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Articles

Development of the L2 Motivational Self System: English at a University in Japan

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This paper reports on a study investigating changes in L2 motivation for Japanese learners of English as they completed their first communicative English language course at university. I aim to describe the strength and structure of students’ motivation and the degree to which these changed over one semester. A 36-item questionnaire was used to measure components of the L2 Motivational Self System and International Posture. The questionnaire was administered twice to 202 second-year university students in Japan: during the first week of the semester and 11 weeks later. Structural equation models were created to describe the causal relationships between motivational variables for the two time periods. Paired t tests revealed that both motivated learning behavior and ought-to L2 self significantly increased over the semester. A comparison of the two models indicated that there was a change in the motivational structure from Week 1 to Week 12.

本研究は、英語学習者の動機づけの強さと構造、及びその変化に焦点をあて、日本人大学生の外国語（L2）に対する動機づけの変化を調査した。大学で最初に履修するコミュニケーション英語の授業を対象に、第2言語習得を動機づける自己システム（L2 Motivational Self System）と国際志向性の2側面を測定する36項目からなる質問紙を作成し、2年生202名に対して授業第1週目とその11週間後に調査を実施した。分析は、まず構造方程式モデリングで2回の調査間の動機づけの変化を分析し、それに基づき対応のあるt検定を実施した。分析の結果、動機づけの高い学習行動と義務自己ought-to selfに関する数値が1学期を通して向上したことが明らかになった。

Although it has been shown that a significant predictor of foreign language learning success is motivation (Gardner, 1985), it is disconcerting to read the plethora of literature describing the motivational deficiencies of English learners at Japanese universities (e.g., Berwick & Ross, 1989; McVeigh, 2004; Nakata, 2006). Previous research has suggested that the motivational tendencies of learners of English in Japan are most vulnerable in the period soon after matriculation to university (Berwick & Ross, 1989; Carpenter, Falout, Fukuda, Trovela, & Murphey, 2009; Warrington & Jeffery, 2005). Although rigid institutional requirements have led to a focus on testing the noncommunicative elements of English at the pretertiary level, English teachers at Japanese universities tend to adopt more innovative communicative approaches (Matsuura, Chiba, & Hilderbrandt, 2001). Instead of “English for exams,” learners find themselves struggling with the notion of “English for communication.” Students entering university face a difficult challenge: They must derive their motivation not from the externally imposed needs of an examination-based system but from their desire to make their English studies personally meaningful for their future.

For some Japanese students, the study of English at university is fulfilling and can foster, for the first time, an intrinsic interest in using the language. However, other students may become confused and overwhelmed by contrasting approaches and loosely defined expectations, leading to passivity and demotivation (Holthouse, 2005; Sakui & Gaies, 1999; Warrington & Jeffery, 2005). Ushioda (2013) suggested that L2 motivation researchers in Japan should investigate this issue from the perspective of “how [students] see English as fitting into or not fitting into their personal system of values, goals, and identities” (p. 9). In other words, one goal of L2 motivation research should be to understand to what extent learners choose to integrate English into their future-oriented selves. Therefore, the primary purpose of this study was to explore the motivational strength and structure of Japanese learners of English from a self-concept perspective as they completed their first communicative English course at university. In doing so, I attempted to test and elaborate Dörnyei’s (2005) L2 Motivational Self System as an applicable framework in the Japanese university context for students taking university-level communicative language classes. The second purpose was to determine the ways in which the strength and structure of students’ motivations change over a semester-long course. Like recent studies (e.g., Munezane, 2013; Nitta & Asano, 2010), it is hoped that this investigation will deepen our understanding of the developmental nature of the L2 Motivational Self System, an area that remains underresearched (Ushioda & Dörnyei, 2012).
The L2 Motivational Self System

Identity has always been a distinguishing factor of L2 motivation. Since the first iteration of the socioeducational model of second language acquisition (Gardner & Smyth, 1975), integrativeness has been a key construct that explains L2 motivation in terms of learners’ identification with another ethnolinguistic group. However, to account for the fluid nature of identities, L2 motivation has been reconceptualized in terms of internal self-identification (Dörnyei, 2005). The most prominent L2 motivation theory related to the concepts of self and identity is the L2 Motivational Self System (Dörnyei, 2005). Based on self-discrepancy theory (Higgins, 1987) and the concept of possible selves (Markus & Nurius, 1986), the self system framework comprises three components that work together to regulate a learner’s L2 motivation: ideal L2 self, ought-to L2 self, and L2 learning experience.

Ideal L2 Self

Ideal L2 self is the central self-guide in the model, which Dörnyei (2005) describes as a learner’s idealized version of him- or herself in the future. It is what learners hope or aspire to be with regard to their L2. Motivation to learn an L2 is derived from the desire to reduce the gap between the actual and ideal selves. In the majority of studies that have served to validate Dörnyei’s self system, ideal L2 self has been shown to be a significant predictor of motivation (e.g., Ryan, 2009; Taguchi, Magid, & Papi, 2009). However, there is empirical evidence to suggest that a vivid and robust ideal L2 self emerges over time and in particular social contexts. For example, Lamb (2012) found only a “partial endorsement” of the importance of the ideal L2 self in motivating young language learners, indicating that the connection between English and a future identity may emerge at a later age (p. 1014). In the context of Japan, Pigott (2011) found that 1st-year Japanese high school students in a compulsory English class lacked a “clearly envisioned ideal L2 self” (p. 547), and Ryan (2009) found evidence to suggest that ideal L2 self represents a better indicator of motivated learning behavior for university students than for high school students.

Ought-to L2 Self

The second self-guide in the model, ought-to L2 self, embodies the pressure to meet the language learning expectations of others, thus having a contrasting but complementary role to ideal L2 self. Empirical studies have indicated that ought-to L2 self contributes less than other components
in Dörnyei’s model. In fact, several studies (e.g., Csizér & Kormos, 2009; Dörnyei, Csizér, & Németh, 2006; Kormos & Csizér, 2008) found no significant relationship between the ought-to L2 self variable and motivated learning behavior. Lamb (2012), who failed to identify the factor with any satisfactory measure of reliability, went further, saying that there may be “a potential weakness either in the construct or current methods of elicitation” (p. 1014). Alternatively, the measure of ought-to L2 self may simply not be as relevant in some contexts as ideal L2 self. Taguchi et al. (2009) found that ought-to L2 self correlates strongly with instrumental measures (e.g., studying English to pass examinations). Their results indicated that for Japanese learners the influence of instrumental measures on ought-to L2 self is strong. This is in line with Pigott’s (2011) findings, which showed that the motivation of Japanese high school students was strongly directed by their ought-to self, a psychological response that Pigott attributed to “the relentless pressure to secure university entrance” (p. 545). One might expect the intensity of ought-to L2 self to dissipate once Japanese students begin their university studies and the pressure of exams is in the past.

L2 Learning Experience

L2 learning experience, the third component of Dörnyei’s model, is conceptualized on a different level. Rather than representing a self-guide, L2 learning experience reflects the impact that the immediate learning environment might have on a learner’s motivation. As Dörnyei (2009) explained, the trigger for initial motivation commonly comes from an engagement in the learning processes rather than from the generation of internal or external self-guides. Previous studies indicated that L2 learning experience strongly contributes to a student’s motivation (Csizér & Kormos, 2009; Taguchi, 2013; Taguchi et al., 2009). However, the influence of learners’ attitudes towards the classroom environment is contextually dependent. For example, Taguchi et al. (2009) observed that in China, attitudes towards learning English play a less important role than in Japan. He explained that “Chinese students will typically be able to control their negative attitudes for the sake of achieving their ultimate goal, a high level of proficiency in English” (p. 87). For Japanese students, situation-specific factors, such as the teacher, methods, and classroom atmosphere, seem to be powerful motivators. However, as Taguchi (2013) warned, a positive attitude towards the classroom environment that is not connected to a learner’s ideal L2 self “does not trigger strong motivation” (p. 184). In previous studies, both strong (e.g., Papi, 2010; Taguchi et al., 2009) and weak (e.g., Csizér & Kormos, 2009) empirical
relationships between ideal L2 self and L2 learning experience have been found, which highlights the concern that an enjoyable classroom environment does not necessarily equate to learning that is personally relevant.

**International Posture and Ideal L2 Self**

In response to Japan-based L2 researchers who have questioned the relevance of integrativeness in the Japanese EFL context (e.g., Benson, 1991; Nakata, 1995; Sawaki, 1997), Yashima (2002) proposed the attitudinal construct, *international posture*, as a measure of how Japanese EFL learners can relate to the English-speaking world outside of Japan. Yashima described international posture as an “interest in foreign or international affairs, willingness to go overseas to stay or work, readiness to interact with intercultural partners, and, one hopes, openness or a non-ethnocentric attitude toward different cultures.” (p. 57). Several studies have shown that Japanese who have high international posture tend to exhibit higher levels of motivated learning behavior (Yashima, 2002; Yashima & Zenuk-Nishide, 2008; Yashima, Zenuk-Nishide, & Shimizu, 2004). International posture, however, is not a stand-alone construct and relates very closely to ideal L2 self. In an attempt to revise the construct, Yashima (2009) tested the relationship of international posture and ideal L2 self and found a strong correlation, suggesting that Japanese learners derive their future selves from having a personal connection with the non-Japanese, English-using world. This result led Yashima to reason that international posture subsumes part of the ideal L2 self; that is, it represents a learners’ desired English-using self within an international community. Outside of the Japanese context, Csizér and Kormos (2009) had similar results, finding international posture to have a significant impact on ideal L2 self for Hungarian students at both the secondary school and university levels. These results indicated that a personal identification with the international community contributes to the formation of a mature ideal self-concept.

**Research Objectives**

The objective of this study was to examine changes in Japanese students’ motivation to learn English as they progressed through a semester-long university English course. Specifically, the study was set out to address the following research questions:

RQ1. Does the strength of Japanese university students’ L2 motivation change as a result of their participation in a semester-long communicative language course?
RQ2. Is there any change in the structure of students’ L2 Motivational Self System over one semester? If so, to what extent does the structure change?

In this study, L2 motivation was operationally defined as the variable *motivated learning behavior*, which examines the amount of effort and the intended choice of learning English (e.g., Dörnyei, 2005; Dörnyei et al., 2006). In this case, the strength of L2 motivation is regulated by the components of the L2 Motivational Self System, which consist of the variables ideal L2 self, ought-to L2 self, and L2 learning experience. The variable *international posture* has been added to the system because of its relevance to the formation of the ideal L2 self of Japanese learners of English.

**Method**

**Research Site**

Perhaps the most ambitious action plan from the Japanese Ministry of Education, Culture, Sports and Technology (MEXT) for improving foreign language skills of Japanese university learners involves the implementation of the *Global 30* and the *Global 30 Plus* projects. Enacted in 2008, the Global 30 project is concerned mainly with creating English-medium programs at 30 top Japanese universities in order to attract degree-seeking international students, with the end goal of making Japan an international hub for education. Global 30 Plus (Project for the Promotion of Global Human Resource Development), on the other hand, focuses on the language education of Japanese students and the promotion of global awareness. Forty universities in Japan were selected to receive Global 30 Plus grants to support the objective of “improving students’ foreign language proficiency, reforming faculty systems, and enhancing programs for sending students abroad” (JSPS, 2013, p. 55).

The research reported here was conducted at a private university in Hyogo prefecture, Japan—a recipient of a Global 30 Plus grant in 2012. Since receiving the grant, English education at the university has undergone considerable reform. At the center of this reform is the Intensive English Program (IEP). The IEP is a yearlong program consisting of two one-semester courses, aimed at developing students’ communicative language skills. All teachers are native English speakers, have master’s degrees in a language-related field, and employ a range of communicative methodologies in their classes. Unlike other English programs at the university, a portfolio assessment has been implemented that places emphasis on communicative performance in class. As a result, teachers in the program have adopted task-based and
project-based learning approaches. In addition, courses in the IEP program adopt a strict English-only classroom policy, with the intention of immersing students in an English-using environment. Students in the program meet 3 days a week, making it, in terms of classroom hours, the most demanding English language program at the university. Students enter the program in the second semester of their 1st year. Admittance into the program is competitive and contingent on a range of factors that include a minimum TOEFL or TOEIC score and an interview in which students must demonstrate a positive attitude towards learning English. For most students, it is their first course that focuses on English for communication.

**Participants**

A total of 202 Japanese students from the Departments of Humanities, Business, Economics, and Sociology participated in all components of this research. Participants were beginning the second-semester course in the IEP at the start of the study. Students belonged to 11 different classes ranging from intermediate to preadvanced. To qualify for placement in these classes, students needed to achieve a score of between 420 and 510 on the TOEFL PBT test.

The researcher gained permission from five teachers to administer the questionnaire in their classes. Of the 202 participants, 105 were female and 97 were male. At the start of the study, students rated their English proficiency for each language skill on a 7-point Likert scale anchored by 1 (very poor) and 7 (very good). The mean of these self-reported scores indicated that participant ratings of their English proficiency were average for reading ($M = 4.31, SD = 1.19$), writing ($M = 3.92, SD = 1.13$), and listening ($M = 3.74, SD = 1.40$), and below average for speaking ($M = 3.31, SD = 1.40$).

Questionnaire data were collected from students twice—once at the start and once at the end of the semester. The first questionnaire was completed by 240 students. However, 10 students were eliminated from the sample because they reported that their nationality was not Japanese. A further 28 students were eliminated because they failed to complete the second questionnaire.

**Instruments**

The questionnaire comprised two parts: The first part elicited background information on participants (e.g., sex, nationality, native language, and perceptions of current foreign language ability) and the second part
consisted of 36 items that targeted motivational factors. The second administration consisted of the motivation portion only. The purpose of the motivation portion of the questionnaire was to measure the strength of the criterion variable, motivated learning behavior, as well as variables that predict motivation: ideal L2 self, ought-to L2 self, L2 learning experience, and international posture. Most items were adapted from Taguchi et al. (2009) and Yashima (2009) and had been extensively piloted in a previous research project (Aubrey & Nowlan, 2013). However, some items were updated to reflect more recent research (e.g., Nakahira & Yashima, 2012). Items consisted of statements to which participants were asked to rate their agreement on a 7-point Likert scale anchored by 1 (absolutely untrue) and 7 (absolutely true). (See Appendix for all items.)

**Procedure**

Once the English draft of the questionnaire (instructions and items) was composed, it was translated into Japanese and back-translated by a bilingual Japanese professor and a bilingual Japanese graduate student in order to ensure that no meaning was lost in the process. The final version of the questionnaire was administered online to all participants in April 2013, during the first week of the semester. Student participants completed the questionnaire while in a computer lab during class time. Before the first administration, the researcher was present to explain the purpose of the research and obtain informed consent. Eleven weeks later, in July 2013, the motivation portion of the questionnaire was administered again to the same students in the same manner. The researcher disregarded all data from students who were absent during the class when the second administration took place.

**Analysis**

To examine whether participants were utilizing all categories of the 7-point scale, responses to questionnaire items for both administrations underwent Rasch analysis (rating scale model) using WINSTEPS 3.81.0 (Linacre, 2011). A diagnostic assessment of item categories was carried out for the purpose of investigating whether response levels were being used effectively and consistently. Responses appeared to be underutilizing one category, which caused an uneven progression from one step calibration to the next. For this reason, it was decided to combine two different categories for each variable measured. In other words, the original 7-point scale was rescaled to a 6-point scale.
After rescaling, the data for each administration were entered into SPSS 22.0. To examine the changes in strength for each scale from Week 1 to Week 12, two measures were calculated. A paired t test was conducted on each scale to test for statistical significance followed by a calculation of effect size. As a total of five t tests were conducted, a level of $p < .01$ was used with Bonferroni’s adjustment to control for the familywise error. The effect size value (Cohen’s $d$) was included as it provides a measure of effect that, unlike tests for significance, does not depend on sample size.

To examine the causal relationships among the factors measured, the analytic objective was to create a structural equation model (SEM) for each time period. The goal of SEM is to test the extent to which a hypothesized theoretical model is consistent with the data collected (Hashimoto, 2002). In doing so, it allows researchers to examine “a series of dependence relationships simultaneously” (Hair, Anderson, Tatham, & Black, 1998, p. 578). If the hypothesized model does not sufficiently fit the data, revised models can be tested until a causal structure reflects the data. For SEM, R. B. Kline (2005) recommends a sample size of over 200, which he deems to be large and sufficient for most models. Data for the analysis were from the administration of the questionnaire to 202 students at two points in time. Thus, we can conclude that the sample size is appropriate for this kind of analysis. Before the testing of the structural model, a measurement model must first be created (Kunnan, 1998). The measurement phase involves conducting a confirmatory factor analysis (CFA) in order to test the validity of the specified relationships between the latent variables and the actual questionnaire items that assess them. AMOS 21.0 (Arbuckle, 2012) was used to conduct the CFA on both data sets. During the CFA process, the following four items with factor loading values less than .35 were removed:

**OS1** (Item 1 for ought-to L2 self)—*It will have a negative impact on my life if I don’t study English.*

**OS3** (Item 3 for ought-to L2 self)—*I study English because close friends of mine think it is important.*

**MB1** (Item 1 for motivated learning behavior)—*If an English course was offered at university or somewhere else in the future, I would like to take it.*

**LE1** (Item 1 for L2 learning experience)—*I find English really interesting*

Table 1 shows the Cronbach’s alpha internal consistency reliability coefficients for each scale based on data from the 202 participants collected for each administration (Week 1 and Week 12) after the deletion of problematic items.
Table 1. Variables With Cronbach’s Alpha Coefficients ($N = 202$)

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of items</th>
<th>Cronbach’s $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Week 1</td>
</tr>
<tr>
<td>Motivated learning behavior</td>
<td>4</td>
<td>.83</td>
</tr>
<tr>
<td>Ideal L2 self</td>
<td>5</td>
<td>.93</td>
</tr>
<tr>
<td>Ought-to L2 self</td>
<td>3</td>
<td>.68</td>
</tr>
<tr>
<td>L2 learning experience</td>
<td>4</td>
<td>.86</td>
</tr>
<tr>
<td>International posture</td>
<td>16</td>
<td>.87</td>
</tr>
</tbody>
</table>

According to P. Kline’s (1999) criteria for describing internal consistency, an alpha greater than .9 constitutes an excellent fit, between .7 and .9 represents a good fit, and between .6 and .7 is an acceptable fit. All values reported met or exceeded the criteria for acceptable fit. However, similar to previous studies (e.g., Lamb, 2012; Taguchi et al., 2009), the measure of ought-to L2 self (.68 and .69) is considerably less reliable than the other scales. As noted in Lamb (2012), this may be due to the wording of frequently used questionnaire items. In this case, to capture the general notion of possessing an obligation towards others to learn English, items referred to “parental” disappointment, the importance “close friends” put on English, and the expectations of “people surrounding me.” For Japanese, the expectations from each of these social groups may be different and possibly contradictory. Given that the Cronbach’s alpha for ought-to L2 self was still an acceptable value, it was incorporated in further analyses.

The remaining items were used to construct an initial (hypothesized) model. Seven causal paths between the five latent variables were added to create the full structural model. The links proposed in these models are based on relationships found by Yashima (2002, 2009), Yashima et al. (2004), Csizér and Kormos (2009), and Taguchi et al. (2009). The hypothesized model is shown in Figure 1.
Figure 1. The hypothesized model to be tested.

Results

Comparative Analysis of Motivation Scales

A comparison of mean scores on each motivation scale for the two administrations is presented in Table 2. To demonstrate changes in strength for each variable, a paired samples \( t \) test was conducted on the first and second administration of the questionnaire. The effect size represents the total effect the one-semester English course had on the strength of each scale. Table 2 shows the descriptive statistics of each scale for administrations in Week 1 and Week 12, with paired \( t \) test results comparing scores.

For both administrations, the highest mean value was obtained for L2 learning experience, indicating that university students in the IEP have maintained a very favorable attitude towards the communicative approach of the program, their native English teachers, and the course content.

Looking at the differences between Week 1 and Week 12, statistically significant increases occurred for both ought-to L2 self (\( p = .007 \)) and motivated learning behavior (\( p = .005 \)). The effect size of ought-to L2 self (\( d = .15 \)) and motivated learning behavior (\( d = .17 \)) are between small and medium. Though a marginal increase, this result suggests that the IEP course
strengthens students’ L2 motivation both in terms of actual effort expended to study English (motivated learning behavior) and obligation towards others to learn English (ought-to L2 self). In other words, for these two dimensions of motivation only, students finished the course more motivated than when they entered the course at the start of semester.

### Table 2. Results of t Tests Comparing Mean Scores of Motivation Scales for Week 1 and Week 12 (N = 202)

<table>
<thead>
<tr>
<th>Scales</th>
<th>Week</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
<th>Effect size (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivated behavior</td>
<td>1</td>
<td>3.14</td>
<td>1.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>3.33</td>
<td>1.10</td>
<td>201</td>
<td>2.868</td>
<td>.005</td>
<td>.17</td>
</tr>
<tr>
<td>Ideal L2 self</td>
<td>1</td>
<td>3.51</td>
<td>1.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>3.57</td>
<td>1.27</td>
<td>201</td>
<td>.990</td>
<td>.323</td>
<td>.05</td>
</tr>
<tr>
<td>Ought-to L2 self</td>
<td>1</td>
<td>3.36</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>3.52</td>
<td>1.10</td>
<td>201</td>
<td>2.707</td>
<td>.007</td>
<td>.15</td>
</tr>
<tr>
<td>L2 learning experience</td>
<td>1</td>
<td>4.17</td>
<td>1.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>4.12</td>
<td>1.08</td>
<td>201</td>
<td>-.889</td>
<td>.375</td>
<td>-.05</td>
</tr>
<tr>
<td>International posture</td>
<td>1</td>
<td>4.00</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>3.99</td>
<td>.84</td>
<td>201</td>
<td>-.347</td>
<td>.729</td>
<td>-.01</td>
</tr>
</tbody>
</table>

*Note. Conducting five separate t tests led to a Bonferroni adjusted threshold for significance of p < .01.*

### Structural Equation Model Comparison

Table 3 presents the fit indices for the initial (hypothesized) model for both Week 1 and Week 12 and the improved fit indices obtained by steps taken towards finalizing the model. To achieve a comprehensive evaluation of fit, a range of different fit indices are reported: chi-squared, comparative fit index (CFI), Tucker-Lewis index (TLI), normed fit index (NFI), and root mean squared error of approximation (RMSEA). The recommended value for model fit is .9 or above for TLI and NFI, .93 or above for CFI, and .8 or below for RMSEA (e.g., Byrne, 1998; Hu & Bentler, 1995).

For the initial model of Week 1, only the CFI value is an acceptable level for model fit. In an effort to find a model that was a better fit for the data
collected, modification indices provided by AMOS output were consulted in order to add new paths that may explain additional variance. The following five pairs of error terms were then correlated on three separate scales: IS2-IS5 (ideal self Items 2 and 5), LE2-LE4, MB2-MB5, MB4-MB5, and MB2-MB4. This was theoretically justified as items in each pair were measuring the same latent variable and were worded similarly. As shown in Table 3, these modifications resulted in a considerable improvement in model fit. Of the seven initial theoretical paths between latent variables (Figure 1), two were not significant \((p > .05)\): ought-to L2 self à motivated learning behavior and ideal L2 self à L2 learning experience. The final modification involved removing these paths from the model. This resulted in a marginally better fit for the RMSEA index. From Table 3, it can be seen that most fit indices for the final model reflect an acceptable model fit for the data of Week 1.

The initial model for Week 12 was modified twice in a similar manner to the Week 1 model. Upon inspection of the modification indices, the following five pairs of error terms were correlated: IS2-IS3, LE2-LE4, MB3-MB5, MB2-MB3, and MB2-MB5. After the adjustments, it was found that one of the theoretical paths \((ought-to L2 self à motivated learning behavior)\) was not significant \((p > .05)\). Creation of the final model involved the removal of the nonsignificant path, which marginally improved model fit. The final Week 12 model is deemed an acceptable fit with CFI, TLI, NFI, and RMSEA values meeting minimum requirements.

Although the value for chi-squared is significant for both models, the fit requirement of \(p > .05\) is notoriously difficult to meet, especially for sample sizes over 200 involving several factors (Schumacker & Lomax, 2004, p. 100).

Schematic representations of the final models are presented in Figure 2 (Week 1) and Figure 3 (Week 12) with standardized path coefficients. The figures show the causal structure of the models by visually indicating the directionality (arrows) and strength (standardized coefficient values) of the relationships between the five latent variables. For reference, nonsignificant paths removed from the initial hypothesized model are shown in Figure 2 and Figure 3 as broken lines; however, these were removed before final model testing. To increase visual clarity, error terms and residuals are not shown in the figures.
### Table 3. Selected Fit Measures for SEMs (Week 1 and Week 12)

<table>
<thead>
<tr>
<th>Models</th>
<th>$\chi^2$</th>
<th>CFI</th>
<th>TLI</th>
<th>NFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial (hypothesized) model</td>
<td>346.68</td>
<td>.91</td>
<td>.89</td>
<td>.86</td>
<td>.083 [.072, .094]</td>
</tr>
<tr>
<td>Adding error correlations</td>
<td>275.54</td>
<td>.94</td>
<td>.93</td>
<td>.89</td>
<td>.069 [.057, .081]</td>
</tr>
<tr>
<td>Final model (deleting nonsignificant paths)</td>
<td>270.57</td>
<td>.94</td>
<td>.93</td>
<td>.89</td>
<td>.069 [.056, .080]</td>
</tr>
<tr>
<td><strong>Week 12</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial (hypothesized) model</td>
<td>342.84</td>
<td>.91</td>
<td>.89</td>
<td>.86</td>
<td>.082 [.071, .094]</td>
</tr>
<tr>
<td>Adding error correlations</td>
<td>250.79</td>
<td>.95</td>
<td>.94</td>
<td>.90</td>
<td>.063 [.050, .075]</td>
</tr>
<tr>
<td>Final model (deleting nonsignificant paths)</td>
<td>249.84</td>
<td>.95</td>
<td>.94</td>
<td>.90</td>
<td>.063 [.050, .075]</td>
</tr>
</tbody>
</table>

*Note. CFI = comparative fit index; TLI = Tucker-Lewis index; NFI = normed fit index; RMSEA = root mean squared error of approximation. For RMSEA values, a 90% confidence interval is reported in brackets.*

![Figure 2. Structural equation model with standardized estimates for Week 1. Solid lines indicate coefficients were significant at $p < .01$. Dashed lines indicate two nonsignificant paths that were deleted from the model.](image-url)
Figure 3. Structural equation model with standardized estimates for Week 12. Solid lines indicate coefficients were significant at \( p < .01 \). The dashed line indicates a nonsignificant path that was deleted from the model.

By comparing the two models, we can see that the overall causal structure of the motivational system has changed from Week 1 to Week 12. The structural change involves the emergence of the path from ideal L2 self to L2 learning experience in Week 12 that was not present in Week 1.

Discussion

In regards to the strength of L2 motivation, learners who participated in this research significantly increased in strength along two dimensions: motivated learning behavior and ought-to L2 self. The increase in motivated learning behavior indicates that one semester in an IEP course had a significantly positive effect on students’ effort to study English. This result is encouraging, as it suggests that communicative English classes may be a source of motivation for students. The increase in ought-to self can be interpreted as an increase in students’ obligation towards others to learn English. A communicative language course may trigger feelings of pressure to meet such social expectations. Additionally, the motivational structure of the learners has undergone a small but significant change, which may have facilitated the increase in motivation overall.
The two SEMs produced in this research show that the structure of the learners’ motivation partially changed over the course of the semester: Specifically, the hypothesized path from ideal L2 self to L2 learning experience was supported in the Week 12 model but not in the Week 1 model. In fact, the influence of ideal L2 self on L2 learning experience was very strong during Week 12 ($p < .01$). This is a positive development in terms of motivational potential as it indicates that attitudes towards the classroom environment are in line with learners’ future-self concept. It appears that classroom activities became more personally relevant for learners’ futures towards the end of the semester, a prerequisite that Taguchi (2013) claimed is necessary for triggering long-lasting motivation. As L2 learning experience directly impacts motivational behavior, this structural change could account for the increase in strength of motivation overall.

Despite this structural change, some parts of the model remained stable over the course of the semester and share some similarities to previous research. Firstly, L2 learning experience and ideal L2 self both contribute significantly to motivated learning behavior, but to different degrees. As reported in several other studies (e.g., Munezane, 2013; Papi, 2010), ideal L2 self is the primary contributor to motivated learning behavior, which confirms the hypothesis that fostering a vivid future-oriented self is a very important motivator for learners. Moreover, L2 learning experience (4.17 and 4.12) maintained the highest mean scores among all variables measured. As reported by Csizér and Kormos (2009), the classroom experience is strongly connected to how much energy learners are willing to exert learning an L2. Secondly, similar to Yashima’s (2009) finding, ideal L2 self for both models is closely related to international posture, indicating that students who imagine themselves as proficient English speakers in the future can do so because they have an internationally oriented disposition. Finally, the ought-to L2 self component appears not to predict motivation at all for these learners. Several studies (Csizér & Kormos, 2009; Dörnyei et al., 2006; Kormos & Csizér, 2008) have reported that this component has no significant relationship with motivated learning behavior. The finding in this study reaffirms the questionable level of influence ought-to L2 self has on L2 motivation. Ought-to self does, however, significantly influence ideal L2 self. The fact that a learner’s future-self concept is congruent with what others expect from him or her is a powerful motivational relationship that seems to have lasted throughout the semester. Therefore, the increase in ought-to L2 self may have indirectly contributed to a higher motivation overall through ideal L2 self.
Conclusion

In this study, I investigated the changes in strength and structure of L2 motivation from a self-concept perspective for Japanese learners of English over a one-semester university course. In doing so, the L2 Motivational Self System was applied successfully to describe the motivational structure of a specific group of participants in a specific context at two points in time. In addition to increasing the strength of motivated learning behavior and ought-to L2 self, one semester in a communication-oriented English course caused a change in the structure of learners’ L2 motivation. The results confirmed several assertions made by previous researchers, most notably the tenuous impact of ought-to L2 self on motivation, the strong relationship between international posture and ideal L2 self, and the impact of ideal L2 self on motivated learning behavior. Results also shed some light on how motivation develops over a period of time. As the semester progressed, students seem to have connected classroom activities to their future-self concept, leading to a more well-rounded motivational structure. This study is perhaps limited by the selection of students who have gained entry to a program based on their strong desire to learn English; participants may have already had highly developed English-using selves before entering the university education system. Nevertheless, it is encouraging that students responded very positively to a course that focuses on English communication.

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References


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Appendix

Motivation Questionnaire (Responses on a 7-Point Likert Scale)

(Absolutely untrue)  1  2  3  4  5  6  7  (Absolutely true)

Motivated learning behavior (5 items)
MB1 If an English course was offered at university or somewhere else in the future, I would like to take it.*
MB2 I think I am doing my best to learn English.
MB3 I am prepared to expend a lot of effort in learning English.
MB4 Compared to my classmates, I think I study English relatively hard.
MB5 I am working hard at learning English.

Ideal L2 self (5 items)
IS1 In the future, I can imagine myself as a person who uses English in his or her daily life.*
IS2 In the future, I can imagine myself as a person who understands English movies or music without Japanese subtitles.
IS3 In the future, I can imagine myself as a person who has the ability to express his or her opinions or thoughts accurately in English.*
IS4 In the future, I can imagine myself as a person who does not hesitate to speak English.*
IS5 In the future, I can imagine myself as a person whose strength is being competent in English.

L2 learning experience (5 items)
LE1 I find English really interesting.
LE2 I would like to have more English classes at university.
LE3 I really enjoy learning English.
LE4 I always look forward to English classes.
LE5 I think that time passes faster while studying English.
Ought-to L2 self (5 items)

OS1  It will have a negative impact on my life if I don’t study English.
OS2  Learning English is necessary because people surrounding me expect me to do so.
OS3  I study English because close friends of mine think it is important.
OS4  I have to study English, because, if I do not study it, I think my parents will be disappointed with me.
OS5  My parents believe that I must study English to be an educated person.

International posture (16 items)

IV1  I want to work in a foreign country.
IV2  I want to work at an international organization such as the United Nations.
IV3  I am interested in an international career.
IV4  I’d rather avoid the type of work that sends me overseas frequently.
IV5  I would rather stay in my hometown.
IV6  I don’t think what’s happening overseas has much to do with my daily life.
AA1  I want to participate in a volunteer activity to help foreigners living in the surrounding community.
AA2  I wouldn’t mind sharing an apartment or room with an international student.
AA3  I want to make friends with international students studying in Japan.
AA4  I would talk to an international student at university if I saw an opportunity.
AA5  I try to avoid talking to foreigners if I can.
AA6  I would feel somewhat uncomfortable if a foreigner moved in next door.
IA1  I have a strong interest in international affairs.
IA2  I often read and watch news about foreign countries.
IA3  I often talk about situations and events in foreign countries with my family and/or friends.
IA4  I am not much interested in overseas news.

Note. Items marked with an asterisk (*) were not included in the final analysis.