first chain of causality—i.e., acculturation causes L2 learners to have more contacts in L2, which in turn encourages learners' second language acquisition (SLA). Noels et al. (1996) demonstrated this effect of acculturation. They measured a wide range of variables including linguistic self-confidence, lifestyle, contact with first language (L1) and L2 groups, and situated ethnic identity of 179 Chinese students in Canada. They found that the students who ethnically identified themselves to be more Canadian tended to have a lifestyle more closely aligned with that of Canadians. They also found that those students had higher self-confidence in English. In contrast, those with stronger Chinese ethnic identity were more likely to have a lifestyle consistent with Chinese culture and had lower self-confidence in English. This corroboration of Schumann's

(1978, 1986) acculturation model thus suggested that a higher degree of acculturation is indispensable for a higher degree of SLA.

Schmidt (1983) challenged this claim. In his case study of Wes, a Japanese immigrant to Hawaii, Schmidt observed the process of his SLA over the years. He found that Wes acquired high communicative competence but not grammatical competence despite the "low social distance, positive attitudes toward the second language community, and high integrative motivation to use the second language for communication" (p. 169). Schmidt thus refuted the hypothesis that the degree of linguistic achievement is determined by the degree of acculturation.

This precarious relation between acculturation and SLA can be explained in light of Gardner and Lambert's (1959) socio-educational model. This model categorized L2 learners' motivation into two subsets—integrative and instrumental motivation. Integrative motivation describes L2 learners' direct interest in the target language, the target culture, and its people. Instrumental motivation is characterized by the learners' focus on the utility that language acquisition yields, such as an enhanced aptitude as a job candidate. Because learners with instrumental motivation should seek opportunities to improve their language ability regardless of the degree of their acculturation, acculturation should not be a predictor of L2 WTC for such learners. Although integrative motivation is generally believed to be a better predictor of SLA (Ellis, 1994), some studies have found a relationship between integrative motivation and SLA insignificant (Chihara & Oller, 1978; Oller et al., 1977; Oller & Perkins, 1978).

Since the publication of Gardner and Lambert's seminal work in 1959, L2 motivation has been studied extensively. Dörnyei (2005) divides the history of L2 motivation research in the following three phases:

- The social psychological period (1959–1990)—characterized by the work of Gardner and his students and associates in Canada.

- The cognitive-situated period (during the 1990s)—characterized by work drawing on cognitive theories in educational psychology.

- The process-oriented period (the past five years [2000 through 2005])—characterized by an interest in motivational change, initiated by the work of Dörnyei, Ushioda, and their colleagues in Europe. (Dörnyei, 2005, pp. 66–67)

During the second phase, Gardner and Tremblay (1994) updated Gardner's initial sociopsychological construct by incorporating elements from goal theory into the education-friendly approaches to motivation (Dörnyei, 2001a). More recently, in the third phase, Dörnyei (2005) argued for a need to adopt a process-oriented approach that can account for the ongoing changes of motivation over time. In this context, Dörnyei discussed the "ideal L2 self," which represents an ideal image of the kind of L2 user that a learner aims to become. This notion of an ideal L2 self was further expanded to the notion of L2 self-regulation.

The basic assumption underlying the notion of motivational self-regulation is that students who are able to maintain their motivation and keep themselves on-task in the face of competing demands and attractions should learn better than students who are less skilled at regulating their motivation (Dörnyei, 2005, p. 91).

Another influential approach in motivational psychology is self-determination theory (Deci & Ryan, 1985, 2002), which focuses on various types of intrinsic and extrinsic motives. Intrinsic motivation is defined as the human need to be competent and self-determining in relation to the environment (Deci & Ryan, 1985). Researchers in the L2 field have attempted to incorporate certain elements of this theory to explain L2 motivation. Noels (2003), for example, suggested a motivation construct consisting of the three interrelated orientations: (a) intrinsic reasons inherent in the language learning process, (b) extrinsic reasons for language learning, and (c) integrative reasons. These terms fit into the established L2 concepts—e.g., intrinsically motivated learners would be able to self-regulate their L2 acquisition, and self-directed individuals would be willing to identify with the English language community and possibly develop intercultural competencies (Dörnyei, 2003). Focusing on intrinsic and extrinsic as well as integrative and instrumental motivations, Kreishan and Al-Dhaimat (2013) conducted a study of 166 Arab students in Jordan majoring in either English, French, or German. Measuring the four types of motivation, the researchers examined the relationships among motivational types, learning orientations, and L2 achievements. A series of statistical analyses indicated that "[students'] achievement scores did not show a significant correlation" with any of the other variables examined (p. 61).

Researchers have also investigated the relationship between motivation and other factors influencing L2 achievements as well as L2 WTC. Yashima (2002), for instance, examined the relationships among attitudes toward target language, motivation, and SLA in an English as a foreign language (EFL) context. With 297 Japanese EFL learners at a university in Japan, her study showed that the attitudes influenced motivation, which in turn positively influenced L2 proficiency measured by Test of English as a Foreign Language (TOEFL) scores. In addition to re-establishing this relationship between motivation and proficiency, the study revealed that motivation influenced L2 self-confidence, which in turn affected L2 WTC, providing a deeper insight into the mechanism of the relationship between motivation and achievement. Yashima, however, only employed motivational intensity, not motivational types. The study was thus successful in explaining the correlation between motivational intensity and L2 proficiency, but it did not explain how different motivational types affect the learning process and outcome.

Hashimoto (2002) conducted a study with similar variables in an ESL context. With 56 Japanese ESL learners at the University of Hawaii, she examined the relationship among L2 self-perceived competency, L2 anxiety, motivation, L2 WTC, and L2 communication frequency. A strong positive correlation between L2 WTC and motivation was established, and motivation was also shown to positively correlate with self-perceived competency. Although it was concluded indirectly, integrativeness showed some correlations with other variables such as L2 perceived competence and communication frequency.

Yashima et al. (2004) examined the goals of learning English upheld by Japanese EFL learners and their L2 WTC. Some students had immediate goals, such as tests, grades, and academic achievement. Others seemed to have "international-communication goals." The focus of "international posture" in the latter "captures a tendency to see oneself as connected to the international community, have concerns for international affairs and possess a readiness to interact with people other than Japanese. It seizes both integrative and instrumental aspects of motivation" (Yashima, 2009, p. 146). Yet, it seems that international posture seems to capture a tendency to relate oneself to the international community as a construct more pertinent to EFL contexts (p. 145).

In addition to the inconclusiveness of the studies on the relationship between motivational types and SLA, the incompleteness of the studies seems problematic. Such studies tend to focus on the learning outcome, rather than on the learning process. Therefore, not only the direction of the motivational types' effects on SLA, but also the mechanism of such effects, is yet to be revealed. Another issue might be related to language learning contexts. As Dörnyei (2005) pointed out, Gardner's conceptualization of the model only made sense in the multicultural context of Montreal, but in the foreign language context, the model might lack relevancy "because, e.g., there is no real contact with L2 speakers available for the learners" (p. 94).

Present Study

In an attempt to solve the conundrum of the relationship between acculturation and L2 WTC, the present study aimed to identify the factors affecting Japanese ESL speakers' L2 WTC, focusing on L2 self-confidence, acculturation, and motivational types. For motivational types, this study adopted integrative and instrumental motivation because they are well-known, easily defined, and relevant to L2 contexts (see Cook, 2000, for the discussion of the integrative and instrumental motivation as a useful and effective factor for L2 learning).

Based on findings in previous research (Gardner, 1985, 2001; MacIntyre & Charos, 1996; MacIntyre et al., 1998; Noels et al., 1996; Schumann, 1978, 1986; Ward & Kennedy, 1999; Yashima, 2002, 2009; Yashima et al., 2004), L2 self-confidence and acculturation were hypothesized to have a positive correlation with L2 WTC. This relationship between acculturation and L2 WTC was hypothesized to be mediated by self-confidence. That is, once the effect of L2 self-confidence was controlled for, the effect of acculturation would not remain significant. It was also hypothesized that this mediation pattern would be observed in instrumental motivation learners but not in learners with integrative motivation. For integrative motivation learners, even after the effect of self-confidence was controlled for, acculturation would still positively correlate with L2 WTC.

In summary, the following hypotheses were formulated:

- Hypothesis 1: The relationship between L2 self-confidence and L2 WTC is likely to be replicated—i.e., L2 self-confidence correlates with L2 WTC.

- Hypothesis 2: (a) The relationship between acculturation and L2 WTC is also likely to be replicated—i.e., acculturation correlates with L2 WTC, but (b) this correlation between acculturation and L2 WTC is mediated by L2 self-confidence.

- Hypothesis 3: Once the effect of L2 self-confidence is controlled for, (a) for the L2 learners with integrative motivation, the degree of acculturation still positively correlates with the degree of L2 WTC, but (b) for the L2 learners with instrumental motivation, the degree of acculturation does not correlate with the degree of L2 WTC.

METHOD

Participants

The participants were 88 Japanese international students—i.e., F-1 visa students from Japan—enrolled in the bachelors and ESL programs at Soka University of America (SUA), a liberal arts college in Southern California, in the spring semester of 2018. The 88 participants consisted of 19 first-year, 23 second-year, 20 third-year, 15 fourth-year students, and 11 ESL students attending the university's Extended Bridge Program (EBP), a 1-year intensive ESL program for international students conditionally admitted into the bachelor's degree program. All participants had advanced English proficiency—high enough to be admitted or conditionally admitted to SUA, a selective liberal arts college in the United States. For English proficiency, SUA requires a minimum TOEFL iBT (internet-based test) score of 80 for admission. The average TOEFL score of admitted international students at SUA is slightly above 100. It is thus reasonable to assume that the 88 undergraduate participants had TOEFL scores ranging between 80 and 100+, while the ESL participants on average had scores slightly lower than 80. None of the 88 participants had attended international schools and/or school outside of Japan prior to coming to the United States.

Design

Because the variables of interest (L2 WTC, L2 self-confidence, acculturation, and motivational types) are extremely difficult, if not impossible, to manipulate, a correlational design was employed instead of an experimental design. For data collection, we conducted a survey to collect demographic information and responses to measure study variables.

Measures

For each of the variables, we created an index for each participant. We assured the construct validity of each index by measuring the internal consistency of each set of the questions that was intended to measure the same construct, using Cronbach's alpha (for the entire scale, see Appendix A).

L2 WTC

For the measurement of L2 WTC, we employed the 20 items developed by MacIntyre and Charos (1996) as a measurement tool with modifications. We converted the ratio scale from 0% to 100% into a 7-point Likert scale. The measurement was shown to be highly reliable (eight items; α = .81).

L2 Self-Confidence

L2 self-confidence is, as MacIntyre et al. (1998) defined, a combination of L2 self-perceived competency and L2 anxiety. Therefore, we first measured L2 self-perceived competency and L2 anxiety separately. Then, by subtracting the L2 anxiety index from the L2 self-perceived competency index, we created the L2 self-confidence index.

L2 Self-Perceived Competency

For the measurement of L2 self-perceived competency, we used the 12 items developed by MacIntyre and Charos (1996) as a model with modifications. The measurement was found to be extremely reliable (eight items; α = .90).

L2 Anxiety

For the measurement of L2 anxiety, we used the 12 items developed by Yashima (2002) as a measurement tool with modifications. We employed a 7-point Likert scale, and the measurement was found to be highly reliable (eight items, α = .84).

Acculturation

For the measurement of acculturation, we adapted the sociocultural adaptation scale originally developed by Ward and Kennedy (1999) with modifications. We employed a 7-point Likert scale, and we asked the participants to rate how competent they would be in each acculturation example. The measurement was shown to be highly reliable (11 items; α = .85).

Motivational Types

We employed the Attitude/Motivation Test Battery (AMTB) developed by Gardner (1985, 2001) as a model. Among the 11 subsets that were designed to measure attitudes and motivations regarding English learning, we employed two subsets—integrative motivation and instrumental motivation. For each item that describes different kinds of motivation to study English, we asked participants to rate how strongly they agreed with each statement on a 7-point Likert scale. Both the integrative motivation scale (four items; α = .68) and instrumental motivation scale (four items; α = .68) were found to have moderate reliability.

In converting this quantitative variable into a categorical variable, we calculated the difference between instrumental motivation (four items) and integrative

motivation (four items) indices. The difference ranged from −10 (highly integrative) to 15 (highly instrumental). We labeled the highest through the 25th percentile as "instrumental motivation," and the 75th percentile through the lowest as "integrative motivation."

Procedure

We created an online survey (see Appendix A). We sent an invitation to participate in the survey to 106 Japanese students enrolled in the bachelors and ESL programs at SUA in the spring semester of 2018. We asked participants to answer questions regarding demographic information including their expected year of graduation, gender, age, etc. Then, we asked a series of questions to measure the variables of interest—L2 WTC, self-confidence, acculturation, and motivational types.

A total of 97 completed the survey. In order to control the participants' English learning experience, we excluded those who attended international schools and/or those who attended school outside of Japan prior to coming to the United States from the sample. Consequently, we studied responses by a total of 88 students.

Additionally, prior to the launch of the data collection, we received approval for the plans and procedures for the present study from the Institutional Review Board of our university.

RESULTS

To test the normality of the data, we performed the Shapiro-Wilk test. Results showed that L2 WTC ($W = .99$, $p = .45$), L2 self-confidence ($W = .99$, $p = .69$), and acculturation ($W = .98$, $p = .09$), were all normally distributed. Once normality was established, we conducted Pearson correlation analyses. As hypothesized, L2 self-perceived competency and L2 WTC showed a strong positive correlation ($r = .56$, $p < .001$). Also, L2 anxiety and L2 WTC showed a strong negative correlation as hypothesized ($r = −.40$, $p < .001$). Therefore, L2 self-confidence, which is calculated by subtracting L2 anxiety from L2 self-perceived competency, also showed a strong positive correlation with L2 WTC ($r = .58$, $p < .001$). Moreover, a statistically significant correlation between L2 WTC and acculturation was found ($r = .52$, $p < .001$; see Table 1).

Table 1: Correlation Matrix for Study Variables

Variable	L2 WTC	L2 Self-Confidence	Acculturation
L2 WTC	1.00		
L2 self-confidence	.58**	1.00	
Acculturation	.52**	.42**	1.00

Note. L2 = second language; WTC = willingness to communicate. *$p < .05$; **$p < .01$

To test Hypothesis 2b, we conducted Baron and Kenny's mediation analysis. First, a positive correlation between acculturation (original predictor) and L2 WTC (outcome variable; $r = .52$, $p < .001$) was found. Second, it was shown that acculturation predicted L2 self-confidence (mediator variable; $r = .42$, $p = .001$). Third, L2 self-confidence was shown to predict L2 WTC ($r = .58$, $p < .001$). However, as opposed to the hypothesis, even after the effect of L2 self-confidence was controlled for, the effect of acculturation still remained significant ($\beta = .33$, $p < .001$).

To test Hypotheses 3a and 3b, we conducted Baron and Kenny's mediation analysis separately for two motivational types—i.e., integrative and instrumental. Accordingly, we conducted the Shapiro-Wilk normality test again for each of the three variables for each motivational type. Results showed that L2 WTC ($W = .98$, $p = .69$; $W = .94$, $p = .47$), L2 self-confidence ($W = .98$, $p = .63$; $W = .98$, $p = .95$), and acculturation ($W = .99$, $p = .69$; $W = .97$, $p = .86$) were normally distributed for both integrative and instrumental motivation learners, respectively.

For integrative motivation learners, acculturation (original predictor) and L2 WTC (outcome variable) showed a strong positive correlation ($r = .55$, $p < .001$). A strong positive correlation between acculturation (original variable) and L2 self-confidence (mediator variable) was also established ($r = .63$, $p < .001$). Then, L2 self-confidence was also shown to strongly correlate with L2 WTC ($r = .66$, $p < .001$). Lastly, the effect of acculturation on L2 WTC, after the effect of L2 self-confidence was controlled for, was shown by multiple regression. As opposed to the hypothesis, however, once the effect of L2 self-confidence was controlled for ($\beta = .66$, $p < .001$), the effect of acculturation was shown to become insignificant ($\beta = .22$, $p > .05$). Instead, L2 self-confidence remained as a strong predictor of L2 WTC even after the effect of acculturation was controlled for ($\beta = .52$, $p < .01$).

For instrumental motivation learners, again, acculturation (original variable) was shown to positively correlate with L2 WTC (outcome variable; $\beta = .54$, $p < .001$). As opposed to the hypothesis, however, the correlation between acculturation and L2 self-confidence was statistically insignificant ($\beta = .30$, $p > .05$). Owing to the absence of the correlation between the original variable and the mediator, Baron and Kenny's mediation analysis was not established. However, other correlations were shown to be significant: L2 self-confidence positively correlated with L2 WTC ($\beta = .43$, $p < .05$). As opposed to the hypothesis, even after the effect of L2 self-confidence was controlled for, acculturation remained a significant predictor of L2 WTC ($\beta = .46$, $p < .01$). Conversely, once the effect of acculturation was controlled for, the correlation between L2 self-confidence and L2 WTC became statistically insignificant ($\beta = .29$, $p > .05$).

DISCUSSION

The study results confirmed Hypotheses 1 and 2a—i.e., L2 self-confidence and L2 WTC showed a moderate positive correlation, and so did acculturation and L2 WTC. However, incongruent with Hypothesis 2b, the effect of acculturation still remained significant even after the effect of L2 self-confidence was controlled for. Hypotheses 3a and 3b were also disconfirmed; the results showed the opposite. Based on a series of Baron and Kenny's mediation analyses, the correlation between acculturation and

L2 WTC became insignificant for integrative motivation learners once the effect of L2 self-confidence was controlled for. For instrumental motivation learners, acculturation remained a significant predictor of L2 WTC even after the effect of L2 self-confidence was controlled for. Furthermore, for instrumental motivation learners, this mediation analysis could not be completed because the correlation between acculturation and L2 self-confidence was not established to begin with.

The disconfirmation of Hypothesis 2b implies that the chain of correlations among acculturation, L2 self-confidence, and L2 WTC can be inferred from the studies conducted by Schumann (1986) and Noels et al. (1996), but it is not always the case. As a significant predictor of L2 WTC, acculturation contributes to L2 WTC for a reason other than enhancing the learners' L2 self-confidence. This inference appears to be a direct antithesis to Schumann's claim that one's target language can be acquired only to the degree to which the target culture is acculturated. However, this interpretation has a limitation because Schumann's idea of the degree of SLA is implicitly equated with the learners' L2 WTC here.

The incongruence between the results and Hypotheses 3a and 3b reveals noteworthy differences between integrative and instrumental motivation. As the cross-tabulation of study variables grouped by motivational types shows (see Table 2), the only significant difference between these two groups of learners was acculturation. It is understandable because integrative learners are assumed to be motivated to study English for the sake of integration (e.g., communication and cultural appreciation), and instrumental learners by practical purposes, such as careers.

Table 2: Cross-Tabulation of Motivational Types and Second Language (L2) Learners' Willingness to Communicate, L2 Self-Confidence, and Acculturation

	n	L2 WTC	L2 Self-Confidence	Acculturation
Integrative	32	33.59 (8.75)	1.88 (15.48)	51.41* (7.44)
Instrumental	32	34.25 (7.08)	0.75 (11.69)	47.31* (8.70)
Total	88	34.16 (7.95)	1.28 (13.86)	49.60 (8.09)

*$p < .05$ for independent samples t test between integrative and instrumental motivation learners

Note. As noted in the method section, integrative motivation learners and instrumental motivation learners do not add up to the total number of participants (N = 88) because the top 25% integrative and the top 25% instrumental motivation learners were selected for comparison, instead of dividing the total participants into half.

Although the difference was found to be insignificant, instrumental learners' higher L2 WTC appears to be counterintuitive because integrative motivation learners would be more willing to communicate in English than their instrumental counterparts would be. L2 WTC is suggested to be "the ultimate goal of the learning process" (MacIntyre et al., 1998, p. 547)—i.e., the most important determinant of SLA. With this assumption, the higher L2 WTC of instrumental motivation learners

implies that instrumental motivation might be more effective than integrative motivation, contrary to a number of past studies that concluded the superiority of integrative motivation (Ellis, 1994).

Explaining the unexpected patterns of correlation among the three variables—acculturation, L2 self-confidence, and L2 WTC—for integrative and instrumental motivation learners, which are contrary to Hypotheses 3a and 3b, also explicates this apparent outperformance of instrumental motivation learners on L2 WTC.

Acculturation and L2 WTC

As seen in the scatter plot in Figure 1, both integrative and instrumental motivation learners exhibited a positive linear relationship between acculturation and L2 WTC. Although the dispersions are slightly different, it is reasonable to assume that acculturation and L2 WTC have a positive linear correlation regardless of the motivational types. However, some noteworthy differences also can be observed. First, more integrative motivation learners' acculturation level exceeded 60, whereas more instrumental motivation learners' acculturation level fell under 40. This difference is directly observable from the statistically significant difference in the mean acculturation scores between the two motivational types as presented in Table 2. Secondly, the fitted line of the correlation between acculturation and L2 WTC for integrative motivation learners exhibited a steeper slope than that of the instrumental
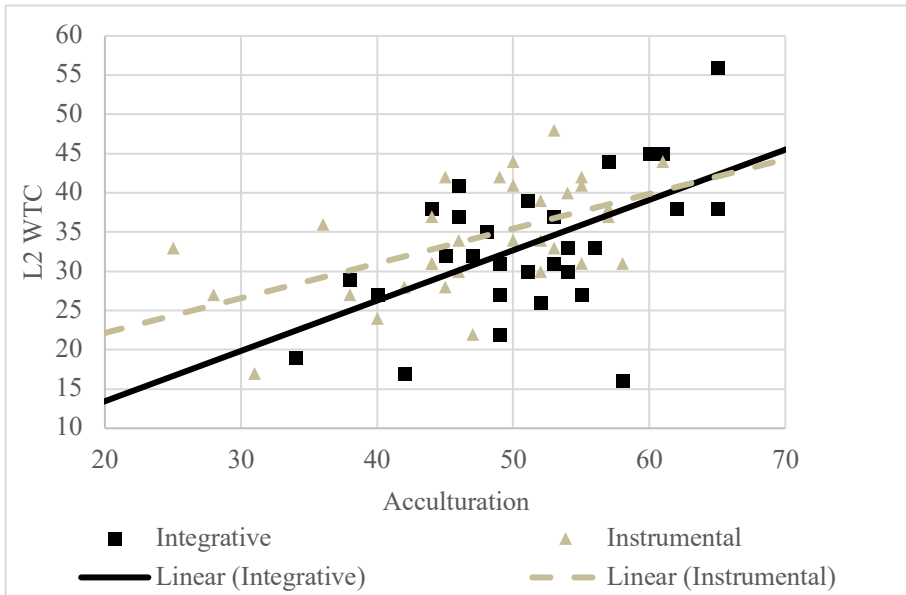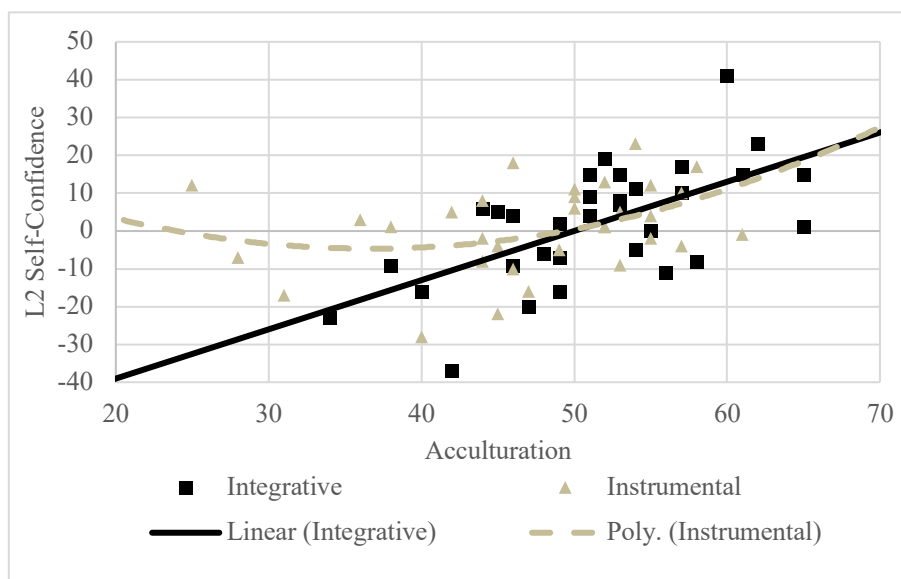

Figure 1: Relationship Between Second Language (L2) Learners' Willingness to Communicate (WTC) and Acculturation for Integrative Motivation Learners and Instrumental Motivation Learners

counterparts. That is, integrative motivation learners seem to attain more L2 WTC than their instrumental counterparts if their acculturation level increases by one unit.

Acculturation and L2 Self-Confidence

The correlation between acculturation and L2 self-confidence for instrumental motivation learners, which was found to be statistically insignificant, as opposed to the hypothesis, is presented in Figure 2. This graph indicates that integrative motivation learners exhibit a positive linear correlation, whereas their instrumental counterparts display a curve convex to the *x*-axis. The latter's L2 self-confidence initially decreases as they become more acculturated; however, more acculturation leads to more self-confidence beyond the tipping point (around acculturation score 40).
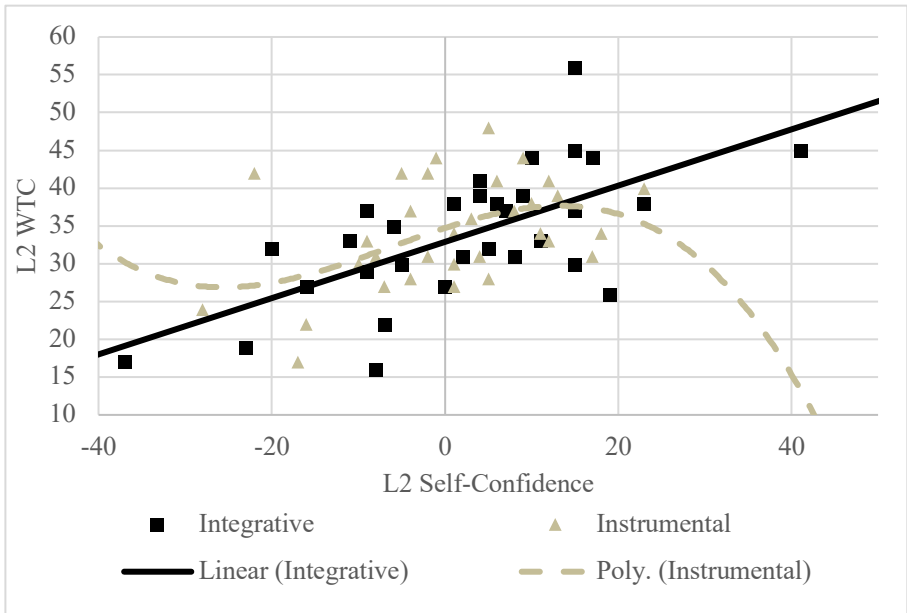

Figure 2: Relationship Between Acculturation and Second Language (L2) Learners' Self-Confidence for Integrative Motivation Learners (left) and Instrumental Motivation Learners (right)

A possible explanation for this unique correlation is a variant of what Gallagher (2013) coined "naïve optimism," characterizing those who have "fewer opportunities for social participation" but have "relatively high L2 WTC" (p. 68). Similarly, the initial downward slope of instrumental motivation learners' correlation between acculturation and L2 self-confidence could be explained that such learners have an unrealistic or inflated level of L2 self-confidence due to the insufficient level of acculturation, which could possibly represent the low level of social participation. The tipping point is, then, the level of acculturation at which instrumental motivation leaners are able to accurately perceive their L2 self-confidence, rather than

unrealistically inflating it. It is, therefore, likely that this mixture of negative and positive slopes is the primary reason for the statistical insignificance of the correlation between acculturation and L2 self-confidence for instrumental motivation learners.

L2 Self-Confidence and L2 WTC

For the correlation between L2 self-confidence and L2 WTC as well, integrative and instrumental motivation learners exhibited distinctively different patterns. As shown in the scatter plot in Figure 3, integrative motivation learners exhibit a linear positive correlation. On the other hand, instrumental motivation learners display a bell curve, which can be interpreted as a tendency for the L2 WTC of those learners to increase as they gain more self-confidence. At one point (around L2 self-confidence score 5), however, L2 WTC begins to decrease as they become more self-confident in their L2.
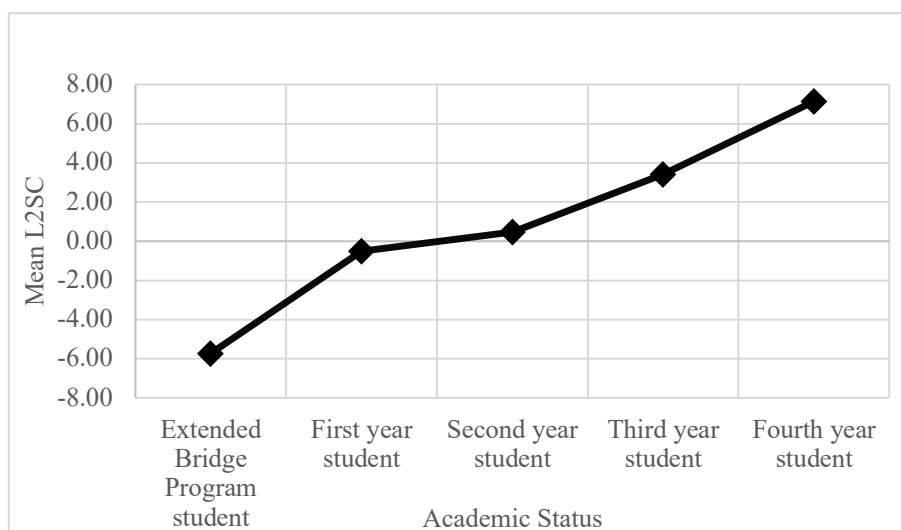

Figure 3: Relationship Between Second Language (L2) Leaners' Self-Confidence and L2 Willingness to Communicate (WTC) for Integrative Motivation Learners (left) and Instrumental Motivation Learners (right)

Because L2 WTC is the very motivation of SLA for integrative motivation learners, the more confident they become in their L2, the more willing to talk in ESL, especially for the purpose of integration and socialization. On the other hand, instrumental motivation learners are, by definition, more likely to have clear and practical goals, such as scoring better on the TOEFL or finding a job that involves English use. But they might lose their willingness to practice speaking English once their goals are achieved. It could thus be suggested that the point where the curve

exhibits a downward slope is the degree of self-confidence at which instrumental motivation learners feel satisfied with their SLA and begin to lose L2 WTC. This seems congruent with the observation made by Yashima et al. (2004): "The higher level of motivation links to self-confidence, possibly through learning behavior and its resultant competence" (p. 142). Reversely, when motivation fades away, L2 self-confidence and L2 WTC also go down. These findings also suggest that "motivation is a dynamic, ever-changing process" (Dörnyei, 2005, p. 66), and "in the context of learning a language for several months or years, or over a lifetime, motivation is expected to go through rather diverse phases" (p. 83).

Considering the nature of L2 self-confidence, the reason for the instrumental motivation learners' slightly higher L2 WTC becomes clearer. As Figure 4 indicates, L2 self-confidence is related to the years spent in the United States.
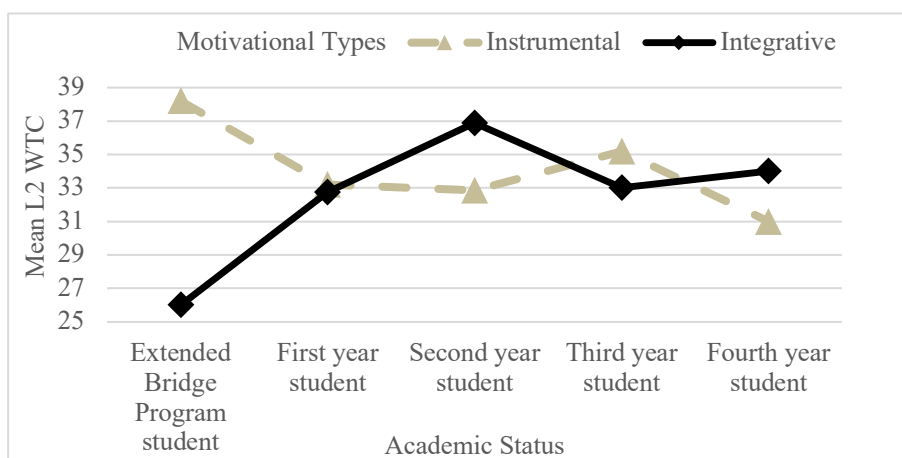

Figure 4: Relationship Between Academic Status and Second Language (L2) Learners' Self-Confidence for All Participants

A one-way analysis of variance indicated that none of the differences in L2 self-confidence among students of five different groups (EBP to fourth-year students) was statistically significant. The graph shows, however, that students gain L2 self-confidence as they move up the ladder of academic status. Extrapolating from the positive upward slope of the integrative motivation learners' correlation between L2 self-confidence and L2 WTC, their mean L2 WTC would have been higher if the samples included students who have spent more than 5 years in the United States. Conversely, for instrumental motivation learners, the mean L2 WTC would have been lower with more samples with more years spent in the United States because more data would cluster around the downward slope portion of the bell curve. Therefore, the apparent outperformance of the instrumental motivation learners in L2 WTC is

not likely due to their motivational types; rather, it can be attributed to the participants' limited amount of time spent in the United States.

It was assumed that integrative motivation learners' L2 WTC tends to increase, whereas instrumental motivation learners' L2 WTC tends to decrease as more time is spent in the United States. This assumption was confirmed with a direct investigation of the relationship between the time spent in the United States and L2 WTC. As Figure 5 shows, integrative motivation learners and their instrumental motivation counterparts exhibit virtually opposite trajectories of chronological development in L2 WTC.

Figure 5: Relationship Between Academic Status and Second Language (L2) Learners' Willingness to Communicate Grouped by Motivational Types

In general, as the previous analyses showed, L2 WTC increased as a function of the time spent in the United States for integrative motivation learners, whereas the opposite was true about the instrumental counterparts. However, for both groups, third-year students were exceptions: Third-year integrative motivation learners scored lower in L2 WTC than their second-year counterparts, whereas third-year instrumental motivation learners scored higher than their second-year counterparts. These findings, again, suggest that motivation should not be seen "as a static attribute but rather as a dynamic factor that displays continuous fluctuation" (Dörnyei, 2005, p. 83).

What, then, might have affected those learners' motivation in the third year in college? A possible explanation for integrative motivation learners' irregular drop in L2 WTC is the mandatory study abroad program that requires all the third-year students at SUA—both international and domestic—to participate in for one semester in the country where their chosen foreign language is spoken. Because most of the third-year students who participated in the present study had just begun their semester abroad or just completed and returned from the program, it is likely that such

integrative motivation learners were highly integrated into the culture of their study abroad destination. Their high motivation for the integration into their target language (third-language) culture might have resulted in the so-called "reverse culture shock" after return, making them feel intimidated or overwhelmed by the necessity to initiate a conversation in English in various settings.

On the other hand, instrumental motivation learners' sudden increase in L2 WTC could be explained by their prospective postgraduation aspirations. Because most international students begin job hunting or preparing for graduate school application in their third year, it is of immense importance for them to improve their English-speaking ability. For example, those job hunters are highly motivated to speak English more in order to prepare themselves for job interviews. Graduate school applicants, who are often required to submit their TOEFL scores, could also be motivated to communicate in English during this period of time.

Compared to the steady growth of L2 self-confidence as a function of the time spent in the United States, we found L2 WTC to be more unstable and fluctuating. These different characteristics of L2 self-confidence and L2 WTC are congruent with the heuristic model developed by MacIntyre et al. (1998), as discussed earlier (see Introduction). According to MacIntyre et al., the closer the variable is to Layer I (actual L2 use), the more situated and flexible the variable is. Conversely, variables at the lower levels of the hierarchy are considered to be more static and stable. From this perspective, the steady development of L2 self-confidence is congruent with the heuristic model because it is located in Layer IV, the layer closer to the bottom. On the other hand, L2 WTC's susceptibility to a variety of factors such as study abroad and job hunting is also congruent because it is located in Layer II, the layer closest to the top (see Macintyre et al., 1998, p. 547).

Pedagogical Implications

A comprehensive review of the studies of international students' challenges and successes at English-speaking universities by Andarade (2006) revealed that: (a) international students have greater and different adjustment challenges than domestic students, and (b) international students may need different types and levels of support depending on such factors as year in school, level of study, age, gender, country of origin, etc. (pp. 148–149). The present study on international students' WTC supports these findings in that international students go through a number of challenges linguistically, culturally, socioculturally, psychologically, and motivationally. The present study also revealed that the amount of time international students spend in the English-speaking environment likely affects their L2 WTC, and so does the time away from it (i.e., during study abroad). Although there are still many unknowns, it is imperative that faculty have "greater understanding of [international students'] academic, social, emotional and psychological challenges" (Andarade, 2006, p. 149).

According to Kishino and Takahashi (2019), study abroad is "like an incubation period when students struggle with their global citizenship identities. In the long run, it contributes to developing students' concerns for social problems and strengthening interpersonal skills across cultures" (p. 555). This characterization of study abroad seems also relevant to students' linguistic and cultural development. After immersing

themselves in their third-language culture during study abroad (from their study abroad at SUA), international students in the present study had to readjust themselves to their L2 culture back at SUA. The study found that international students, particularly those with integrative motivation, are likely to have trouble readjusting due to their high motivation for the integration into their third-language culture. They will eventually readjust to their L2 speaking mode. And yet, we must remember that students need much support before, during, and after study abroad in terms of identity development (Kishino & Takahashi, 2019), as well as linguistic and cultural development.

As the contrast between integrative and instrumental motivation learners is evident from this study, it would be helpful for teachers to identify students' motivational types. For integrative motivation learners, for instance, ESL teachers may not rely on traditional pedagogies, which are characterized by their heavy dependence on formal aspects of language learning, such as grammar, vocabulary, and translation. Rather, they should readily be able to provide students with materials that elicit students' interest and integrative motivation through the use of culturally toned materials such as music, art, or film. On the other hand, instrumental motivation learners tend to lose their motivation for learning once they achieve their practical goals. Although whether or not integrative motivation is more effective for SLA requires further discussions, it is at least reasonable to argue that teachers should provide instrumental motivation learners with intellectually challenging goals to maintain their motivation. Such pedagogical strategies will likely prevent them from suddenly losing their L2 WTC after a certain amount of time.

According to the basic assumption underlying the notion of motivational self-regulation, "Students who are able to maintain their motivation and keep themselves on-task in the face of competing demands and attractions should learn better than students who are less skilled at regulating their motivation" (Dörnyei, 2005, p. 91). If so, how can we help those instrumental motivation learners maintain their motivation even after they achieve their goals or tasks? Dörnyei (2001b) suggests the following "instrumental strategies":

- make students aware (or remind them) that successful completion of the tasks is instrumental to the accomplishment of their valued goals;

- reiterate the role the L2 plays in the world and its potential usefulness both for themselves and their community; and

- establish incentive systems that offer extrinsic rewards for successful task completion (e.g., good grades, prizes, celebration). (pp. 124–125)

It is also important that faculty support students' development of L2 self-confidence, considering its insusceptible nature; however, it might not be a realistic goal in classroom settings. Instead, L2 WTC could be externally stimulated to enhance students' actual L2 use. Therefore, teachers' use of various motivational factors, such as target language culture or possible career paths for fluent English

speakers, could greatly influence students' L2 WTC. Dörnyei (2001a), for instance, offered a number of suggestions to maintain L2 learners' motivation, or what he calls "executive motivational strategies" (p. 71). His suggestions include detailed lessons to: (a) make learning stimulating and enjoyable, (b) present tasks in a motivational way, (c) set specific learner goals, (d) protect the learners' self-esteem and increase their self-confidence, (e) allow learners to maintain a positive social image, (f) promote cooperation among the learners, (g) create learner autonomy, and (h) promote self-motivating learner strategies (pp. 71–116). By applying pedagogical strategies that can generate and maintain L2 learners' motivation and enhance their L2 WTC, the quality of their experience in the English-speaking environment is expected to improve.

CONCLUSION

In the present study we found that the effect of acculturation on L2 WTC is strongly mediated by L2 self-confidence for integrative motivation learners, but not for their instrumental counterparts. For the latter, acculturation and L2 self-confidence did not show a statistically significant correlation. Furthermore, the positive correlation between L2 self-confidence and L2 WTC was stronger for integrative motivation learners than for their instrumental counterparts. A closer examination of the weak correlation between L2 self-confidence and L2 WTC suggests that instrumental motivation leaners' L2 WTC would decrease after a certain amount of time spent in the United States, presumably due to their satisfaction after the achievement of their practical goals. This finding implied that L2 WTC was more susceptible to external factors and that it fluctuates over time as opposed to L2 self-confidence, which showed a steady growth over time. This is congruent with the heuristic model of L2 WTC proposed by MacIntyre et al. (1998). This could have been the reason for the instrumental motivation learners' counterintuitive outperformance over the integrative counterparts in L2 WTC.

This is one of the few studies, if any, that examined the relationship between motivational types, not merely the intensity, and various constructs related to SLA. Moreover, the homogeneity of the participants (all ESL speakers from Japan pursuing a bachelor's degree in the United States) possibly suggests the applicability of the findings to pedagogical contexts in Japan, especially those in preparation for the pursuit of international education.

Limitations and Future Directions

This study has identified the following limitations. First, this study did not collect data on students' actual L2 proficiency. Even though it has rebutted Schumann's argument that one can achieve SLA only to the degree of acculturation, the conceptualization of SLA is still in question. More specifically, because this study implicitly defined SLA as L2 WTC, the results could vary if SLA was defined in different ways. L2 WTC is considered to be the ultimate goal of SLA, but the measurement of actual L2 proficiency would most likely yield different results. If so, this study's rebuttal against Schumann's argument is valid only to the degree to which

L2 WTC represents SLA. It is thus suggested that future studies collect and use data such as TOEFL scores in order to analyze its correlation with acculturation. Furthermore, it is suggested that future research look into the developmental patterns related to WTC and L2 communicative competence.

In one's first language, WTC is a fairly stable personality trait, developed over the years, but the situation is more complex with regard to L2 use, because here the level of one's L2 proficiency, and particularly that of the individual's L2 communicative competence, is an additional powerful modifying variable. (Dörnyei, 2003, p. 12)

Similarly, the second limitation is the lack of data on actual L2 use. Although this study has placed its primary focus on how L2 WTC is affected and predicted by other variables, results would be futile if there was a large discrepancy between L2 WTC and the actual L2 use. As a better measurement of the actual L2 use, future research may adopt the concept of self-reported L2 use. Given the limited accuracy of self-report, however, future research could yield more fruitful findings if it obtained data on students' actual L2 use in their participation in particular activities inside and outside the classroom evaluated by their teachers.

Finally, the third limitation lies in the analyses of the relationship between the time spent in the United States and study variables such as L2 self-confidence and L2 WTC. Although the incremental development of L2 self-confidence as a function of the time spent in the United States was considered as a "steady growth," this study was unable to fully demonstrate this point owing to its cross-sectional nature. It is thus suggested that future studies adopt a longitudinal design.

REFERENCES

Andarade, M. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education, 5*(2), 131–154.

Chihara, T., & Oller, J. W. (1978). Attitudes and attained proficiency in EFL: A sociolinguistic study of adult Japanese speakers. *Language Learning*, *28*, 55–68.

Cook, V. (2000). *Linguistics and second language acquisition*. Foreign Language Teaching and Research Press and Macmillan.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* Plenum.

Deci, E. L., & Ryan, R. M. (Eds.). (2002). *Handbook of self-determination.* University of Rochester Press.

Dörnyei, Z. (2001a). *Motivational strategies in the language classroom*. Cambridge University Press.

Dörnyei, Z. (2001b). *Teaching and researching motivation*. Pearson Education.

Dörnyei, Z. (2003). Attitudes, orientation, and motivations in language learning: Advances in theory, research, and applications. *Language Learning, 53*(Supp.), 3–32.

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum.

Ellis, R. (1994). *The study of second language acquisition.* Oxford University Press.

Gallagher, H. C. (2013). Willingness to communicate and cross-cultural adaptation: L2 communication and acculturative stress as transaction. *Applied Linguistics, 34*(1), 53–73.

Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. Edward Arnold.

Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 422–459). University of Hawaii, Second Language Teaching and Curriculum Center.

Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology, 13*(4), 266–272.

Gardner, R. C., & Tremblay, P. F. (1994). On motivation, research agendas, and theoretical frameworks. *The Modern Language Journal, 78*(3), 359–368.

Gareis, E. (2012). Intercultural friendship: Effects of home and host region. *Journal of International and Intercultural Communication*, *5*(4), 309–328.

Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context. *Studies in Second Language Acquisition 20*(2), 29–70.

Kishino, H., & Takahashi, T. (2019). Global citizenship development: Effects of study abroad and other factors. *Journal of International Students, 9*(2), 535–559.

Kreishan, L. J., & Al-Dhaimat, Y. (2013). Intrinsic and extrinsic motivation, orientation and achievements in L2 of Arab learners of English, French and German: A study from Jordan. *International Education Studies*, *6*(12), 52–63.

MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and Social Psychology, 15*, 3–26.

MacIntyre, P. D., Dörnyei, Z., Clément, R., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal, 82*(4), 545–562.

McCroskey, J. C., & Baer, J. E. (1985, November). *Willingness to communicate: The construct and its measurement* [Paper presentation]. Annual Convention of the Speech Communication Association, Denver, CO, United States.

Noels, K. A. (2003). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. In Z. Dörnyei (Ed.), *Attitudes, orientations, and motivations in language learning* (pp. 97–136). Blackwell.

Noels, K. A., Pon, G., & Clément, R. (1996). Language, identity, and adjustment: The role of linguistic self-confidence in the acculturation process. *Journal of Language and Social Psychology, 15*(3), 246–264.

Oller, J. W., Baca, L., & Vigil, F. (1977). Attitudes and attained proficiency in ESL: A sociolinguistic study of Mexican–Americans in the South West. *TESOL Quarterly*, *11*, 173–183.

Oller, J. W., & Perkins, K. (1978). Intelligence and language proficiency as sources of variance in self-reported affective variables. *Language Learning, 28,* 85–97.

Schmidt, R. W. (1983). Interaction, acculturation, and the acquisition of communicative competence: A case study of an adult. In N. Wolfson, E. Judd, &

E. Hatch (Eds.), *Sociolinguistics and language acquisition* (pp. 137–174). Newbury House.

Schumann, J. H. (1978). *The pidginization process: A model for second language acquisition*. Newbury House.

Schumann, J. H. (1986). Research on the acculturation model for second language acquisition. *Journal of Multilingual and Multicultural Development, 7*(5), 379–392.

Wang, I-C., Ahn, J., Kim, H., & Lin-Siegler, X. (2017). Why do international students avoid communicating with Americans? *Journal of International Students, 7*(3), 555–580.

Ward, C. A., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations, 23*(4), 659–77.

Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal, 86*(1), 54–66.

Yashima, T. (2009). International posture and the ideal L2 self in the Japanese EFL context. In E. Ushioda & Z. Dörnyei (Eds.), *Motivation, language identity and the L2 self* (pp. 144–163)*.* Multilingual Matters.

Yashima, T., Zenuk-Nishide, L., & Shimizu, K. (2004). The influence of attitudes and affect on willingness to communicate and second language communication. *Language Learning, 50*(1), 119–152.

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