MOTIVATION AND WILLINGNESS TO COMMUNICATE AS PREDICTORS OF REPORTED L2 USE: THE JAPANESE ESL CONTEXT

YUKI HASHIMOTO

University of Hawai'i

ABSTRACT

The purpose of this study was to examine affective variables as predictors of reported second language (L2) use in classrooms of Japanese ESL (English as a Second Language) students. The study used the socio-educational model and the willingness to communicate (WTC) model as the basis for a conceptual framework, partially replicating a study by Macintyre and Charos (1996). Descriptive statistics, reliability of the subscales, correlation, and construct validity (using principal component analysis) were examined, and a model of L2 communication was tested using structural equation modeling.

Using Amos version 4.0, structural equation modeling showed that motivation and WTC affect reported L2 communication frequency in classrooms as hypothesized. Variables underlying WTC were also examined. Perceived competence and L2 anxiety were found to be causes of WTC, which led to more L2 use, and L2 anxiety was found to negatively influence perceived competence, supporting the results of the Macintyre and Charos (1996) study. Although a path from WTC to motivation was not found to be significant in the original study, it was found to be significant in the present replication. In addition, a path from perceived competence was found to exert a strong and direct influence on motivation from a data-driven path.

INTRODUCTION

The use of the target language is one of the main purposes in learning second languages for many L2 learners, and it has been widely assumed that the use of the target language is also an indicator of and a necessary condition for successful second language acquisition (SLA). Researchers have found that the use of the target language plays a crucial role in SLA (Seliger, 1977; Swain 1995, 1998). However, though many studies examine affective variables as predictors of proficiency, there are few studies that examine affective variables as causes of L2 use.

This study examines affective variables as predictors of reported L2 use by Japanese

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ESL students in classrooms. Using the socio-educational model (Gardner, 1985) and the WTC model (Macintyre, 1994) as the basis for a conceptual framework, motivation and willingness to communicate were hypothesized to be main causes of the frequency of L2 use in classrooms. This paper will begin by examining the study of L2 motivation, since motivation is held to be a major affective variable influencing SLA. Other affective variables which may influence the frequency of L2 use will also be discussed, including willingness to communicate, L2 anxiety, and perceived competence.

Gardner's Approach to Motivation

Gardner and Lambert (1959) developed an approach to motivation which has influenced various studies in L2 motivation to the present day. They made the distinction between integrative motivation and instrumental motivation. In their definition, integrative motivation is positive attitudes toward the target language group and a willingness to integrate into the target language community, whereas instrumental motivation refers to practical reasons for learning a language, such as to gain social recognition or to get a better job.

Gardener (1985) established a model of motivation in second language learning called the socio-educational model. The model is concerned with the role of various individual differences in the learning of an L2. In the model, two classes of variables, integrativeness and attitudes toward the learning situation are said to contribute to the learner's level of motivation, and these three classes of variables are said to form integrative motivation.

The Attitude/Motivation Test Battery (AMTB) was developed by Gardner (1985) to assess various individual difference variables based on the socio-educational model. Adaptations of the AMTB have been used in many studies of L2 motivation (e.g., Baker & Macintyre, 2000; Gardner, Day, & Macintyre, 1992; Gardner, Lalonde, Moorcroft, & Evers, 1987; Gardner & Macintyre, 1991; Gardner & Macintyre 1993; Gardner, Tremblay, & Masgoret, 1997; Gliksman, Gardner, & Smythe, 1982; Masgoret, Bernaus, & Gardner, 2001; Tremblay & Gardner, 1995). The AMTB is made up of over 130 items, and its reliability and validity have been supported (Gardner & Gliksman, 1982; Gardner & Macintyre, 1993).

The AMTB consists of 11 subtests that can be grouped into five categories (Gardner, 2001, p. 7). Three of the categories, integrativeness, attitudes toward the learning situation, and motivation have been mentioned above and included in Gardner's model. One of the remaining two is instrumental orientation which refers to an interest in learning the language for pragmatic reasons that do not involve identification with the other language community. The other is language anxiety, which involves anxiety reactions when called upon to use the second language (Gardner, 2001, p. 8). Table 1 presents a listing of the constructs assessed in the AMTB, the subtests that define each construct, and the number of items typically used in each subtest.

Table 1
Constructs and Scales of the AMTB from Gardner (2001, pp. 8-9)

Construct 1:	**Integrativeness**
Subtest 1:	Integrative orientation (4 items)
Subtest 2:	Interest in foreign languages (10 items)
Subtest 3:	Attitudes toward the target language group (10 items)
Construct 2:	**Attitudes toward the Learning Situation**
Subtest 4:	Evaluation of the language instructor (10 items)
Subtest 5:	Evaluation of the language course (10items)
Construct 3:	**Motivation**
Subtest 6:	Motivation intensity (10 items)
Subtest 7:	Desire to learn the language (10 items)
Subtest 8:	Attitudes toward learning the language (10 items)
Construct 4:	**Instrumental Orientation**
Subtest 9:	Instrumental orientation (4 items)
Construct 5:	**Language Anxiety**
Subtest 10:	Language class anxiety (10 items)
Subtest 11:	Language use anxiety (10 items)

Motivation Beyond Integrative/Instrumental Distinctions

Gardner's approach outlined above has influenced many studies in L2 motivation. Although it is clear that Gardner's theory has made a large contribution to this area, many studies calling for reconceptualization of motivation have emerged. Gardner's theory took the position that learners' attitudes toward the target language group affect their success in learning the target language (Baker & Macintyre, 2000, p. 318). Others held

that integrative motivation is more influential than instrumental motivation. In fact, instrumental motivation is discussed in very little detail, whereas integrative motivation is a key concept in the model (Macintyre, MacMaster, & Baker, 2001, p. 464). It was pointed out that Gardner's theory puts too much emphasis on the integrative and instrumental distinctions.

In response to calls for the adoption of a wider vision of motivation, Tremblay and Gardner (1995) extended Gardner's construct of L2 motivation by incorporating other motivational variables into the model. Gardner (2001) acknowledges that there are factors other than integrative motivation that affect motivation such as instrumental motivation and attitudes toward a teacher and a course. Although the focus of the model is on integrative motivation, Gardner (2001) also maintains that there might be other factors that have direct effects on language achievement such as language learning strategies, language anxiety, and self-confidence with the language. He states that the purpose of the model is to focus attention on the role of integrative motivation, rather than attempting to show all the possible variables (p. 7). Gardner does not currently claim that integrative motivation is more influential than instrumental or any other type of motivation, but simply that those who are integratively motivated will probably be more successful in language learning than those who are not so motivated (Crookes & Schmidt, 1991, p. 474).

Another argument which has been raised against the Gardner model is that traditional approaches influenced by the work of Gardner have been almost exclusively social-psychological, and they have tended to group attitudes and motivation together (Crookes & Schmidt, 1991, p. 501). Macintyre et al. (2001) provided empirical evidence that Gardner's model deals with attitudinal motivation which might be separate from action motivation. Macintyre tested for the overlap among concepts from four separate research paradigms: Gardner's socio-educational model; the model of academic motivation and learning strategies of Pintrich; the action control model of Kuhl; and McCroskey's WTC. Factor analysis revealed that all of the Gardner AMTB variables loaded heavily on a factor called attitudinal motivation, rather than on two other factors called action motivation and self-confidence (Macintyre et al., 2001, p. 482). However, Crookes and Schmidt (1991) acknowledge that language learning takes place within a social context

and socially grounded attitudes may provide important support or lack of support for motivation (p. 501). The focus of their arguments was that Gardner's approach was so influential that alternative concepts have not been seriously considered (Crookes & Schmidt, 1991, p. 501; Dörnyei, 1994, p. 274) and that the theory was limited in terms of the range of possible influences on motivation that exist (Dörnyei, 1994, p. 274).

Schumann's acculturation model also emphasizes the importance of social-psychological factors influencing SLA. Schumann (1986) points out that although instrumental and integrative motivations are useful ways to think about success in second language learning, motivations are complex constructs that interact with social and other variables (p. 384). Schumann's acculturation model predicts that learners will acquire the target language to the degree they acculturate to the target language group. Motivation is seen as one of a large number of affective variables contributing to the construct of acculturation. There are arguments against the acculturation model that the degree of acculturation does not always positively correlate with the degree of success in SLA (Schmidt, 1983; Schumann, 1986) and, since the effects of individual affect may be variable and complex, it is difficult to test the model (Crookes & Schmidt, 1991, p. 477; Schumann, 1986, pp. 386-387). Since studies undertaken with regard to the acculturation model did not provide sufficient support for the model, the model is seen as only one aspect influencing SLA instead of a major causal variable in SLA (Crookes & Schmidt, 1991).

While early studies done in connection with Gardner's theory supported the importance of the integrative over the instrumental motivation, the results found in other studies were contradictory. Oller, Baca, and Vigil (1977) found that subjects (Mexican Americans in Southeast) who were instrumentally motivated developed resentment toward the target community (in this case Anglo Americans) as they progressed in the target language (in this case English). The authors attributed the anti-integrative motivation of the subjects to the situation in which colonized minority of Mexican Americans have been oppressed by a powerful political system (p. 182). There are several other studies which have found negative correlations between attitudes and language proficiency (e.g., Chihara & Oller, 1978; Oller, Hudson, & Liu, 1977; Teitelbaum, Edwards, & Hudson, 1975). Gardner (1980) responds to these counter

arguments by stating that the inconsistencies are mainly due to statistical, contextual, and conceptual factors such as statistical exceptions, sociocultural differences, and differences in how the affective factors are viewed and measured (pp. 264-268).

Clément and Kruidenier (1983) proposed that contradictory results could be traced to two factors. First, it is difficult to draw a clear line between instrumental and integrative motivation, and second the relationship between orientations and achievement in a second language might vary depending on the context in which the learning takes place (pp. 274-278). In addition to instrumental orientation, they proposed three other orientations (the acquisition of knowledge, travel, and friendship) in their study based on factor analysis suggesting that these four orientations should be considered as independent orientations in future research in place of the integrative/instrumental distinction (pp. 286-288). Although these four orientations might have extended integrative and instrumental distinctions to some extent, it seems these categorizations still do not address the dynamic and variable nature of motivation. In fact, Gardner and Macintyre themselves acknowledge that since motivation is dynamic, it is too static and restricted to employ the old characterization of motivation represented by instrumental/integrative distinctions (Dörnyei, 1994, p. 274).

Qualitative Approaches to Motivation

Several studies have emerged which directed studies of L2 motivation to focus more on social context and social identity. Norton Peirce (1995) introduced the conception of investment, building on Bourdieu's notion of "cultural capital." She argues that the instrumental and integrative distinction does not capture the complex relationship among power, identity, and language learning. Instead, the notion of investment attempts to capture the relationship of the language learner to the changing social world (p. 17). She argues that in the field of SLA, artificial distinctions are drawn between the individual language learner and the social world. However, motivation must be understood with reference to social context and in relation to the multiple changing and contradictory identities of language learners across time and space (p. 26). The term investment refers to the socially and historically constructed relationship of learners to the target language and their sometimes ambivalent desire to learn and practice it (Norton, 1997, p. 411).

Syed (2001) also argues that the notions of multiple and socially constructed identity need to be addressed in the study of motivation (p. 129). Other researchers also saw the need for more qualitative approaches to complement the largely quantitative tradition of research on L2 motivation (Crookes & Schmidt, 1991; Dörnyei, 2001; Ushioda, 2001). Although L2 motivation research can benefit from the use of qualitative techniques, they are not without disadvantages in terms of their reliability and generalizability.

Many researchers have questioned the use of self-report questionnaires in studies of L2 motivation on the ground that they do not always elicit true responses from participants and they are vulnerable to extraneous influences. Self-reported attitude measures may also be under the influence of extraneous factors such as the desire to look good in one's own eyes (self-flattery), or in the eyes of others (the approval motive), or simply to be consistent in responding to questions of related content (response set). Further, it has been suggested that subjects must understand the questions in an attitude survey in order for them to give self-flattering, socially desirable, and consistent responses. Therefore, if the questions are phrased in the subject's native language, they become a test of intelligence and a rather direct test of first language proficiency. If the questions on the other hand are phrased in the target language, they become a target language proficiency measure (Oller, 1981; Oller & Parkins, 1978a; Oller & Parkins, 1978b). Gardner responded that all such claims are based on speculation and lack empirical support (Gardner, 1980; Gardner & Gliksman, 1982).

Factors Affecting Frequency of the L2 Use

The use of the target language is an end in itself for many L2 learners, and it is generally believed to be an indicator of and a necessary condition for successful second language acquisition. In Seliger's (1977) research with adults studying ESL in the United States, it was found that students who participate more and thereby elicit more teacher input exhibit greater gains in L2 proficiency compared to students who play a passive role in language interaction. Swain (1995, 1998) also emphasized the role of output (i.e., production or use) in L2 learning, stating that output is necessary for the development of production (talking and writing) as input develops only listening and reading comprehension. According to Swain (1998), output has three functions in L2 learning

which are noticing, hypothesis testing, and metalinguistic functions. By producing output, learners notice the gap between the target language and their own interlanguage, or what they want to say and what they cannot say which may prompt learners to recognize their linguistic problems. In addition, learners use their output as a way to test hypotheses about the second language by way of experimenting with new structures and forms to modify their L2. Finally, output produces metatalk which is language used in problem solving and for cognitive purposes. Using metatalk, learners become more aware of noticing, hypothesis testing, and other language learning processes. In contrast, Day (1984) did not find that the voluntary classroom participation of adult ESL students in the U.S. was significantly related to proficiency. Although the use of the target language may not be the only factor affecting the acquisition of the target language, it is clearly an important condition for successful target language acquisition.

Various affective variables influence the use of the target language in classrooms. Ely (1986) tested the effects of language class discomfort, language class risktaking, language class sociability, and strength of motivation, as well as attitude toward the language class, concern for grade, and language learning aptitude on the classroom participation of students enrolled in first year university Spanish classes. Data on classroom participation were collected by classroom observation and other data were gathered by surveys. Ely hypothesized that the strength of motivation as well as language class risktaking positively influence classroom participation. On the other hand, it was posited that language class discomfort has a direct negative influence on classroom participation as well as an indirect influence through reducing language class risktaking and language class sociability. It was found that language class risktaking is a significant positive predictor of classroom participation and language classroom discomfort influenced classroom participation only indirectly. Other variables did not have a significant effect on classroom participation.

Several studies have suggested that integrative motivation has a positive influence on the frequency of the L2 use which in turn affects second language proficiency. In two investigations (Gardner, Smythe, Clément, & Gliskman, 1976; Gliksman et al., 1982), the effects of integrative motivation on the frequency of L2 use in classroom were examined by administering a motivational questionnaire and conducting classroom observation.

Both studies examined secondary school students in Canada who were enrolled in French classes. It was hypothesized that integratively motivated students would take every opportunity to perfect their second-language skills, and they would use the classroom as an opportunity to use their L2. It was found that integratively motivated students, in contrast with those not integratively motivated, exhibited a significantly greater number of several classroom behaviors, including volunteering to answer questions and making more correct responses. Gardner et al. (1987) employed self-report questionnaires instead of classroom observations to examine the frequency of the L2 use of secondary school students who are enrolled in French classes. The findings support the above studies in that the integrative motivation plays a role in the frequency of the L2 use, and the frequency of L2 use contributes to individual differences in proficiency (p. 42).

It has been shown that, in addition to attitudes and motivation, anxiety has a large impact on second language learning (Horwitz, 1986; Horwitz, 2001; Horwitz, Horwitz, & Cope, 1986; Horwitz & Young, 1991; Macintyre & Gardner, 1989; Macintyre & Gardner, 1991). Horwitz et al. (1986) identified foreign language anxiety as a situation specific anxiety which is distinct from other anxieties. The Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz et al. (1986) is designed to assess three components of anxiety: communication apprehension, test anxiety, and fear of negative evaluation. It has been shown that the FLCAS has satisfactory reliability and validity (Horwitz, 1986). Language anxiety has been shown to correlate negatively with achievement measures such as language course final grades (Horwitz, 1986) and performance on a vocabulary learning tasks (Macintyre & Gardner, 1989). Gardner and Macintyre (1993) found that among attitudes, motivation, and anxiety, measures of both classroom anxiety and language use anxiety showed the strongest correlations with several language production measures including a cloze test, a composition task, and an objective proficiency measure. Gardner and Macintyre (1993) found language anxiety correlates more highly with the self-ratings of proficiency than with actual performance on the tests of ability. It was found that anxious students tend to underestimate their ability and less anxious students tend to overestimate their ability (Macintyre, Noels, & Clément, 1997). Communication apprehension has also been widely studied, not only in the field of language education, but also in the field of speech communication (Daly,

1991). Although communication apprehension refers to first language anxiety, it is said that it is conceptually similar to language anxiety in that they both refer to anxiety about communicating (Daly, 1991; Horwitz et al., 1986).

Much of the research discussed above has demonstrated the influence of affective variables on achievement and other behavioral measures. A recent addition to the affective variables coming from the field of speech communication is "willingness to communicate" (WTC). McCroskey and associates employed the term to describe the individual's personality based predisposition toward approaching or avoiding the initiation of communication when free to do so (McCroskey, 1992, p. 17). WTC was originally introduced with reference to L1 communication, and it was considered to be a fixed personality trait that is stable across situations, but when WTC was extended to L2 communication situations, it was proposed that it is not necessary to limit WTC to a trait-like variable, since the use of an L2 introduces the potential for significant situational differences based on wide variations in competence and inter-group relations (Macintyre, Clément, Dörnyei, & Noels, 1998). Macintyre et al. (1998) conceptualized WTC in an L2 in a theoretical model in which social and individual context, affective cognitive context, motivational propensities, situated antecedents, and behavioral intention are interrelated in influencing WTC in an L2 and in L2 use (Figure 1).

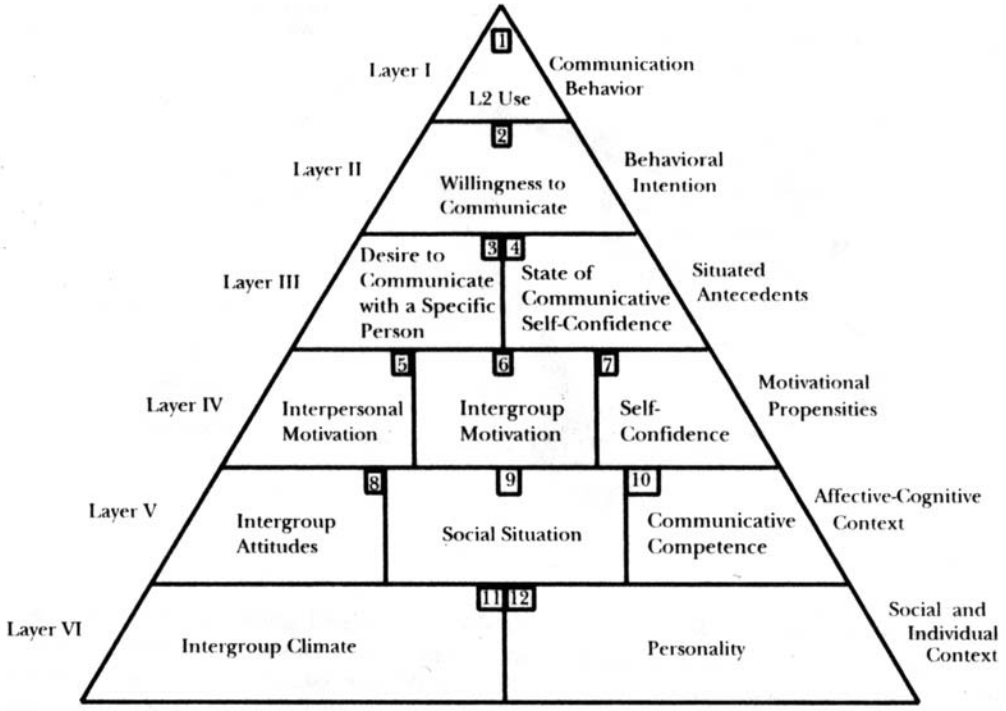


Figure 1. Heuristic model of variables influencing WTC (Macintyre, Clément, Dörnyei, & Noels, 1998, p. 547)

Macintyre (1994) developed a path model that postulates that WTC is based on a combination of greater perceived communicative competence and a lower level of communication apprehension. The model also postulates that anxiety influences the perception of competence. Baker and Macintyre (2000) examined the effects of an immersion versus a non-immersion program on various dependent variables including perceived competence, WTC, self-reported frequency of communication, communication anxiety, and motivation of students who have English as their L1 and are studying French as their L2. It was found that anxiety and perceived competence were key factors in predicting WTC and self-reported frequency of communication.

Macintyre and Charos (1996) tested a hybrid of Gardner's socio-educational model (1985) and Macintyre's (1994) WTC model to predict the frequency of using the second language in the daily interactions of Anglophone students taking introductory level conversational French at adult evening classes. All the paths that were derived from the Gardner and Macintyre models were replicated. The results confirmed that students who

have greater motivation for language learning report using the language more frequently and students who are more willing to communicate are more likely to do so. The hypothesized variables underlying WTC were also tested. Both language anxiety and perceived competence influenced WTC, and the predicted effect of anxiety on perceived communicative competence was also supported. It was shown that perceived communicative competence has a strong and direct influence on the L2 communication frequency from a data-driven path. A path from WTC to motivation was also hypothesized but was not found to be significant.

In the Macintyre and Charos model, it was also hypothesized that personality traits and social context have an indirect effect on L2 communication frequency through attitudes, motivation, language anxiety, and perceived competence. Their hypothesis was based on a study by Lalonde and Gardner (1984) which concluded that personality traits have an effect on second language achievement indirectly, through motivation and attitudes. Personality traits were measured using a scale of the "Big-Five" which assesses five global personality traits: extroversion, agreeableness, conscientiousness, emotional stability, and intellect. These personality traits influenced motivation and WTC which in turn affected L2 communication frequency. Social context was measured by a self-report of the relative concentration of L1 and L2 at home and at work. It was found that having more opportunities for interaction in L2 affects frequency of L2 use directly and also indirectly through perceived competence and WTC. These findings support the suggestions by Macintyre et al. (1998) that context and personality are among the variables influencing the WTC.

Yashima (2002) investigated variables underlying the WTC in a Japanese English as a foreign language context using Macintyre's WTC model and Gardner's socio-educational model. Since there is little daily contact with native speakers of English in the Japanese EFL context, frequency of communication was not included in this model. Instead, L2 proficiency, attitude toward the international community, confidence in L2 communication, and L2 learning motivation were hypothesized to affect the WTC in the L2. The hypothesized causes of WTC were replicated. It was shown that a lower level of anxiety and a higher level of perception of L2 communication competence led to a higher level of WTC, thus supporting the results of the Macintyre and Charos (1996)

study. In this model, a combination of relative lack of anxiety and perceived competence was hypothesized to form the latent variable self-confidence in L2 communication based on Clément's model (Clément & Kruidenier, 1985). A data-driven path from motivation to confidence in L2 communication was significant. A hypothesized direct path from motivation to WTC was not significant.

Purpose of the Study

The purpose of the present study is to examine the relationships among L2 learning and L2 communication variables using the WTC model and the socio-educational model as the basis for a framework and to extend the models by testing their ability to predict language use in the Japanese ESL formal (classroom) context. Six research questions motivate the present study:

1. How is the reported willingness to communicate of Japanese ESL students, as measured by the WTC scale, related to reported frequency of L2 use in classrooms?
2. How is the reported motivation of Japanese ESL students, as measured by the mini-AMTB, related to reported frequency of L2 use in classrooms?
3. How is the reported perceived competence of Japanese ESL students related to reported frequency of L2 use in classrooms?
4. To what degree are perceived competence and communication apprehension causes of WTC, as hypothesized by Macintyre (1994) and found by Macintyre and Charos (1996)?
5. To what degree is communication apprehension a cause of perceived competence, as hypothesized by Macintyre (1994) and found by Macintyre and Charos (1996)?
6. To what degree is WTC related to motivation, as hypothesized by Macintyre and Charos (1996)?

METHOD

Participants

The participants were 56 Japanese undergraduate and graduate students attending the University of Hawaii at Manoa (UHM) in Honolulu. All of the participants spoke English as their second language and Japanese as their first language. To enter undergraduate programs at the UHM, students must have a TOEFL score of at least 500. Some graduate students are required to have TOEFL scores as high as 620. Since this study was done anonymously, gender, major, and class standing were not classified.

Materials

Measures of language learning affect. A short version of the Attitude/Motivation Test Battery (the mini-AMTB) was employed. The mini-AMTB has recently been introduced to reduce administration time while maintaining the basic conceptual structure of the original version. This "Guilfordstyle" instrument measured the eleven variables in the original AMTB (see Table 1) using single-item indicators each on a 7-point rating scale. Several studies have successfully employed the mini-AMTB (e.g., Baker & Macintyre, 2000; Gardner & Macintyre, 1993; Macintyre & Charos, 1996; Macintyre & Noels, 1996; Masgoret et al., 2001). In spite of the potential problems with single-item measures, Gardner and Macintyre (1993) have shown that this instrument has acceptable concurrent and predictive validity. Since the original AMTB was written with regard to attitudes toward learning French and French Canadians, it was modified to refer to attitudes toward learning English and English speakers. The five subscales on this measure are as follows:

1. Integrativeness (α = .86 in Macintyre & Charos, 1996). This measures the degree to which respondents were learning English for the purpose of interacting and communicating with members of the second language community. Integrativeness was measured with three single-item measures of integrative orientation, attitude toward the target language group, and interest in foreign languages.
2. Attitudes toward learning situation (α = .89 in Macintyre & Charos, 1996). This was measured by two items, attitude toward the language teacher and attitude toward the course.

3. Motivation (α = .65 in Macintyre & Charos, 1996). Motivation was measured with three single-item measures of the desire to learn English, motivational intensity, and attitude toward learning English.
4. Instrumental orientation. This was measured by one item of instrumental orientation.
5. Language anxiety (α = .48 in Macintyre & Charos, 1996). This was measured by two items, one assessing English classroom anxiety and the other measuring English use anxiety.

Communication-related variables. The following four measures were adapted to refer to communication using English. Each of the measures presents 12 communication contexts involving four communication contexts: (a) public speaking, (b) formal meetings, (c) small groups, and (d) dyads, and each of these is applied to three types of receivers (strangers, acquaintances, and friends).

1. Willingness to communicate in English (α = .97 in Macintyre & Charos, 1996). This study used the WTC scale from McCroskey (1992). Twenty items assessed the percentage of time respondents would choose to communicate in each type of situation (when completely free to do so) using a probability estimate scale between 0% and 100%. Eight of the items are fillers (items 1, 2, 5, 7, 10, 13, 16, and 18), and 12 items are scored as part of the scale (McCroskey, 1992). A few changes were made in the questionnaire to make it more appropriate for the respondents in this study. This instrument was shown to have strong content validity, and there is some support for its construct and predictive validity (McCroskey & Richmond, 1990, p. 73).
2. Perceived competence in English (α = .98 in Macintyre & Charos, 1996). Twelve items from Macintyre and Charos (1996) assessed the average percentage of time (ranging from 0% to 100%) that respondents felt competent in using English to speak in 12 situations. This instrument was modified to refer to classroom contexts in this study.
3. Frequency of communication in English (α = .97 in Macintyre & Charos, 1996). Items from the perceived competence scale were adapted to measure the frequency of communication in English for each of the 12 situations using a 7-point scale.
4. Communication anxiety in English (α = .92 in Yashima, 2002). The 12 items for

communication apprehension or anxiety used by Yashima (2002) assessed the average percentage of nervousness (ranging from 0% to 100%) that respondents felt in communicating in English in 12 situations. This instrument was modified to refer to classroom contexts in this study.

Items regarding instrumental orientation and communication anxiety in English were not included in the Macintyre and Charos (1996) study, but they were added in the present study. Instrumental orientation was added because it plays an important role in the socio-educational model, and it was included in the original mini-AMTB by Gardner and Macintyre (1993). Macintyre and Charos (1996) used two language anxiety items from the mini-AMTB to measure L2 anxiety, but here, it seemed more appropriate to assess L2 anxiety with more items on a separate instrument. Therefore, in this study, L2 anxiety was measured with 12 communication anxiety items. All scales were translated into Japanese. Back-translation was used to ensure the accuracy of the translation. The English version of the questionnaire is shown in Appendix.

Procedures

Students participated in this study voluntarily and received a movie ticket as compensation for their participation. They were presented with a consent form and told that the data would be collected anonymously and kept confidential. Respondents were given as much time as required to complete the questionnaire.

RESULTS

The SPSS version 11.0 statistical program was used to analyze descriptive statistics and reliability, and to do principal components analysis. Amos version 4.0 was used to test the hypothesized model using structural equation modeling.

Descriptive Statistics

Descriptive statistics are numerical representations of how participants performed on a test or questionnaire (Brown, 1996). These descriptive statistics are averages for each participant of all the items in the corresponding measures. The variable labels represent each of the measures as follows. AMTB represents a brief version of the Attitude/Motivation Test Battery, WTC is the willingness to communicate scale, PC is perceived competence, ANXIET refers to communication anxiety, and FREQ is frequency of communication. The statistics include the number of participants (*N*), number of items (*k*), mean (*M*), standard deviation (*SD*), minimum (MIN), and maximum (MAX), Median (MDN), mode (MODE), and skewness (SKEW). It should be noted that AMTB and FREQ are based on a 7-point scale, whereas other measures are based on a probability estimate scale ranging from 0% to 100%.

Table 2
Descriptive Statistics

VARIABLE	*N*	*k*	*M*	*SD*	*Min*	*Max*	*Mdn*	*Mode*	*Skew*
AMTB	56	11	5.31	.79	3.36	6.64	5.41	5.36	-.61
WTC	56	12	54.75	16.79	17.50	89.17	53.33	48.33	.00
PC	56	12	66.15	18.42	12.92	94.17	69.38	45.83	-.59
ANXIET	56	12	43.59	18.07	6.25	95.83	42.92	23.33	.68
FREQ	56	12	4.42	1.09	1.25	7.00	4.42	4.83	-.32

The mean, median, and mode are indicators of the central tendency of the scores. The standard deviation, as well as the minimum and maximum scores, are indicators of the dispersion of scores around the mean. In these measures the dispersion appears to be fairly broad in all cases. Skewness characterizes the degree of asymmetry of a distribution around its mean (Brown, 1997). If a distribution of scores is skewed, that means it is probably non-normal because of a high number of high or low scores. In such cases, the skewness statistic will vary widely from .00 with a positive value indicating the possibility of a positively skewed distribution or with a negative value indicating the possibility of a negatively skewed distribution. Values of 2 standard errors of skewness (*ses*) or more are considered to be skewed to a significant degree (Brown, 1997; Brown,

Cunha, Frota, & Ferreira, 2001, p. 263).

Since the *ses* in this study is .327, two times the standard error of the skewness is .654. As the skewness statistic for ANXIET is .68, which is slightly higher than .654, it can be assumed that the distribution of communication anxiety scale is significantly skewed. Since the sign of the skewness statistic is positive, the distribution is positively skewed. In other words, for the Japanese students involved here, the distribution for ANXIET was not normal, but instead, was somewhat positively skewed, which means there was a high number of low scores on the measure of communication anxiety. Other skew statistics fell within the range between -.654 and + .654 which indicates that there are no other significant skewness problems.

Reliability

The reliability coefficients indicate the degree to which the results on a scale can be considered internally consistent, or reliable (Brown, 1996, p. 192). The Cronbach alpha was used in this study. It can range from .00 to 1.00.

Table 3

Cronbach's Coefficient Alpha Reliability Estimates and Standard Error of Measurement

Variable	*k*	Alpha	*sem*
AMTB	11	.83	.33
WTC	12	.85	6.50
PC	12	.95	4.12
ANXIET	12	.90	5.71
FREQ	12	.92	.31

Table 3 shows that all the Cronbach alpha estimates are reasonably high. They can be interpreted as the percent of consistent variance in the students' answers. For example, the reliability of .83 for the AMTB can be said to indicate that the scale is 83% consistent, or reliable (Brown et al., 2001, p. 264). Another way of looking at the consistency of a set of scores is called the standard error of measurement (*sem*). The *sem* can be interpreted as a band around a student's score within which that student's score

would be expected to fall repeatedly if they were to fill out the instrument repeatedly (Brown, 1996, p. 206; Brown et al., 2001, p. 265). For instance, the *sem* of 6.50 for the WTC indicates that a participant who has a total score of 50 on that scale can be expected to score within a band of one *sem* plus (50+6.50 = 56.50) or minus (50-6.50 = 43.5) 68 % of the time if the participant were to fill out the instrument time and again. The *sem* may be easier to interpret than a reliability coefficient because it is expressed in terms of raw score bands rather than percent-of-reliability terms. A scale that has a small *sem* is more consistent than one with a large *sem* (Brown, 1996, p. 208). Considering that AMTB and FREQ are on a 7-point scale and other scales are based on a probability estimate scale, the *sem* can be said to be fairly narrow for all five scales.

Correlation

Table 4 shows a correlation matrix for the five main variables in this study: AMTB, WTC, PC, ANXIET and FREQ. All correlations except that between ANXIET and WTC were significant at $p < .05$. As expected, FREQ correlated significantly with the other four variables. It was expected that ANXIET would correlate significantly with WTC, but there was no significant correlation. There was a significant negative correlation between ANXIET and PC and between ANXIET and AMTB suggesting that lower L2 anxiety is associated with higher L2 perceived competence and higher motivation. The AMTB was positively correlated with WTC and PC indicating that higher motivation is related to higher willingness to communicate and higher perceived competence.

Table 4

Correlation Matrix

	AMTB	WTC	PC	ANXIET	FREQ
AMTB	1.00				
WTC	.39*	1.00			
PC	.59*	.26*	1.00		
ANXIET	-.33*	-.05	-.46*	1.00	
FREQ	.50*	.36*	.38*	-.27*	1.00

* $p < .05$

Validity

Construct validity. Principal components analysis was performed (with VARIMAX rotation) on the responses to the five scales to investigate the degree to which the instrument was measuring what it claims to measure. Examining the Eigen values above 1.00, the scree plot, theory, and the interpretability of the rotated factors, a six factor solution was determined to be best. These six factors accounted for 62% of the variance. The loadings for each of the variables on six factors are shown in Table 5. The asterisks indicate loadings of .30 or higher, and the bold-faced type indicates the highest loading for each variable. Communalities are presented in the column furthest to the right. The communalities indicate the total proportion of variance that the six factors account for in each variable (Brown, Robson, & Rosenkjar, 2001). At the bottom of the table, a row is presented which indicates the proportion of variance in the overall solution accounted for by each factor. For example, the proportion of variance accounted for by the first factor is .15, which represents 15% of the variance in the overall solution.

Table 5

VARIMAX Rotation of the Six Factor Solution

Variable / Components	**1**	**2**	**3**	**4**	**5**	**6**	h^2
Motivation							
AMTB1	.38*	**.44***	-.01	.11	.04	.24	.41
AMTB2	.21	.22	.05	-.04	.31*	**.50***	.45
AMTB3	**.48***	.31*	-.10	.16	.14	.36*	.51
AMTB4	.07	.16	.03	**.45***	-.04	.40*	.39
AMTB5	.04	.26	.00	.19	.20	**.48***	.38
AMTB6	.43*	.10	.00	.06	.14	**.52***	.49
AMTB7	.22	.31*	.03	.12	-.02	**.55***	.46
AMTB8	.39*	.08	.19	.14	**.41***	.22	.44
AMTB9	.25	.40*	-.08	.13	-.22	**.51***	.55
AMTB10	.35*	.07	**-.36***	.08	.11	-.11	.29
AMTB11	**.46***	.17	-.37*	-.24	.27	-.07	.51

L2 Willingness to Communicate							
WTC3	.00	.03	.12	-.15	**.84***	.10	.75
WTC4	.25	.25	-.06	**.63***	.01	.14	.55
WTC6	.11	.04	-.16	**.69***	.28	.08	.59
WTC8	.29	.15	-.15	.25	**.52***	-.11	.47
WTC9	.16	.01	-.04	**.72***	-.06	.20	.59
WTC11	.16	.11	-.05	**.75***	.39*	.07	.76
WTC12	.10	**.54***	-.06	.03	.23	-.01	.35
WTC14	-.10	.13	.09	.13	**.82***	.16	.75
WTC15	.06	.10	-.15	**.65***	.38*	-.08	.62
WTC17	.06	.14	-.15	.30*	**.55***	-.18	.47
WTC19	.12	.06	-.04	**.84***	.06	-.13	.74
WTC20	-.02	.10	.17	.19	**.83***	.13	.78
L2 Perceived Competence							
PC1	**.61***	-.15	-.25	-.38*	.27	.30*	.76
PC2	**.78***	.26	-.16	.16	.08	.30*	.82
PC3	**.79***	.10	-.16	.29	.07	.11	.76
PC4	**.83***	.20	-.27	.11	-.06	.10	.83
PC5	**.78***	.07	-.12	.27	.08	-.07	.72
PC6	**.78***	.25	-.20	.15	.12	.14	.76
PC7	**.80***	.26	-.21	.07	-.11	.09	.79
PC8	**.61***	.09	-.29	-.06	-.05	.58*	.80
PC9	**.79***	.17	-.17	.34*	-.10	.10	.82
PC10	**.79***	.13	-.23	-.10	-.03	.02	.70
PC11	**.76***	.01	-.19	.33*	-.06	-.06	.73
PC12	**.68***	.07	-.25	-.14	.06	.48*	.78
L2 Anxiety							
ANXIET1	.14	.17	**.54***	.52*	-.08	-.41*	.78
ANXIET2	-.35*	-.15	**.64***	-.05	-.04	.02	.56
ANXIET3	-.06	-.26	**.78***	-.24	.09	-.11	.75
ANXIET4	-.16	-.08	**.75***	.05	.10	.06	.62
ANXIET5	-.24	-.06	**.70***	-.20	.14	-.09	.61
ANXIET6	-.17	-.18	**.81***	-.13	-.11	-.11	.77
ANXIET7	-.27	-.02	**.55***	.12	.16	.16	.44
ANXIET8	.12	-.10	.47*	.36*	.04	**-.51***	.64
ANXIET9	-.25	-.10	**.78***	-.18	-.06	-.06	.72
ANXIET10	-.21	.04	**.72***	.15	-.02	.03	.58
ANXIET11	-.15	-.13	**.68***	-.32*	.14	-.18	.65

ANXIET12	-.01	-.10	**.53***	.45*	-.11	-.49*	.75
L2 Communication Frequency							
FREQ1	.00	**.76***	-.06	-.13	.25	.14	.69
FREQ2	.24	**.59***	-.09	.07	-.04	.24	.48
FREQ3	.18	**.72***	.03	.25	-.09	.14	.64
FREQ4	.27	**.63***	-.15	.28	.02	-.08	.57
FREQ5	.20	**.61***	-.05	.21	-.25	.30*	.62
FREQ6	.15	**.73***	-.08	.25	.06	.23	.68
FREQ7	.08	**.69***	-.20	-.17	.16	-.24	.63
FREQ8	-.03	**.67***	-.01	-.02	.11	.32*	.56
FREQ9	.08	**.75***	-.12	.05	.04	.09	.59
FREQ10	.20	**.72***	-.02	-.11	.14	-.26	.65
FREQ11	.10	**.67***	-.17	.29	-.19	.20	.65
FREQ12	-.02	**.69***	-.14	.03	.25	.23	.61
Proportion of Variance	.15	.13	.11	.10	.07	.07	.62

* loadings above .30
[bold] highest loading for each variable

Examining Table 5, you will notice that all of the items for L2 perceived competence load most heavily on component one, the items for L2 communication frequency loads most heavily on component two, and that all the items for L2 anxiety except for ANXIET 8 load most heavily on component 3. Two other scales (motivation and L2 willingness to communicate) present more complex patterns of loadings. Six of the items (WTC 4, 6, 9, 11, 15, and 19) of WTC load most heavily on component four, and five of the items (WTC 3, 8, 14, 17, and 20) load most heavily on component five. Three items (WTC 11, 15 and 17) load on both components four and five. When items loading most heavily on component four are closely examined, it appears that they are all about communicating in informal situations. For example, WTC 9, which loads most heavily on component four, asked participants' willingness to communicate with a friend while standing in line. In contrast, the four items loading most heavily on component five (WTC 3, 14, 17, and 20) appear to be about communication in formal situations. For instance, WTC 3 asks participants' willingness to speak in public to a group of strangers. WTC 8, which loads most heavily on component five, asks about participants' willingness to communicate in a small group of strangers. It seems that the interpretation of WTC 8 as formal or informal can differ depending on the context. Interestingly, WTC 12, which asks about

willingness to talk with a stranger while standing in line, does not load on either component four or five. It appears that WTC 12 is measuring something different from other items on the WTC.

The AMTB has the most complex patterns of loadings. Five items (AMTB 2, 5, 6, 7, and 9) of the AMTB load most heavily on component six. AMTB 10 loads most heavily on component three, an L2 anxiety component, and also loads heavily on component one, a perceived competence component. These loadings can easily be interpreted because AMTB 10 asks about language class anxiety. Similarly, AMTB 11 loads most heavily on component one and also loads heavily on component three. These loadings can easily be explained because AMTB 11 asks about language use anxiety. It is clear that these two items of the motivational scale are more closely related to perceived competence and L2 anxiety than to motivation. The loadings for AMTB 1, AMTB 3, AMTB 4, and AMTB 8 are not so easily interpretable. AMTB 1, which asks about integrative orientation, loads most heavily on an L2 communication frequency component and also loads heavily on an L2 perceived competence component. AMTB 3, which asks about attitudes toward the target language group, also loads on both an L2 perceived competence component and an L2 communication frequency component along with a motivation component. Since both AMTB 1 and AMTB 3 are subscales of a construct called integrativeness, this pattern might suggest that integrativeness is related to L2 perceived competence and communication frequency. AMTB 4, which asks about the evaluation of a language instructor, loads heavily on both informal willingness to communicate and motivational components. AMTB 8, which asks about attitudes toward learning a language, loads heavily on L2 perceived competence and formal willingness to communicate components. These loadings are interpretable since the attitudes toward learning a language would involve L2 perceived competence and willingness to communicate in formal situations. These complex patterns of loadings probably may simply indicate that motivation is a complex variable which is influenced by other variables.

Structural Equation Modeling

Structural equation modeling (SEM) is also known as analysis of covariance structures, or causal modeling (Arbuckle & Wothke, 1999). SEM is a statistical

methodology that takes a confirmatory hypothesis-testing approach to the analysis of a structural theory. The hypothesized model can be tested statistically to determine the extent to which it is consistent with the data. If goodness of fit is adequate, the model argues for the plausibility of assumed relations among variables, but if the goodness of fit is not adequate, the tenability of such relations is rejected (Byrne, 2001). Amos is short for Analysis of Moment Structures, and it is one of the widely used programs for SEM. The models were tested using Amos version 4.0 in this study. Figure 2 is a portion of the model from Macintyre and Charos (1996). The figure describes the relationships among L2 learning and L2 communication variables in French as a second language context in Canada.

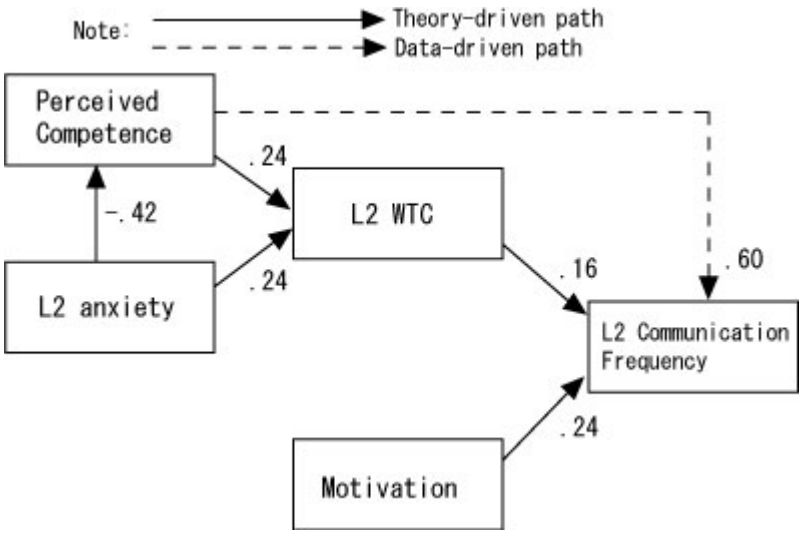


Figure 2. Model of L2 communication applied to French as a second language situation in Canada (Macintyre & Charos, 1996, p. 12)

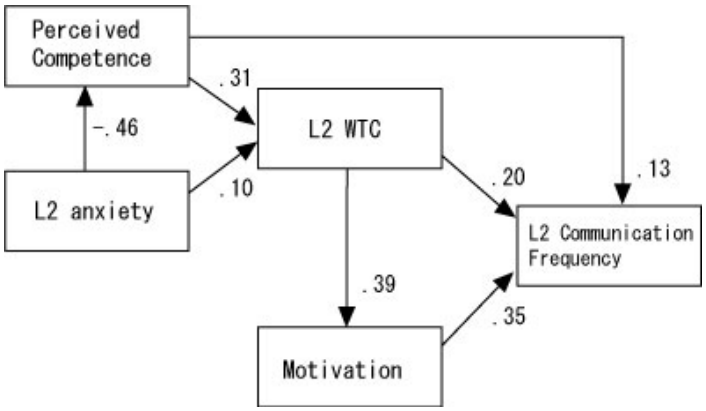
The major elements of Gardner's (1985) model and Macintyre's (1994) model are shown in this model. The model shows that language anxiety reduces perceived communicative competence, and both of these variables influence willingness to communicate. Both willingness to communicate and L2 motivation contribute to the extent of the L2 communication frequency. A path from willingness to communicate to motivation is proposed based on Clément's (1980) model. In Figure 2, the path from

willingness to communicate to motivation has been deleted, since it was not significant. This path was based on speculations about the relations among the variables and had not been tested before. The dotted path from perceived competence to L2 communication frequency is a data-driven path and therefore considered to be tentative. Solid paths indicate originally hypothesized paths.

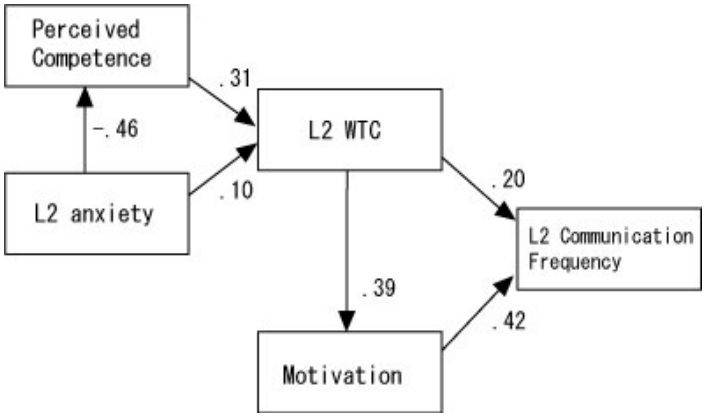
Figure 3 presents the process of in this study of revising the model of L2 communication applied to a Japanese ESL classroom context. The base model is a replication of Macintyre and Charos's model. To determine the goodness-of-fit between the hypothesized model and the sample data, in other words, to test the appropriateness of the model, the goodness-of-fit statistics in Amos are examined.

Looking at Table 6, chi-square for base model was 20.76 with 3 degrees of freedom which was significant. In this case, a non-significant finding is an indication of goodness-of-fit. Other fit indexes are also provided since chi-square is considered to be of limited value especially with small samples (Byrne, 2001, p. 81). GFI indicates goodness-of-fit index and AGFI indicates adjusted goodness-of-fit index with values close to 1.00 being indicative of good fit. The AGFI differs from the GFI in that it adjusts for the number of degrees of freedom in the specified model (Byrne, 2001, p. 82). As shown in Table 6, for the base model, both GFI (0.89) and AGFI (0.44) are indicative of a poor fit of the model to the data. For the fit index labeled CFI (comparative fit index), values larger than .95 are considered representative of a good-fitting model. RMSEA represents the root mean square of approximation. Values less than .05 indicate a good fit. The expected cross-validation index (ECVI) has no determined appropriate range of values, but the model having the smallest ECVI value demonstrates the best fit. Table 6 shows that CFI (0.69), RMSEA (0.33), and ECVI (0.81) are indicative of an ill-fitting model. Therefore, all the fit statistics indicate poor fit for the base model. Note that there are other fit statistics but only those mentioned above are presented in the table.

Base Model



Revision 1



Revision2

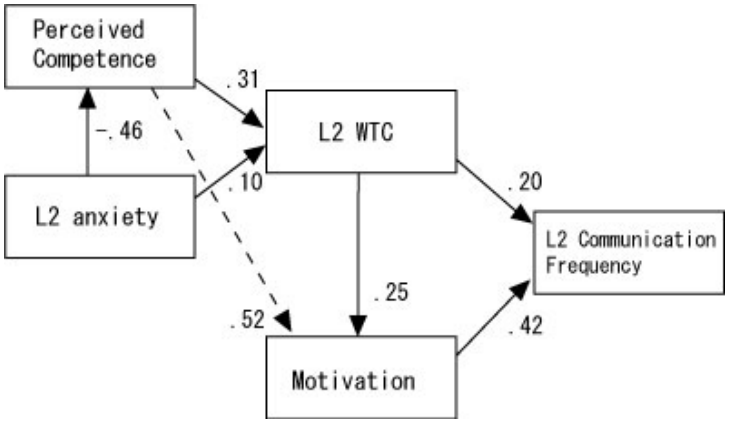


Figure 3. The process of revising the model of L2 communication applied to Japanese ESL classroom context

Table 6

Step-By-Step Procedure for Revising the Model to Add and Delete Data-Driven Paths

Model	χ^2	*df*	χ^2/df	**GFI**	**AGFI**	**CFI**	**RMSEA**	**ECVI**
Base model	20.76	3	6.92	.89	.44	.69	.33	.81
Revision 1: Delete path from perceived competence to frequency of communication	21.56	4	5.39	.89	.57	.69	.28	.80
Revision 2: Add path from perceived competence to Motivation	2.31	3	.77	.99	.92	1.00	.00	.48

In Revision 1, shown in Figure 3 and Table 6, a data driven path from perceived competence to L2 communication frequency has been deleted. Perceived competence was found to exert a direct and strong influence on the frequency of communication with beginning French as a second language students in Canada by Macintyre and Charos (1996). In the base model, perceived competence influenced L2 communication frequency weakly with a standardized regression weight of .13. Since this path was data driven, which is exploratory and tentative, the path was deleted. Examining Table 6, chi-square for Revision 1 is 21.56 with 4 degrees of freedom which is significant. Other fit

statistics also indicate a poor fit of the model to the data.

Areas of misfit in the model can be identified by examining two types of information which are standardized residuals and the modification indexes. The essence of SEM is to determine the fit between the hypothesized model and the sample and any discrepancy between the two is captured by the residual covariance matrix (Byrne, 2001, p. 88). The matrix of standardized residuals gives estimates of the number of standard deviations the observed residuals are from the zero residuals that would exist if model fit were perfect; values larger than 2.58 are considered to be large (Byrne, 2001, p. 89). In examining the standardized residual values of Revision 1, a residual value of 3.567 was found for the covariance between perceived competence and motivation. This was the only value that exceeded the cut point of 2.58. From this, it can be said that the only statistically significant discrepancy lies in the covariance between these two variables.

The modification indexes (MIs) are another way to detect model misspecification. The MIs can be conceptualized as a chi-square statistic with one degree of freedom and the value of the MIs indicate the extent to which chi-square would be reduced by adding an additional path having the highest modification index value (Byrne, 2001, p. 90). In reviewing the regression weights section, the MI value between motivation and perceived competence was 15.115 with an expected parameter change value of 0.021. Based on the standardized residuals and the modification indexes of Revision 1, a path from perceived competence to motivation was added which resulted in Revision 2. Table 6 shows that chi-square for Revision 2 is 2.31 at 3 degrees of freedom, which was not significant. Other fit statistics also indicate a very good fit of the model with a GFI of .99, a CFI of 1.00, and an RMSEA of 0.00. Therefore, Revision 2 represents the final model in this study.

DISCUSSION

Significant positive paths were obtained leading from willingness to communicate and motivation to L2 communication frequency. These paths indicate that students who have greater motivation for language learning and who are more willing to communicate report using the language more frequently in the classroom. Although a path from perceived competence to L2 communication frequency was found to be significant by

Macintyre and Charos (1996), the path was not significant with these particular Japanese ESL students even though it was expected that higher perceived competence would lead to more frequent L2 use in classroom. The Macintyre and Charos study was conducted with beginning students whose actual proficiency was low; perhaps perceived competence did not influence L2 use as much with more advanced students. This suggests that merely perceiving that one has the ability to communicate can affect the frequency of L2 use with beginning students but not with more advanced students. Perceived competence and L2 anxiety were found to be causes of WTC supporting a hypothesis proposed in Macintyre (1994) and supported in the study by Macintyre and Charos (1996). L2 anxiety was found to exert a strong and direct negative influence on perceived competence, supporting the Macintyre (1994) hypothesis and results found in the Macintyre and Charos (1996) study. Although a path from L2 WTC to motivation was not found to be significant by Macintyre and Charos, it was found to be significant in this study indicating that willingness to communicate has motivational properties. The largest single effect was obtained from perceived competence to motivation. This path suggests that increased perceived competence will lead to increased motivation which in turn affects frequency of L2 use in the classroom. This suggests that perceived competence or self-confidence in an L2 is a positive indicator of motivation. Since adding additional paths is regarded as exploratory, and data-driven, this path needs to be replicated and should be further investigated.

There are several limitations to this study. First of all, the sample size was limited (n = 56). In addition, the frequency of communication was measured using self-report questionnaires. As discussed earlier, there are some problems involved in the use of self-report questionnaires in L2 motivational studies. Also, this study may be generalizable only to Japanese students.

Nonetheless, this study has some implications for teachers. One is that by increasing perceived competence and reducing language anxiety, the willingness to communicate may lead to more language use in the classroom increases. Creating a less threatening atmosphere to reduce anxiety and encouraging students to increase perceived competence may be effective in increasing willingness to communicate and frequency of L2 use in classrooms with Japanese ESL students. Perceived competence had a direct and strong

influence on motivation, which in turn affected L2 communication frequency in the classroom. It may be especially important with the Japanese ESL students to increase perceived competence.

The following questions may prove useful for future research in line with this study:

1. What relationships would be found in comparisons between intention to behave and actual behavior?
2. Would similar results be obtained if frequency of L2 use were extended to use outside of classroom context?
3. Would similar results be obtained if this study were replicated with Japanese ESL students at different levels of proficiency?
4. How would other factors such as gender, personality, and context affect the frequency of L2 use with Japanese ESL students?

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APPENDIX

SURVEY QUESTIONNAIRE FORM

DIRECTIONS: Please indicate your opinion after each statement by putting an X that best describes the extent to which you believe the statement applies to you.

1. If I were to rate my feelings about learning English in order to interact with members of the second language community, I would say it is:
   Weak____:____:____:____:____:____:____Strong
2. If I were to rate my interest in foreign languages, I would say that it is:
   Very Low____:____:____:____:____:____:____Very High
3. If I were to rate my attitude toward members of the second language community, I would say that it is:
   Unfavorable____:____:____:____:____:____:____Favorable
4. If I were to rate my attitude toward my second language instructor, I would say that it is:
   Unfavorable____:____:____:____:____:____:____Favorable
5. If I were to rate my attitude toward my second language course, I would say that it is:
   Unfavorable____:____:____:____:____:____:____Favorable
6. If I were to rate how hard I work at learning English, I would characterize it as:
   Very Little____:____:____:____:____:____:____Very Much
7. If I were to rate my desire to learn English, I would say that it is:
   Very Low____:____:____:____:____:____:____Very High
8. If I were to rate my attitude toward learning English, I would say that it is:
   Unfavorable____:____:____:____:____:____:____Favorable
9. If I were to rate how important it is for me to learn English for employment, I would say that it is:
   Very Low____:____:____:____:____:____:____Very High
10. If I were to rate my anxiety in my second language class, I would rate myself as:
    Very Calm____:____:____:____:____:____:____Very Nervous
11. If I were to rate my anxiety when speaking English, I would rate myself as:
    Very Calm____:____:____:____:____:____:____Very Nervous

DIRECTIONS: Below are 20 situations in which a person might choose to communicate or not to communicate. Please presume that you have completely free choice to initiate or avoid communication. Please indicate in the space at the left the percentage of times you would choose to communicate in English in each type of situation.

0 %= never, 100 %= always

_____ **1.** Talk with an acquaintance in an elevator.

_____ **2.** Talk with a stranger on the bus.

_____ **3.** Speak in public to a group (about 30 people) of strangers.

_____ **4.** Talk with an acquaintance while standing in line.

_____ **5.** Talk with a salesperson in a store.

_____ **6.** Talk in a large meeting (about 10 people) of friends.

_____ **7.** Talk with a janitor/resident manager.

_____ **8.** Talk in a small group (about 5 people) of strangers.

_____ **9.** Talk with a friend while standing in line.

_____ **10.** Talk with a waiter/waitress in a restaurant.

_____ **11.** Talk in a large meeting (about 10 people) of acquaintances.

_____ **12.** Talk with a stranger while standing in line.

_____ **13.** Talk with a shop clerk.

_____ **14.** Speak in public to a group (about 30 people) of friends.

_____ **15.** Talk in a small group (about 5 people) of acquaintances.

_____ **16.** Talk with a garbage collector.

_____ **17.** Talk in a large meeting (about 10 people) of strangers.

_____ **18.** Talk with a librarian.

_____ **19.** Talk in a small group (about 5 people) of friends.

_____ **20.** Speak in public to a group (about 30 people) of acquaintances.

DIRECTIONS: Below are 12 situations in which you might need to communicate. People's abilities to communicate effectively vary a lot and sometimes the same person is more competent to communicate in one situation than in another. Please indicate how competent you believe you are in communicating in English in each of the situations described below. Indicate in the space provided at the left of each item your estimate of your competence.

Presume 0 %= completely incompetent and 100 % = completely competent

_____ **1.** Speak in public to a group (about 30 people) of strangers.

_____ **2.** Talk with an acquaintance.

_____ **3.** Talk in a large meeting (about 10 people) of friends.

_____ **4.** Talk in a small group (about 5 people) of strangers.

_____ **5.** Talk with a friend.

_____ **6.** Talk in a large meeting (about 10 people) of acquaintances.

_____ **7.** Talk with a stranger.

_____ **8.** Speak in public to a group (about 30 people) of friends.

_____ **9.** Talk in a small group (about 5 people) of acquaintances.

_____**10.** Talk in a large meeting (about 10 people) of strangers.

_____**11.** Talk in a small group (about 5 people) of friends.

_____**12.** Speak in public to a group (about 30 people) of acquaintances.

DIRECTIONS: Below are 12 situations in which you might need to communicate. Please indicate how nervous you believe you will feel about communicating in English in each of the situations described below. Indicate in the space provided at the left of each item the percentage of time you would feel nervous.

Presume 0 %= I would never feel nervous and 100 %= I would always feel nervous

_____ **1.** Speak in public to a group (about 30 people) of strangers.

_____ **2.** Talk with an acquaintance.

_____ **3.** Talk in a large meeting (about 10 people) of friends.

_____ **4.** Talk in a small group (about 5 people) of strangers.

_____ **5.** Talk with a friend.

_____ **6.** Talk in a large meeting (about 10 people) of acquaintances.

_____ **7.** Talk with a stranger.

_____ **8.** Speak in public to a group (about 30 people) of friends.

_____ **9.** Talk in a small group (about 5 people) of acquaintances.

_____**10.** Talk in a large meeting (about 10 people) of strangers.

_____**11.** Talk in a small group (about 5 people) of friends.

_____**12.** Speak in public to a group (about 30 people) of acquaintances.

DIRECTIONS: Below are 12 situations in which you might need to communicate. Please indicate how frequent you believe you will communicate in an English classroom in each of the situations described below. Indicate by putting an X that best describes the extent of your estimate of your frequency of communication.

1. Speak in public to a group (about 30 people) of strangers.
   Never____:____:____:____:____:____:____Many, many times
2. Talk with an acquaintance.
   Never____:____:____:____:____:____:____Many, many times
3. Talk in a large meeting (about 10 people) of friends.
   Never____:____:____:____:____:____:____Many, many times
4. Talk in a small group (about 5 people) of strangers.
   Never____:____:____:____:____:____:____Many, many times
5. Talk with a friend.
   Never____:____:____:____:____:____:____Many, many times
6. Talk in a large meeting (about 10 people) of acquaintances.
   Never____:____:____:____:____:____:____Many, many times
7. Talk with a stranger.
   Never____:____:____:____:____:____:____Many, many times
8. Speak in public to a group (about 30 people) of friends.
   Never____:____:____:____:____:____:____Many, many times
9. Talk in a small group (about 5 people) of acquaintances.
   Never____:____:____:____:____:____:____Many, many times
10. Talk in a large meeting (about 10 people) of strangers.
    Never____:____:____:____:____:____:____Many, many times
11. Talk in a small group (about 5 people) of friends.
    Never____:____:____:____:____:____:____Many, many times
12. Speak in public to a group (about 30 people) of acquaintances.
    Never____:____:____:____:____:____:____Many, many times

(THE END. THANK YOU VERY MUCH)

Yuki Hashimoto
Department of Second Language Studies
1890 East-West Road
Honolulu, HI 96822

kahawaiyuki@hotmail.com