The Relationship Between L2 Selves, Intrinsic/Extrinsic Motivation and Motivated Behavior of Japanese EFL Learners

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Abstract

The concept of L2 Selves has been a prominent topic in the L2 motivation research field and the preceding studies have shown the utility and applicability of the construct. However, the following two relationships have not yet been revealed: associations between the Ideal and Ought-to L2 Selves; and relationships between these L2 Selves and L2 experiences. The former attribute to less attention on the Ought-to L2 Self and how L2 Selves affect L2 learning. The latter refer to limited attention on L2 Selves in EFL classrooms, and examining the links between L2 selves and intrinsic/extrinsic motivation may be helpful. Thus, the present study examined the interrelations among L2 Selves, motivation and L2 learning behavior by using cluster analysis. The study administered a questionnaire to 147 Japanese college EFL learners. The result showed that motivated behavior may occur when both L2 Selves are highly balanced, and extrinsic motivation may play a crucial role in L2 Selves. The study concluded that positive sides of extrinsic motivational attributes should not be overlooked.

1. Introduction

In recent years, the new motivational framework, the L2 Motivational Self System has been introduced by Dörnyei (2005, 2009) to studies of L2 motivation. The theory was inspired by the Self-Discrepancy Theory of Higgins (1987) and Possible Self by Murkus and Nurius (1986). These two studies are both premised on two types of self-concept toward one’s end state; one is the Ideal Self, or the imagery of self-representation and visions of what one would like to become, and the other is the Ought Self, or the self-representations of what one should be, with a sense of responsibility, obligation, and duty. Usually, the Ideal Self is associated with positive outcomes as the desired end state, while the Ought Self focuses on the presence or absence of negative outcome that should be avoided (Higgins, Roney, Crowe, & Hymes, 1994). It is assumed that by eliminating the mismatch between their actual self and the desired, hoped, and feared end states, people would be motivated to take self-regulatory processes to approach or avoid the end states.

Dörnyei’s L2 Motivational Self System was proposed to expand Gardner’s (1985) integrativeness into a broader concept, in order to understand the widely varied orientations of
language learners living in the world of globalization. Dörnyei (2009) argued that, for such learners, integrativeness is more likely to indicate integration with their wished self-concept with L2 specific facets, rather than identification with people or community of the target language. In this globalized world, learners who do not live in the native L2 community can possess a certain kind of imagery or visions pertaining to mastering L2, or L2 Selves, that they would like to be identified with, through the significant others and social tendencies in their context and various media (e.g., TV, movies, internet, magazines). The researchers advanced the research on L2 Selves in various ways (e.g., Ryan, 2009; Taguchi, Magid, & Papi, 2009). However, how three main components of Dörnyei’s model, the Ideal L2 Self, the Ought-to L2 Self and the L2 Learning Experience, interplay to affect language learning motivation is still ambiguous. More specifically, although the two types of L2 selves have been shown to independently influence learner motivation, how they interact has rarely been the research focus. In addition, the role of the L2 Learning Experience also has infrequently been discussed. This is very important since, as Yashima (2009) argued, Japanese learners of English rarely display L2-specific facets in their future selves as learners of English. What this tells is that learners should be provided with good L2 experiences in the classroom to develop their L2 Selves. Thus, the purpose of the present study is to reveal the interactions between the Ideal L2 Self and the Ought-to L2 Self, and also to explore how these two are in the relationship with the subtypes of motivation, which may reflect the past L2 learning experiences in the classroom.

2. Research Background

2.1 L2 Motivational Self System

The study of L2 Selves became a considerable research topic after Dörnyei and Csizer’s (2002) large scale, nation-wide survey of various motivational/attitudinal variables in Hungary in 1993 and in 1999, with more than 8,000 participants who had a limited contact with the communities of foreign languages. They found that integrativeness was correlated most strongly with two criterion variables of motivated learning behavior, language learning effort and language choice. This was a striking finding because a conflicting concept, instrumentality, has traditionally been considered to be more relevant to the EFL context (Dörnyei, 1990). In their later study, Csizer and Dörnyei (2005) investigated EFL learners’ internal structure of language learning motivation. The result demonstrated that instrumentality and attitude toward the L2 community independently influenced integrativeness, which then leads to motivated behavior. They concluded that integrativeness in the EFL contexts subsumes both integrative and instrumental perspectives, and called for reconceptualization of Gardner’s integrativeness.

Dörnyei’s (2005, 2009) L2 Motivational Self System was constructed based on the results mentioned above, and the following three new components were developed drawing mainly on Higgins (1987) and Markus and Nurius (1986). The Ideal L2 Self refers to one’s idealized images
of L2 learners/users as an outcome or end state that one would like to reach. The Ought-to L2 Self concerns an end state that one should attain to meet the expectations of the others, or that one would like to avoid. A sense of responsibility or obligation is dominant with this type of the self. The L2 Learning Experience concerns attitudinal/motivational factors influenced by the immediate learning situation and experience. Dörnyei assumed that in order to reduce the gap between the current self and the desired end states, either positive or negative, the learners would be motivated to approach the end states with the Ideal L2 Self and avoid it with the Ought-to L2 Self. The Ideal L2 Self, on one hand, subsumes both integrativeness and instrumentality perspectives; for example, learners may learn L2 because they wish to be like a person who can speak native-like L2, or because they want to use L2 for business matters in the future. On the other hand, the Ought-to L2 Self mainly concerns the prevention perspective of instrumentality; for instance, learners would study L2 because they do not want to fail the language course or disappoint their significant others.

Based on these theoretical premises, subsequent studies have conducted empirical research on L2 Selves in various contexts. Csízer and Kormos (2009) compared their hypothetical models of L2 Selves between secondary school students and university students in Hungary. As a result, for both groups of learners, the L2 Learning Experience and the Ideal L2 Self were the direct predictors of motivated learning behavior (i.e., effort). The L2 Learning Experience also predicted the Ideal L2 Self. However, for high school learners, the Ought-to L2 Self did not predict motivated learning behavior, while, for university students, it was the significant predictor. Taguchi et al. (2009) also examined the applicability of L2 Self models in the Japanese, Chinese, and Iranian contexts, and demonstrated that the model can be applied to these different cultural contexts, with both the Ideal L2 Self and the Ought-to L2 Self predicting learning effort. Ryan (2009) conducted a large-scale study in the Japanese context, and concluded that in EFL contexts, integrativeness plays an important role as a part of the Ideal L2 Self, and the Ideal L2 Self is related directly with L2 learning effort. What can be concluded from these studies is that, first, the L2 Motivational Self System is a valid theoretical framework in various cultural settings, and, second, the Ideal L2 Self is important for L2 learning motivation. However, it seemed that little research attention was focused on the role of the Ought-to L2 Self, and thus, it can be said that how L2 Selves are related to L2 motivation and learning is still ambiguous and open to debate.

2.2 The Relationship between L2 selves and the Other Motivational Variables

Deci and Ryan's (1985) Self-Determination Theory (SDT) has been one of the research topics in SLA since Noels, Clément, Pelletier, and Vallerand (2000) showed the applicability of the model to the field. The SDT assumes two types of motivation: intrinsic motivation and extrinsic motivation. The former refers to the motivation coming from a person's own genuine interest and enjoyment in performing a task. This is the most self-determined type of motivation. The latter, extrinsic motivation has three different dimensions. The first is Identified Regulation,
which occurs when a learner finds high value and relevance in doing a learning task. This is the most self-determined form of extrinsic motivation. Introjected Regulation is the second most self-determined form, which concerns a learner performing a task in order not to feel guilty for not following the self-imposed rules or expectations from others. The least self-determined form is External Regulation, which refers to a learner’s behavior completely regulated by external rewards or threats. Lastly, Amotivation refers to the state of a learner who blindly thinks the task is far beyond his/her control, and thus has little or no motivation. These subtypes are not antagonistic counterparts of one another. Rather, they are assumed to vary on a continuum according to the degree of internalization of external factors, and this enables researchers to grasp widely varied patterns of learner motivation in a classroom. Internalization occurs when learners perceive that their sense of autonomy, competence and relatedness is satisfied by immediate learning situations.

Although there have been few practical reports on motivational development in the classroom, a series of empirical studies conducted in Japan has shown that learner motivation can be developed through positive classroom experiences provided by elaborately designed pedagogical interventions (e.g., Hiromori, 2006; Tanaka, 2005). For instance, Tanaka carried out a 20-day instructional curriculum on a group presentation in English to high school students. This was intended to foster Intrinsic Motivation, and the result demonstrated that self-determined types of motivation tended to increase. A similar tendency was shown by Hiromori’s instructional practices of group English writing for university students, and the qualitative analysis of the students’ comment on the practice showed that these learners were motivated through positive English learning experiences produced by the practice.

The practical studies mentioned above gave valuable insights into the role of the L2 Learning Experience in L2 selves. Dörnyei (2005, 2009) suggested that L2 Selves share similar dispositional characteristics with intrinsic motivation and extrinsic motivation in internalization of external incentives. Thus, the Ideal L2 Self may be conceptually related to the more self-determined types of motivation, while the Ought-to L2 Self would be associated with less self-determined forms. The relationship between these two concepts has also been studied empirically by Yashima (2009). She found that the Ideal L2 Self was correlated with more self-determined types of regulations. If this is the case, L2 selves may vary in response to motivational development through L2 learning experiences that may encourage learners to internalize the external incentives pertaining to learning L2. Therefore, exploring how L2 Selves and the motivational subtypes are mutually related may provide fruitful insights for fostering L2 Selves in the classroom, which has rarely been discussed in the studies of L2 Selves.

2.3 The Context of the Study

Previous studies have confirmed the following four empirical findings: 1) applicability of the framework of L2 selves in various cultural contexts; 2) the Ideal L2 Self as a good predictor of motivated behavior (i.e., L2 learning effort); 3) positive L2 learning experiences through
classroom practices fostering motivational development; 4) positive relationship between the Ideal L2 Self and more self-determined types of motivation. However, there seem to be issues remaining to be uncovered. First, how L2 Selves contribute to L2 learning is still ambiguous. This is attributed to the fact that the previous studies have not revealed roles of the Ought-to L2 Self in L2 learning, and how the two types of L2 selves are mutually related. Oyserman, Bybee, and Terry (2006) and Oyserman and Markus (1990) have demonstrated that a good balance between the Ideal and Ought Self may lead to motivated learning behavior. This implies that looking at the profiles of the two L2 Selves in an individual learner may be crucially important to reveal relationships between L2 Selves and motivated L2 learning. Second, the links between the L2 Learning Experiences and L2 Selves have not yet been discussed. As Ushioda (2001) indicated, a current motivational state of learners is affected from the cumulative impact of past language learning experiences. Thus, it seems reasonable to assume that the L2 Learning Experience accumulated from the past may have some impact on learners’ self-image or sense of obligation as a language learner. However, no scales were proposed to measure the learning experience. Rather than proposing new scales, the present study applied subscales of the SDT for the following reasons. First, L2 Selves share the theoretical foundation with the SDT (e.g., Dömyei, 2005; Yashima, 2009). Second, it was assumed that subtypes of motivation reflect how learners have perceived and internalized their learning experiences and situations so far (e.g., Hiromori, 2006; Tanaka, 2005). It would then be valuable to see relationships between L2 Selves and the SDT for the first step to examine how learning experiences are related to L2 Selves, and to gain insights into how classroom interventions contribute to L2 Selves, which have not been the topic in the field. With these in mind, the study posed the following research questions (RQs).

RQ1: What are the profiles of L2 self of Japanese EFL learners?
RQ2: How are the L2 selves and the L2 Learning Effort of Japanese EFL learners related?
RQ3: How are the L2 selves and the subtypes of motivation of Japanese EFL learners associated?

3. Method

3.1 Participants

A total of 147 university students who were taking general English courses participated in the present study. The major fields of these learners were varied: information science, nutrition, law and economics. More than half of the learners had taken TOEIC Bridge, and their scores ranged from 56 to 146, which is roughly equivalent to 400 and below based on the TOEIC scoring scale. Approximately 70 percent of the rest of the learners reported that they had passed either the third or lower levels of the STEP Eiken test. The rest had never taken any of English proficiency tests or had no desire to take any of them due to their irrelevancy to their majors or future professions.
3.2 Material

In order to collect the data, the present study administered a 5-point Likert scale questionnaire designed to assess L2 Selves, subtypes of motivation and learning effort during the regular class period in April. As for L2 Selves, four items represented the Ideal L2 Self (α = .71; e.g., “I often imagine myself as someone who is able to speak English.”), and four items represented the Ought-to L2 Self (α = .81; e.g., “Learning English is necessary because people surrounding me expect me to do so.”). These items were developed based on Ryan (2009) and Taguchi et al. (2009), respectively. A high score indicated clear visions toward desired (i.e., Ideal L2 Self) and undesired (i.e., Ought-to L2 Self) ends.

The measurement scale assessing motivational variables was composed of three items for Intrinsic Motivation (α = .83; e.g., “I’m studying English because I enjoy the feeling of acquiring knowledge about English.”), three items for Identified Regulation (α = .84; e.g., “I’m studying English because it is good for my personal development.”), three items for Introjected Regulation (α = .64; e.g., “I’m studying English because I will feel ashamed if I can’t speak English.”), three items for External Regulation (α = .56; e.g., “I’m studying English because I want to get a good grade in my English class.”), and three items for Amotivation (α = .68; e.g., “I think I’m wasting my time in studying English.”). These items were generated based on Noels, Pelletier, Clément, and Vallerand (2000) and Hiromori (2006). A high score represented a high degree of agreement between the proposed reasons and the learners’ own reason for learning English. External Regulation showed very low internal consistency, probably because of the number of the item. However, the current study decided to use it because of the theoretical foundation of the model.

As for the measures of motivational L2 learning behavior, the present study included a scale to assess L2 Learning Effort in the classroom. Four items (α = .72; e.g., “I’m working hard at learning English.”) were adapted from Ryan (2009), and a high score suggested a learner is willing to expend a high amount of L2 learning effort. While the previous studies (Csizer & Dörnyei, 2005; Dörnyei & Csizer, 2002) dealt with both language learning effort and language choice as criterion measures of motivated behavior, the present study focused only on learners’ efforts. This is because English is the single most popular foreign language in the Japanese context, and thus many learners were not likely to have strong reasons to choose to learn foreign languages other than English. Although it is not the only one element, effort was chosen to be the measure of motivated behavior in the present study. This is because effort has definitely been one theoretical aspect of motivation (Gardner, 1985). It has also been suggested that motivation refers to the direction and magnitude of human behavior, and effort represents these two aspects of motivated behavior (Dörnyei, 2001). Thus, it seemed reasonable to define motivated behavior by effort that learners intend to exert toward learning English. In addition, after Dörnyei & Csizer (2002), the studies of L2 Selves have been applying intended learning effort as motivated behavior (e.g., Taguchi et al., 2009; Csizer & Kormos, 2009). Therefore, adopting effort as the measure of motivated L2 behavior ensures theoretical consistency with previous L2 studies.
3.3 Analytical Procedure

The present study dealt with a number of variables, aiming to reveal the interrelationships among them. Before the analysis, the study performed confirmatory factor analysis (CFA) to reveal the dimensions underlying the items and to validate whether such dimensions corresponded to the preceding theoretical assumptions. CFA was performed using Amos 17.

In order to reveal the relationships among the variables, the present study used cluster analysis. Recently, structural equation modeling (SEM) has been considered the most appropriate statistical technique for examining relationships between variables, since regression and factor analysis can be carried out at once with several dependent/independent variables (Ullman, 2007). However, what this procedure provides is limited to only one-to-one relationships among a number of variables, assuming that other variables do not vary. As Oyserman et al. (2006) showed, whether positive learning behavior would be enhanced depends on to what extent two types of Selves are balanced. Based on this premise, the present study assumed that a learner possesses both types of L2 Selves at a certain level. Thus, it was reasonable to carry out cluster analysis, rather than correlation, regression and SEM. By using cluster analysis, researchers can identify groups of learners who show a similar tendency toward dispositions that they possess. Each cluster represents a certain pattern of several dispositions, and by comparing each cluster’s profile of dispositions, it would be possible to see how these variables interact cooperatively, but not independently. Thus, cluster analysis seemed more appropriate for elucidating how these two Selves are related to other variables (Isoda, 2006).

By using the result of cluster analysis as the between-group factor, a set of one-way analysis of variance (ANOVA) was performed to see if any group differences could be found in dispositional tendencies. The effect size was also computed drawing on Field (2009): $\eta^2$ for ANOVAs, and Cohen’s $d$ for the post hoc comparisons. The effect size refers to the standardized indices that represent the magnitude of the effectiveness of independent variables. This is an important index because the significant test does not show how meaningful and strong the effect was. In the present study, the effect size was discussed to see how effectively the difference was provided by the clusters. Although $r$ is widely used for the post hoc comparison, the present study applied Cohen’s $d$ because it is more suitable when the sample size of each group being compared is not equal. Because the study performed ANOVAs on eight dependent variables, the significant level was adjusted to $p < .006$ (i.e., .05 / 8). These analyses were carried out using SPSS 17.

4. Results

4.1 Dimensions of L2 Selves, Subtypes of Motivation and Language Learning Effort

In order to see whether the dimensions underlying the questionnaire items, or factors, represent the theoretical construct with adequate fit indices, CFA were carried out for each subscale using the maximum likelihood procedure. All variables were standardized and the
z-score was calculated (e.g., M = 0, SD = 1) since the learners in the current study were in different colleges, taking differently contextualized English classes (Dömyei, 2001).

In the case of L2 Selves, a two-factor model was assumed, with each latent variable, or factor, independently loading on the observed variables, or items, of the Ideal L2 Self and Ought-to L2 Self. As a result, the model was considered to be good fit, $\chi^2 (19) = 29.55, p = .058$; CFI = .97; RMSEA = .06. Factor loadings ranged from .55 to .67 for the Ideal L2 Self, and .62 to .77 for the Ought-to L2 Self. These two factors were significantly correlated ($r = .68$).

As for L2 Learning Effort, a single-factor model was provided for the analysis; a single latent variable loaded on all four observed variables. Again, fit indices demonstrated acceptable fit, $\chi^2 (2) = .61, p = .736$; CFI = 1.00; RMSEA = .00. Thus, it can be said that all four effort items successfully represented L2 Learning Effort.

In terms of subtypes of motivation, the present study assumed a five-factor model (i.e., Intrinsic Motivation, Identified Regulation, Introjected Regulation, External Regulation, and Amotivation) according to the previous studies (e.g., Hiromori, 2006; Noels, 2001). The result showed the loadings ranging from .40 to .85, but the estimated values of the fit indices seemed somewhat complicated, $\chi^2 (80) = 131.87, p = .000$; CFI = .93; RMSEA = .07. The chi-square test was significant, which means that there was a significant difference between the model and the data. However, whether the model was a good fit or not should not be judged only by the chi-square test because with large samples, it tends to be significant, and with small samples, the probability level would be erroneous (Ullman, 2007). Ullman also added that it may be indicative of a good-fitting model when the ratio of the chi-square to the degrees of freedom is below 2. In the present study it was 1.65, indicating an acceptable fit.

Based on the result of the factor analysis, the variables representing each construct were aggregated, and the following variables were generated for the following analysis: Ideal L2 Self, Ought-to L2 Self, Intrinsic Motivation, Identified Regulation, Introjected Regulation, External Regulation, Amotivation, and L2 Learning Effort. Table 1 shows the descriptive statistics.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>The Descriptive Statistics of L2 Selves, Subtypes of Motivation, and L2 Learning Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>$N$</td>
</tr>
<tr>
<td>Effort</td>
<td>147</td>
</tr>
<tr>
<td>Ought-to L2 Self</td>
<td>147</td>
</tr>
<tr>
<td>Ideal L2 Self</td>
<td>147</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>147</td>
</tr>
<tr>
<td>Identified</td>
<td>147</td>
</tr>
<tr>
<td>Introjected</td>
<td>147</td>
</tr>
<tr>
<td>External</td>
<td>147</td>
</tr>
<tr>
<td>Amotivation</td>
<td>147</td>
</tr>
</tbody>
</table>
As can be seen, these learners were likely to possess a higher disposition toward the Ideal L2 Self than the Ought-to L2 Self. In terms of the subtypes of motivation, these learners tended to be more externally motivated than intrinsically motivated, since the three subtypes of extrinsic motivation were higher than Intrinsic Motivation. L2 Learning Effort was below the average.

4.2 Examining the Profiles of L2 Selves

In order to investigate to what extent an individual learner possessed the two types of L2 Selves, cluster analysis was carried out using these two variables as clustering measures. As a result, four clusters were considered to be reasonable for further analyses. Then, in order to confirm the validity of clustering, one-way ANOVAs were administered. Table 2 shows the results of descriptive statistics of each cluster and the results of ANOVAs, and Figure 1 demonstrates a graphical representation of the dispositional patterns of each cluster. As can be seen, for both variables, significant differences with large-sized effects were found among the groups, and Tukey’s post hoc comparison was conducted.

Table 2
Means and Standard Deviations of Each Cluster and the Results of ANOVAs

<table>
<thead>
<tr>
<th>Cluster</th>
<th>(n = 51)</th>
<th>Cluster</th>
<th>(n = 30)</th>
<th>Cluster</th>
<th>(n = 41)</th>
<th>Cluster</th>
<th>(n = 25)</th>
<th>F(3, 143)</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal L2 Self</td>
<td>2.45 0.58</td>
<td>4.03 0.31</td>
<td>3.03 0.27</td>
<td>3.75 0.46</td>
<td>99.16</td>
<td>.000 .48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ought-to L2 Self</td>
<td>1.78 0.50</td>
<td>3.66 0.58</td>
<td>3.03 0.33</td>
<td>2.34 0.27</td>
<td>130.11</td>
<td>.000 .54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Profiles of each cluster’s L2 Selves.

In terms of the Ideal L2 Self, there was no statistically significant difference between Cluster 2 and Cluster 4 (p = .102, d = 0.71), but there was a medium-sized effect, meaning that an unignorable difference was found. These clusters, however, showed significantly higher Ideal L2 Self than Cluster 1 and Cluster 3 (Cluster 2 vs. Cluster 1: p = .000, d = 3.19; Cluster 2 vs. Cluster 3: p = .000, d = 3.50; Cluster 4 vs. Cluster 1: p = .000, d = 2.42; Cluster 4 vs. Cluster 3: p = .000; d = 2.07). Additionally, a significant difference was found between Cluster 1 and Cluster 3 (p = .000, d = 1.25). The large-sized effects were found for these comparisons. Thus, Cluster 2 tended to
show the highest Ideal L2 Self, followed by Cluster 4, Cluster 3 and Cluster 1, respectively. As for the Ought-to L2 Self, significant differences were found among all clusters, with Cluster 2 showing the highest score (Cluster 2 vs. Cluster 1: \( p = .000, d = 3.59 \); Cluster 2 vs. Cluster 3: \( p = .000, d = 1.41 \); Cluster 2 vs. Cluster 4: \( p = .000, d = 2.89 \); Cluster 4 vs. Cluster 1: \( p = .000, d = 1.30 \); Cluster 4 vs. Cluster 3: \( p = .000; d = 2.26 \); Cluster 1 vs. Cluster 3: \( p = .000, d = 2.92 \)). The effect size was large for all comparisons.

In sum, it was demonstrated that each cluster tended to have a distinctive trait of L2 Selves. Therefore, the general characteristics of each cluster can be described as follows. Cluster 1 showed the lowest Ideal L2 Self and Ought-to L2 Self. Thus, this cluster was named Unclear L2 Self Learners (hereafter, UCL). Cluster 2 was demonstrated to possess the highest Ideal L2 Self and Ought-to L2 Self. Interestingly, it can be said that the learners in this group had the tendency to both pursue an L2-related ideal self-image and to avoid negative outcomes in the end state as a L2 learner/user. Therefore, Cluster 2 was reasonably labeled as Highly Balanced L2 Self Learners (hereafter, HIB). The current study named Cluster 3 Averaged L2 Self Learners (hereafter, AVE) since this cluster displayed a similar dispositional tendency as Cluster 2, but the scores of both L2 Selves were significantly lower than Cluster 2 and Cluster 4, staying at the average level. Finally, Cluster 4 exhibited the Ideal L2 Self as clearly as Cluster 2 and the second lowest Ought-to L2 Self. Thus, this group of learners was clearly dominated by the Ideal L2 Self, and was reasonably represented by the title Ideal L2 Self Learners (hereafter, IDL).

4.3 The Comparisons of Motivational Dispositions and Effort Expenditure of Each Group

With the result of cluster analysis as a between-group factor, a set of one-way ANOVAs were conducted to see how much effort the groups would spend in English learning and to see if the clusters, which each reflected considerably different levels of L2 Selves, had notable characteristics of the subtypes of motivation and. Table 3 shows the result of ANOVAs.

| Table 3 |

| Descriptive Statistics of Each Group's Effort and Motivation, and the Results of ANOVAs |
|-------------------|-------------------|-------------------|-------------------|-------------------|
|                   | UCL              | HIB              | AVE              | IDL              |
|                   | \( M \) | \( SD \) | \( M \) | \( SD \) | \( M \) | \( SD \) | \( M \) | \( SD \) | \( F(3, 143) \) | \( p \) | \( \eta^2 \) |
| Effort            | 2.09  | 0.66  | 3.38  | 0.65  | 2.72  | 0.44  | 2.94  | 0.54  | 33.35 | .000  | 0.17    |
| Intrinsic         | 2.17  | 0.84  | 3.18  | 0.97  | 2.88  | 0.61  | 3.12  | 0.91  | 13.09 | .000  | 0.05    |
| Identified        | 2.69  | 0.94  | 4.06  | 0.67  | 3.46  | 0.46  | 4.13  | 0.79  | 31.16 | .000  | 0.16    |
| Introjected       | 2.54  | 0.85  | 3.79  | 0.61  | 3.36  | 0.60  | 3.03  | 0.67  | 22.15 | .000  | 0.10    |
| External          | 3.01  | 0.72  | 3.83  | 0.80  | 3.54  | 0.61  | 3.24  | 0.85  | 9.06  | .000  | 0.03    |
|Amotivation        | 2.96  | 1.03  | 2.47  | 0.52  | 2.59  | 0.62  | 2.35  | 0.74  | 4.48  | .005  | 0.01    |

\*Note. UCL refers to Unclear L2 Self Learners; HIB to Highly Balanced L2 Self Learners; AVE to Averaged L2 Self Learners; IDL to Ideal L2 Self Learners.

As can be seen, the result demonstrated that the main effect was significant for all
dependent variables. The effect size was large for Identified Regulation and L2 Learning Effort, and medium for Introjected Regulation, it was very subtle for Intrinsic Motivation, External Regulation and Amotivation. Then, the Tukey HSD post hoc comparison was performed to see differences among the groups. As for L2 Learning Effort, HIB seemed to expend the best effort among the groups (HIB vs. IDL: \( p = .030, d = 0.75 \); HIB vs. AVE: \( p = .000, d = 1.20 \); HIB vs. UCL: \( p = .000, d = 1.98 \)). Although the difference between HIB and IDL was not significant, the medium-sized effect indicated the considerable difference induced by the effect of grouping. UCL was least likely to expend effort (UCL vs. IDL: \( p = .000, d = -1.40 \); UCL vs. AVE: \( p = .000, d = -1.11 \)). IDL and AVE tended to put almost the same amount of effort into learning English, since the difference was not significant and the effect size was just small \( (p = .451, d = 0.45) \). HIB, who possessed high Ideal and Ought-to L2 Selves, tended to expend greater effort than IDL.

The mean score of Intrinsic Motivation was highest for HIB, followed by IDL and AVE in order, but the statistically significant differences were not found among them (HIB vs. AVE: \( p = .433, d = 0.37 \); HIB vs. IDL: \( p = .994, d = 0.06 \); AVE vs. IDL: \( p = .655, d = -0.31 \)). A small sized effect was presented between HIB and AVE, and between IDL and AVE. UCL displayed the lowest mean score, and the effect size was large for all the comparisons (UCL vs. HIB: \( p = .000, d = -1.11 \); UCL vs. AVE: \( p = .000, d = -0.97 \); UCL vs. IDL: \( p = .000, d = -1.09 \)).

When it comes to Identified Regulation, the mean difference between HIB and IDL was not statistically significant, and almost no effect was presented \( (p = .986, d = -0.10) \). However, these two groups demonstrated higher mean scores than AVE and UCL, and the large-sized effect was presented for all the comparisons (HIB vs. AVE: \( p = .006, d = 1.04 \); HIB vs. UCL: \( p = .000, d = 1.69 \); IDL vs. AVE: \( p = .003, d = 1.04 \); IDL vs. UCL: \( p = .000, d = 1.67 \)). The mean score of UCL was significantly lower than that of AVE, with the large-sized effect \( (p = .003, d = -1.05) \).

In terms of Introjected Regulation, HIB demonstrated the significantly higher mean score than IDL and UCL, and the large-sized effects were found (HIB vs. IDL: \( p = .001, d = 1.20 \); HIB vs. UCL: \( p = .000, d = 1.70 \)). The difference between IDL and UCL was not significant but the moderate-sized effect was produced \( (p = .026, d = 0.644) \). In the case of AVE, who showed the second highest mean score, only the marginal difference was found between these learners and HIB, who showed the highest mean, but the effect size was moderate \( (p = .058, d = 0.72) \). Thus, the mean difference produced by the group difference was likely to be considerable. However, the significant difference was found between AVE and UCL \( (p = .000, d = 1.12) \), but not between AVE and IDL \( (p = .258, d = 0.52) \).

As forExternal Regulation, the significant difference was found between HIB and UCL with the large effect size \( (p = .000, d = 1.08) \), and between AVE and UCL with the medium effect \( (p = .005, d = 0.79) \). The difference was not significant between IDL and UCL, but the effect size was small \( (p = .582, d = 0.29) \). Thus, UCL tended to show the lowest External Regulation. HIB showed higher mean score than IDL with the moderate effect, but it was not significant \( (p = .017, d = 0.72) \). The significant difference was not found between HIB and AVE, and the small-sized
effect was presented ($p = .332, d = -0.42$). The similar tendency was found between AVE and IDL ($p = .382, d = 0.40$). Thus, while HIB was likely to display the highest External Regulation, UCL was likely to show the lowest.

With respect to Amotivation, the significant difference was not found for any comparisons. However, UCL displayed moderately higher mean score than HIB, $p = .037, d = 0.61$, and the IDL, $p = .010, d = 0.69$. AVE showed subtly higher mean than HIB ($p = .924, d = 0.21$) and IDL ($p = .635, d = 0.35$), and lower than UCL ($p = .112, d = 0.44$).

In sum, considerable differences were found for Identified, Introjected and External Regulation. The *Highly Balanced L2 Self Learners* who possessed high Ideal and Ought-to L2 Selves tended to demonstrate the highest mean for these regulations. For the *Ideal L2 Self Learners* who had the Ideal L2 Self as much as the *Highly Balanced L2 Self Learner*, only Identified Regulation was salient. The *Unclear L2 Self Learners* showed the lowest means, except for Amotivation. The *Averaged L2 Self Learners* showed moderate levels of these regulations.

5. Discussion

The present study investigated the relationships between L2 Selves, subtypes of motivation, and the L2 Learning Effort of Japanese EFL learners by exploring the profiles of L2 Selves through cluster analysis. The RQ 1 was “What are the profiles of the L2 self of Japanese EFL learners?” The result of cluster analysis demonstrated that there were four distinctive groups among the participants of the study according to the extent of both types of L2 Selves. The first cluster was called *Unclear L2 Self Learners* (UCL), who possessed the lowest Ideal and Ought-to L2 Self. The second cluster was labeled as *Highly Balanced L2 Self Learners* (HIB), composed of learners who showed the highest Ideal and Ought-to L2 Self, both of which were at similar levels. The third cluster, *Averaged L2 Self Learners* (AVE), was a group of learners who possessed both types of L2 at the mean levels. The learners who possessed Ideal L2 Self clearly but Ought-to L2 Self obscurely were categorized into the fourth cluster named *Ideal L2 Self Learners* (IDL).

As for the RQs 2 and 3, the group differences of the variables were examined by a set of one-way ANOVAs with the result of cluster analysis as the between-subject factor, reflecting the dispositional characteristics of each group. The RQ2 prompted investigation of the relationships between L2 Selves and effort expenditure. First, HIB and IDL should be compared. The learners of both groups showed higher Ideal L2 Self and a greater amount of effort than the other groups. This tendency was supported by previous studies conducted in various countries (e.g., Csizer & Kormos, 2009; Ryan, 2009; Tanaka et al., 2009), who found that the Ideal L2 Self was significantly related to effort exerted on L2 learning. However, comparisons of these groups indicated that simply possessing a clear Ideal L2 Self may not be enough to explain the higher amount of effort they put into language learning. The mean score of L2 Learning Effort was likely to be higher for HIB than for IDL, since the difference was not significant but there was a
moderate-sized effect for the difference. The dispositional difference between these two groups was the mean score of the Ought-to L2 Self, with HIB showing a higher level. The third cluster, AVE, also demonstrated both types of L2 self at a similar level, but the mean scores of these two L2 Selves and language learning effort were considerably lower than HIB. Thus, in accordance with Oyserman et al. (2006) and Oyserman and Markus (1990), it can be concluded that, at least for learners who do not have very high proficiency in English, motivated behavior for learning English would be induced when a high level of Ought-to L2 Self was possessed together with a clear Ideal L2 Self, indicating a positive role of the Ought Self in L2 learning. In other words, for successful English learning, perceptions of responsibility, obligation and duty to avoid negative outcomes, such as failing the class or being screened out from a company, may play an important role as much as self-images or visions of an ideal L2 learner or user. This finding seemed to be reasonable, since, as Yashima, Zenuk-Nishide, and Shimizu (2004) indicated, Japanese learners are likely to have dual goals for learning English: one concerns short-term goals, such as passing the college entrance exams or getting a good grade on tests, and the other is related to long-term goals, such as acquiring ability to communicate in English. Therefore, it may not be realistic for these learners to emphasize only one side of the two.

The RQ3 dealt with relationships between L2 Selves and subtypes of motivation. In terms of self-determined subtypes, HIB and IDL, who displayed very strong Ideal L2 Self, showed similar mean scores. These two groups were likely to show slightly higher Intrinsic Motivation than the AVE, but the difference was not significant and the mean difference was small. As for Identified Regulation, a similar tendency was found for HIB and IDL; the difference was not found between these groups. However, mean scores of these groups were significantly higher than those of the other groups. Thus, considering the mean differences of the Ideal L2 Self, it can be suggested that both Intrinsic Motivation and Identified Regulation may be associated with the Ideal L2 Self, as was found in Yashima (2009). However, other than the Ideal L2 Self, Identified Regulation was more likely to distinguish these groups than Intrinsic Motivation. Thus, it can be said that Identified Regulation has clearer relationship with the Ideal L2 Self.

It was noteworthy to mention contributions of, less self-determined subtypes, Introjected and External Regulations, to the characteristic difference discussed above. According to the significant group differences and the effect size, HIB, who also showed the highest Ideal and Ought-to L2 Self, tended to show the highest mean scores of these two regulations. This suggested that these two variables, in addition to the Ought-to L2 Self, were also the factor that distinguished two groups who displayed very high Ideal L2 Self. Based on this result, it can be said that less self-determined types of motivation, Introjected and External Regulations, are also in relationship more or less with L2 Selves. Therefore, taking all these results into account, it can be suggested that the subtypes of extrinsic motivation, Identified, Introjected and External Regulations, may be interactively related to learners' Ideal and Ought-to L2 Selves, which may lead to their motivated behavior toward learning English. It has usually been said that having valued personal goals (i.e.,
Intrinsic Motivation and Identified Regulation) may sustain one’s motivation to learn, while feeling pressure imposed both externally and internally (i.e., Intreicted and External Regulations) would cease one’s engagement in learning activities (Noels, 2001). However, the result of the current study demonstrated that the less self-determined forms of extrinsic motivation were likely to have facilitative roles when they interact with the more self-determined form, Identified Regulation. This is probably attributed to the dual goals mentioned above; both of approaching valued personal goals and avoiding internal and external pressure may be needed to pursue the long-term and short-term goals. It is also suggested that learners’ realistic views of learning English (e.g., future career, a sense of obligation) are more likely to be related to their L2 Selves.

Overall, in terms of L2 motivated behavior that may lead Japanese college EFL learners to successful English learning, the results of the current study demonstrated that the Ought-to L2 Self and extrinsic motivation, as well as the Ideal L2 Self, may play important roles. Specifically, those who possessed the Ideal L2 Self and the Ought-to L2 Self to a similar extent were more likely to exert effort in learning English than those who were oriented toward the Ideal L2 Self only. Thus, a highly balanced level of both the Ideal L2 Self and the Ought-to L2 Self is needed for successful language learning for university students in Japan. That is to say, a sense of responsibility, duty and obligation to avoid negative L2 outcomes and meet external expectations may facilitate language learning when they correspond with the idealistic images of a successful language learner or user. Additionally, the result also showed that the subtypes of extrinsic motivation were associated with L2 Selves. In other words, when these two motivational regulations are similarly apparent at the right moment within a learner, he/she may demonstrate motivated L2 learning behavior. In sum, it can be said that the positive sides of a sense of responsibility or obligation to avoid negative L2 outcomes and meet external expectations should not be overlooked.

6. Concluding Remarks

There are limitations in the current study that should be mentioned. First, the variation of the participants was limited. The present study dealt with relatively low proficient EFL learners. Second, the result of cluster analysis cannot be generalized, since it is an exploratory procedure without any external criteria that are used to validate the result. Thus, future research should be conducted in different contexts with more varieties of learners in order to generalize the relationships found in the current study.

The current study concluded that the Ideal L2 Self and the Ought-to L2 Self may both be important for Japanese EFL learners. Moreover, it was suggested that subtypes of extrinsic motivation were related to both L2 Selves. Varieties of classroom practices to encourage more self-determined form of motivation may be effective. Thus, instructional interventions that can maintain a balance among these variables may be effective in the classroom, in order to foster EFL learners’ motivated behavior. For example, Tanaka (2005) reported that his group presentation
activity was effective not only for Intrinsic Motivation but also for Extrinsic Motivation, especially, Identified Regulation. Thus, classroom practices that are designed to satisfy learners’ sense of autonomy, competence and relatedness may be functional for developing L2 Selves. According to the results of the current study, it can be implied that Identified Regulation is very important for college EFL students who more or less possess personal future goals. Thus, the learners need to be provided with a good L2 learning experience through effective classroom experiences, so that they would think that English may be helpful for their future development. In this way, they may also possess L2 Selves that lead them to motivated learning. Additionally, providing only interesting and enjoyable L2 tasks may not always be enough for EFL learners; sometimes giving pressures or externally imposed goals may be needed in order for L2 Selves to push learners forward.

References


