

The Effects of Educational Intervention on L2 Learners' Motivational Development

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Abstract

This study investigated whether or not it was possible to motivate L2 learners by introducing an educational intervention based on the theoretical perspective of *Self-Determination Theory* (SDT). SDT postulates three psychological needs that enhance human motivation, namely, the need for autonomy, the need for competence, and the need for relatedness. English learning activities that had the potential to stimulate the three needs simultaneously were designed and given to 100 first-year university students for a period of 12 weeks. Prior to the beginning of the intervention, students were given questionnaires about several types of motivation toward English learning and the three psychological needs. The same questionnaires were administered at the end of the intervention. Changes in scores, i.e., the difference between pre-test and post-test scores, served as the measures of development in learners' motivation. In addition, to investigate in detail the manner in which the three psychological needs act in terms of enhancing motivation among learners, a survey using an open-response format was also administered after the intervention.

The results showed that the educational intervention had a significant positive effect on learners' motivation toward English learning. Furthermore, more detailed analysis focusing on individual differences revealed that the facilitating role of the three psychological needs varied according to learners' motivational profiles. In short, less motivated learners seemed to benefit the most from satisfaction of the need for competence and relatedness, whereas learners with a higher level of motivation required the need for autonomy for their motivational development. This suggests that educators who intend to enhance learners' motivation should differentiate their teaching strategies depending on the motivational profiles of learners.

Background of This Study

Although motivation in the area of L2 studies has attracted the interest of many researchers (for reviews, see Dörnyei, 2001, 2005), there have been very few studies conducted regarding factors involved in bringing about motivation, or in other words, factors that enhance motivation. With respect to this point, Oxford and Shearin (1994) have asserted that determination of the source of motivation is extremely important for educators desiring to enhance motivation among L2 learners, and that it is impossible to develop that source of motivation without determining its nature.

Among numerous theories proposed during the course of research in the field of psychology, *Self-Determination Theory* (SDT; Deci & Ryan, 1985, 2002) serves as a

reference when examining the relationship with motivating factors in particular. SDT focuses on the source of human motivation, and deals with the issue of the manner in which the inclination or physiological/psychological needs toward growth innately possessed by human beings evolve or attenuate while interacting with surrounding sociocultural factors. This theory assumes the existence of three psychological needs as prerequisites for enhancing human motivation. These include: (1) the need for autonomy: the experience of choice in the initiation, maintenance, and regulation of activity and the experience of connectedness between one's actions and personal goals and values; (2) the need for competence: the need to experience oneself as capable of producing desired outcomes and avoiding negative outcomes; and (3) the need for relatedness: the need to feel securely connected to the social surround and the need to experience oneself as worthy and capable of love and respect. In this theory, it is hypothesized that if these psychological needs are met, intrinsic motivation will be enhanced, while, on the other hand, if they are not met, intrinsic motivation will be undermined.

Dörnyei (1998) suggests three advantages to using this theoretical framework in L2 motivation research: (1) its comprehensive nature allows for the inclusion of a large number of L2 learning motivation; (2) a continuum of motivation suggests the possibility of a development in motivation; and (3) the spectrum allows for a valid assessment of empirical evidence of L2 learner motivation using this framework as a reference point.

Noels and her colleagues conducted several empirical studies into the L2 applications of this theory (e.g., Noels, 2001; Noels, Clément, & Pelletier, 1999; Noels, Pelletier, Clément, & Vallerand, 2000). Their series of research demonstrated to a certain extent the significance and potential for invoking SDT in L2 motivation research. According to their studies, learners who have a high sense of competence with respect to learning an L2, or who are aware of being provided with a learning environment that allows them to determine their own course of study tend to be spontaneously motivated to learn. In other words, it is suggested that motivation for learning an L2 can be enhanced through promoting a sense of competence and self-determination (i.e., autonomy).

Although the studies conducted by Noels et al. offer various insights into L2 motivation from the SDT perspective, they also have at least three drawbacks or challenges. The first is that only factors relating to "self," such as a sense of competence and self-determination, are treated as factors used to define motivation. Motivation is something that is not formed only in the minds of learners, but rather is affected by numerous other factors such as other persons involved in learning and the context in which learners are placed (Ehrman, Leaver, & Oxford, 2003; Pintrich & Schunk, 2002). Thus, it is believed to be necessary in future research to assess motivation from a more comprehensive perspective that includes the effects of the presence of an educator, surrounding learners, and so forth.

The second drawback with the studies conducted by Noels et al. is that they are limited to discussions of the correlation between a sense of competence or self-determination and motivation. In other words, their studies are restricted to only a study of the relationship with these factors, and in that sense, cannot be considered to have left the bounds of

conventional descriptive research. In addition, the causal relationship between motivating factors and motivation, or to put it differently, whether or not motivation is really enhanced if a sense of competence and self-determination are satisfied, has not been established. Thus, it will be necessary to conduct follow-up studies regarding this point.

The third drawback is that discussions of the relationship between competence, self-determination, and motivation remain at the level of overall tendencies. Although it is important to determine the characteristics of the group of learners at hand, this by itself is inadequate for providing effective teaching. There are a diverse range of learners that cannot be determined based on an overall tendency alone. In the actual classroom setting, for example, there are some learners whose motivation may be high while learning outcomes are low, or conversely, other learners whose motivation may be low while learning outcomes are high. It is the very determination of the characteristics of these learners that makes it possible to provide effective learning support that is compatible with differences among individual learners. Thus, during the course of future research, it will be important to consider the research design while taking into consideration individual differences.

Objective of This Study

On the basis of the above, the specific objective of this study is to clarify the following point as the theoretical basis of SDT: *To investigate whether or not it is possible to enhance motivation among L2 learners by introducing an educational intervention that has the potential to stimulate these three psychological needs of SDT.*

In this study, in addition to factors of autonomy and competence relating to “self,” the role of the relationship of the involvement with “others” (i.e., relatedness) will also be incorporated into the scope of the study. Then, English learning activities will be conducted that can stimulate these three motivating factors to assess the effects on enhancing motivation through a longitudinal survey. The results will be analyzed from the perspective of individual differences in order to uncover the learners’ motivational profiles and their relationships with the effects of educational intervention.

Method

Participants

The participants were 100 Japanese first-year university students (46 male and 54 female) enrolled in a required English language course. The central goal of this course was to refine their writing skills.

Survey Instruments

Two questionnaire scales were used for the purpose of this study. They were originally developed in the author’s previous studies and had been validated for their psychometric properties (Hiromori, 2004a, 2004b, 2005). A description of the instruments along with Cronbach alphas follows.

Psychological Needs Scale for English Learning.

Psychological Needs Scale for English Learning is a self-report questionnaire that assesses learner's perceptions of the psychological needs in English learning. The scale contains three subscales (the need for autonomy, the need for competence, and the need for relatedness), resulting in 12 items as a total (i.e., four items for each subscale). The need for autonomy is assessed by learner's perceptions to have a say over their behavior. Sample items include "I am free to express my ideas and opinions on English learning" and "My feelings are taken into consideration at English classes," that represent the need toward decisive atmosphere. The need for competence is measured by learner's feeling to be competent about English learning. Sample items include "I feel a sense of accomplishment from learning English" and "I do not feel very competent when I study English" (reversed item). Finally, the need for relatedness is assessed by learner's perceptions to be connected to peers at a class. Sample items are "I get along with my friends during an English class" and "I work hand-in-hand with my friends on a group activity." All of these items are rated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach alpha indexes of internal consistency in each subscale ranged from .84 to .89.

English Learning Motivation Scale.

In order to assess learner's motivation for English learning, a scale was developed to assess his/her intrinsic motivation, three types of extrinsic motivation (i.e., identified regulation, introjected regulation, and external regulation), and amotivation. According to Ryan and Deci (2002), various types of these motivated behaviors can be ordered along a self-determination continuum (see Figure 1).

Type of Motivation	Amotivation	Extrinsic Motivation			Intrinsic Motivation
Type of Regulation	Non-regulation	External Regulation	Introjected Regulation	Identified Regulation	Intrinsic Regulation
Quality of Behavior	Non Self-determined				Self-determined

Figure 1. The self-determination continuum (Ryan & Deci, 2002: 16; slightly modified by the author)

From lower to higher levels of self-determination, they are amotivation (the state of lacking the intention to act), external regulation (the less autonomous form of extrinsic motivation, including the classic instance of being motivated to obtain rewards or avoid punishments), introjected regulation (a type of extrinsic motivation that, having been partially internalized, is within the person but is not considered part of the integrated self), identified regulation (the more autonomous form of extrinsic motivation, involving a conscious valuing of a behavioral goal or regulation, an acceptance of the behavior as personally important), and intrinsic motivation (behaviors performed out of interest and

enjoyment).

Items of each subscale include four items to assess amotivation (e.g., “I truly have the impression of wasting my time in studying English” and “I cannot come to understand what I am doing studying English”), three items to assess external regulation (e.g., “Because that’s the rule” and “Because I want to get a good grade”), three items to assess introjected regulation (e.g., “Because I would feel bad about myself if I didn’t” and “Because I would feel comfortable if I could converse in English”), four items to assess identified regulation (e.g., “Because I think it is good for my personal development” and “Because I choose to be the kind of person who can speak more than one language”), and four items to assess intrinsic motivation (e.g., “Because studying English is fun” and “Because I get the satisfied feeling when I find out new things”), resulting in 18 items as a total. Just like the case of the Psychological Needs Scale for English Learning, all of these items are rated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach alpha indexes of internal consistency in each subscale ranged from .73 to .89.

Educational Intervention

English learning activities were conducted for a period of 12 weeks from October to December 2004 with the aim of assessing their effects on L2 learners’ motivational development. To be more specific, educational intervention that would stimulate the three psychological needs of SDT was introduced in writing classes. The author decided to use “creative writing activities with a student self-monitoring technique” for this purpose because such activities had the potential to stimulate the three psychological needs simultaneously.

In these activities, students annotate their drafts with comments or queries on their problem areas in Japanese (i.e., their L1), before handing their drafts in to the teacher. The teacher responds in writing to these annotations, thus giving direct and appropriate feedback on the points raised by the students. The use of this self-monitoring technique facilitates the teacher’s understanding of the writer’s problems and intentions, and allows students more control over the feedback they receive.

Table 1 shows the time schedule for writing activities. A sample writing task (WT) sheet that was used in these activities is provided in the Appendix.

Table 1. Time schedule for writing activities

	In-class Activities	Assignments
1st class	Writing Task (1)	
2nd class	Teacher feedback on WT (1)	Try Again (Re-submittal if needed), WT (2)
3rd class	Peer review	Making comments on classmate’s WT (2)
4th class	Teacher feedback on WT (2)	Try Again (Re-submittal if needed)
5th class	(Finding a topic sentence and supporting ideas)	WT (3): Summarization (Group work)
6th class	Teacher feedback on WT (3)	Try Again (Re-submittal if needed)
7th to 12th class	(Almost the same as 1st to 6th class)	

In each WT, students were instructed to write an English essay based on relatively unrestricted and open topics (e.g., “What do you want to be in the (near) future? Why?” and “What if tomorrow’s classes are all canceled?”) using a certain number of words (e.g., 50 to 100 words). The teacher chose the topics with the intention of attracting students’ interest and satisfying their need for self-expression. Feedback on the English essay was given to individual students as well as to the whole class. Feedback to the individual students was focused on annotations students made to their essays. Using annotations made it possible for students to have an opportunity to express concerns about their essays, such as “Is my usage of this grammar and these words correct?” “Are there any better expressions?” and “My dictionary says this, but why is that?” Giving appropriate feedback on these annotations had the potential to satisfy their sense of accomplishment regarding the WT. In addition, for students who seemed to be less able at English, feedback was given not only on grammar and usage but also on the content itself to maintain their motivation to learn English.

In the 3rd and 9th classes, students were asked to conduct peer reviews in which they read drafts of their fellow students’ essays (i.e., WT (2), WT (4)) in order to make suggestions for revision. This technique fostered the idea that writing is a process of communicating to an authentic audience. Furthermore, students studied the concept of “topic sentence” and “supporting ideas” in the 5th class, and “paragraph writing” in the 11th class. Then, for group assignments, they were instructed to write a summary in English, of a certain length, using the idea of “topic sentence” for the 5th class assignment, and to write essays that stated their opinions about social problems using the idea of “paragraph writing” for the 11th class assignment. These peer reviews and group work were intended to nurture their sense of acceptance from others.

In sum, the activities described above not only enabled teacher and students to engage in interactive writing activities, but also had the potential to: (1) provide students with wide range of choices and responsibilities (that could fulfill their need for autonomy); (2) give students constructive and informative feedback (that could fulfill their need for competence); and (3) offer students opportunities to collaborate with others through pair work and group work (that could fulfill their need for relatedness). Consequently, the activities were able to stimulate the three psychological needs simultaneously. Therefore, in this study, these activities were conducted over a fixed period of time and the effects on learners’ motivational development were investigated.

Analysis Procedures

To examine the effectiveness of educational intervention, two kinds of questionnaire scales (see *Survey Instruments*) that were administered before and after the intervention and a survey using an open-response format administered only after the intervention were used. The latter was implemented to comprehend learners’ reactions toward the intervention.

As for data analysis, cluster analysis was used to profile the learners based on their pre-test scores on the English Learning Motivation Scale. The Ward method with the

squared Euclidean distance technique was chosen for cluster analysis because this procedure tends to combine clusters with a small number of observations, and produce clusters with approximately the same number of observations (Hair & Black, 2000; Yamamori, Isoda, Hiromori, & Oxford, 2003). The number of meaningful clusters was decided by considering large changes in clustering distances and characteristics of the resulting clusters.

With the aid of the dendrogram (a graphic representation of the clustering process) obtained from the analysis, participants ($n = 100$) were categorized into four groups (see Figure 2 for the visual representation indicating the means of the motivational subscales in each group). The groups were named after their characteristics: the externally-motivated group ($n = 17$), the intrinsically-motivated group ($n = 32$), the unmotivated group ($n = 13$), and the internal-pressure group ($n = 38$). The last group (i.e., the internal-pressure group) could be described as feeling *internal* pressure to study English. This was different to the externally-motivated learners whose behaviors were supported by *external* pressure. To confirm the validity of the grouping, ANOVAs were conducted. Results indicated significant overall differences among the clusters (Intrinsic Motivation: $F(3, 96) = 39.81, p < .001$; Identified Regulation: $F(3, 96) = 18.89, p < .001$; Introjected Regulation: $F(3, 96) = 46.33, p < .001$; External Regulation: $F(3, 96) = 13.25, p < .001$; Amotivation: $F(3, 96) = 32.59, p < .001$).

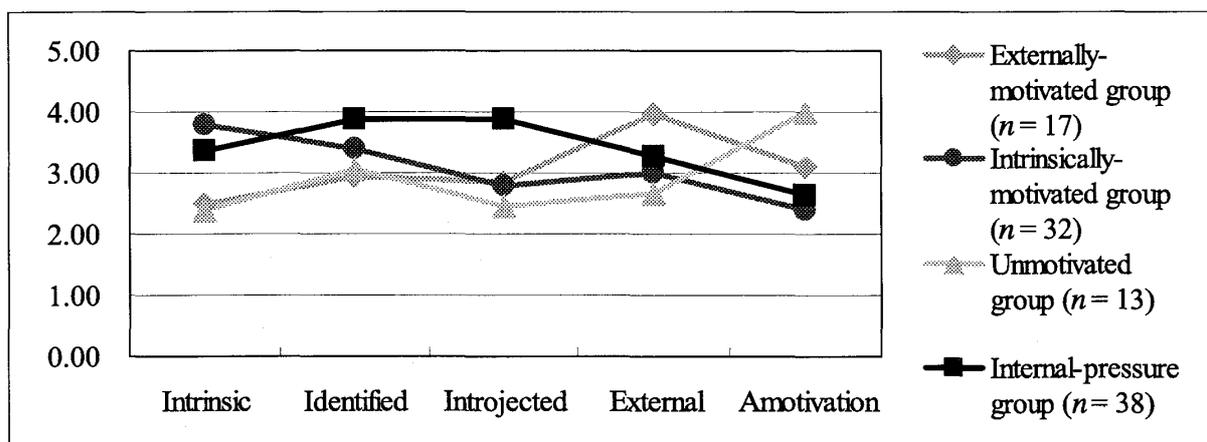


Figure 2. Visual representation of the motivational subscales in the four groups

In order to achieve the objective of this study, the following discussion will be focused on: (1) to examine whether educational intervention enhances learners' motivation in each group; (2) to examine which psychological need (the need for autonomy, the need for competence, or the need for relatedness) plays the most significant role in learners' motivational development; and (3) to examine in detail the effects of intervention through the results of a survey using an open-response format.

Results and Discussion

The aim of this study was to investigate the effects of educational intervention on L2 learners' motivational development. The main data collection methods were two questionnaire scales administered at the beginning of the intervention, and again at the end. The questionnaire data were supplemented by a survey using an open-response format.

The effects of educational intervention

Table 2 shows means and standard deviations of participants' pre-test, post-test, and changes on all variables of the two questionnaire scales. T-tests for dependent samples (paired-samples T-tests) were used to analyze changes between pre-test and post-test.

As for the three psychological needs (i.e., the left part of Table 2), the mean scores of autonomy and relatedness changed significantly among the four groups. In particular, through the implementation of educational intervention, the need for relatedness showed a significant change in the two less-motivated groups (the externally-motivated group: $M_{diff} = 1.44$; the unmotivated group: $M_{diff} = 1.11$). On the other hand, the mean score of competence remained at the same level except for the externally-motivated group. This indicates the possibility that rather than developing a sense of self-determination and sense of acceptance from others, time may be required for learners to take the initiative in engaging in learning activities with expectations of self-confidence and success.

When it comes to English learning motivation (i.e., the right part of Table 2), motivation was found to improve over the course of the intervention for all groups. For example, the unmotivated group whose motivation was the lowest among the groups before intervention showed a significant positive change concerning intrinsic motivation and introjected regulation, whereas it showed a significant negative change in amotivation (Intrinsic Motivation: $M_{diff} = 0.93$; Introjected Regulation: $M_{diff} = 0.79$; Amotivation: $M_{diff} = -1.50$). Furthermore, the intrinsically-motivated group whose motivation was the highest before intervention maintained more self-determined forms of motivation at the high level. This suggests that, through educational intervention, learners who exhibited an adverse reaction to learning English underwent a change to being motivated with a higher sense of self-determination, and learners who enthusiastically engaged in learning on their own maintained and developed such an attitude.

These findings indicated that educational intervention had definite positive effects on L2 learners' motivational development. In other words, educational intervention that stimulates the three psychological needs of SDT has the potential to enhance L2 learners' motivation.

Table 2. Changes before and after educational intervention among the groups

		Autonomy	Competence	Relatedness	Intrinsic	Identified	Introjected	External	Amotivation
Externally-motivated group (<i>n</i> = 17)	Pre-test	2.44 (0.67)	2.47 (0.73)	2.49 (0.29)	2.47 (0.59)	2.93 (0.30)	2.86 (0.39)	3.96 (0.47)	3.10 (0.65)
	Post-test	3.40 (0.61)	3.13 (0.37)	3.93 (0.74)	3.46 (0.66)	4.31 (0.63)	3.37 (0.88)	3.25 (0.61)	2.44 (0.72)
	Change	0.96**	0.66**	1.44***	0.99***	1.38***	0.51*	-0.71**	-0.66**
Intrinsically-motivated group (<i>n</i> = 32)	Pre-test	2.87 (0.54)	3.32 (0.59)	3.34 (0.56)	3.80 (0.39)	3.38 (0.44)	2.78 (0.46)	2.99 (0.72)	2.38 (0.58)
	Post-test	3.27 (0.50)	3.50 (0.39)	3.87 (0.70)	3.75 (0.58)	4.31 (0.59)	3.14 (0.60)	2.55 (0.70)	2.15 (0.58)
	Change	0.40**	0.18	0.53***	-0.05	0.93***	0.36*	-0.44**	-0.23
Unmotivated group (<i>n</i> = 13)	Pre-test	2.27 (0.73)	2.81 (0.70)	2.27 (0.60)	2.38 (0.86)	3.06 (0.73)	2.44 (0.75)	2.67 (0.83)	4.00 (0.50)
	Post-test	2.92 (0.83)	2.92 (0.34)	3.38 (1.00)	3.31 (0.93)	3.50 (0.35)	3.23 (0.71)	2.54 (1.10)	2.50 (0.67)
	Change	0.65**	0.11	1.11***	0.93***	0.44	0.79**	-0.13	-1.50***
Internal-pressure group (<i>n</i> = 38)	Pre-test	2.97 (0.56)	3.40 (0.50)	3.25 (0.52)	3.36 (0.38)	3.88 (0.50)	3.89 (0.43)	3.27 (0.49)	2.64 (0.41)
	Post-test	3.34 (0.54)	3.43 (0.41)	3.88 (0.66)	3.70 (0.70)	4.57 (0.45)	3.79 (0.61)	3.13 (0.66)	2.41 (0.66)
	Change	0.37**	0.03	0.63***	0.34*	0.69***	-0.10	-0.14	-0.23

Note. Mean (Standard Deviation), * $p < .05$, ** $p < .01$, *** $p < .001$

Comparative importance of the three psychological needs

What types of psychological needs play an important role in enhancing L2 learners' motivation? In order to examine this question, correlation coefficients were calculated for each group between changes in the three psychological needs and changes in intrinsic motivation (the most self-determined form of motivation) before and after educational intervention (Table 3). As a result, it was considered possible to suggest a causal relationship between them to a certain extent.

Table 3. Correlation coefficients between changes in the three psychological needs and changes in intrinsic motivation for each group

	Change of Autonomy	Change of Competence	Change of Relatedness
Change of Intrinsic Motivation			
Externally-motivated group ($n = 17$)	.25	.23	-.13
Intrinsically-motivated group ($n = 32$)	.39*	-.07	-.40*
Unmotivated group ($n = 13$)	.08	.63*	.32
Internal-pressure group ($n = 38$)	.07	-.05	.27

* $p < .05$

As is clear from Table 3, the roles played and the importance of the three psychological needs differed according to differences in the learners' motivational profiles. For example, competence and relatedness demonstrated a relatively strong correlation with increased intrinsic motivation ($r = .63$ and $.32$, respectively) in the unmotivated group. When considering that competence beliefs did not exhibit significant changes before and after educational intervention, it can be said that learning support that gives learners a sense of competence in the form of "you can do it if you try" is particularly important for intrinsically motivating learners who have a low level of motivation.

On the other hand, a positive correlation between autonomy and intrinsic motivation ($r = .39$), and a negative correlation between relatedness and intrinsic motivation ($r = -.40$), were observed in the intrinsically-motivated group. This suggests that, for learners who have already developed a sufficient level of motivation, the responsibility towards their own learning process and the selection thereof can be more important than cooperative relationships with others.

On the basis of these findings, it is possible to conclude that the function of each psychological need that enhances intrinsic motivation may differ corresponding to the motivational characteristics of learners.

Analysis of a survey using an open-response format

To investigate in detail the manner in which the three psychological needs act in terms of enhancing motivation among learners, a survey using an open-response format was also administered after the intervention. The analysis of the learners' accounts involved chunking each statement into meaningful units, and then classifying them into a number of

distinctive categories. These procedures were performed by two Japanese EFL teachers who had received training in TESOL at postgraduate level. The results were discussed and adjusted when found necessary.

The following discussion deals with three issues, paying particular attention to the relationships between learners' motivational profiles and their accounts. First of all, the intrinsically-motivated group frequently made mention of a sense of fulfillment (e.g., "I think my writing ability has improved. I was glad that my concerns were resolved, thus helping me to acquire English" and "To make annotations and get feedback on them allowed me to resolve concerns about my essays and, consequently, learn new things"). Second, the unmotivated group tended to mention vague or general matters (e.g., "It was good for my practice of English composition," "I worked cooperatively with my friends," and "Of the types of English ability, I feel my practical ability has particularly improved"), whereas the intrinsically-motivated group gave accounts that demonstrated their active engagement in metacognitive knowledge and learning processes (e.g., "These activities were good for me because I could look for my weak points by myself, discovering where my problems were" and "I discovered one of my weak points in English composition"). In short, the latter group showed their ability to understand and regulate their own thinking and learning (i.e., to monitor a learning task while it is in progress and to evaluate learning once a task has been completed). Third, the two less-motivated groups (the externally-motivated group and the unmotivated group) made frequent reference to the need for relatedness (e.g., "Tackling an activity in groups enabled us to recognize that we had many different ideas to each other. I think that experience was quite stimulating" and "It was good to study cooperatively with other classmates because we could communicate directly with each other, which resulted in a better relationship).

As far as the third issue is concerned, unlike the less-motivated groups, the intrinsically-motivated group seemed to hesitate to collaborate with other learners. This might have been because their motivation had already developed enough, thus making them believe that they could take full charge of their own learning processes by themselves. In fact, their accounts included such as "I felt that it was easier for me to work on my own than in groups" and "I didn't think that mutual cooperation with others would help me improve or perform well in writing." Furthermore, as the relationships between changes in the three psychological needs and changes in intrinsic motivation showed (see Table 3), a negative correlation coefficient between relatedness and intrinsic motivation ($r = -.40$) was found in the intrinsically-motivated group. Therefore, along with the results of questionnaire surveys, this indicates the possibility that the need for relatedness can function negatively for highly-motivated learners as regards maintaining and developing such attributes further.

When reconsidering these results with respect to educational practices, they can be summarized in the following manner. A sense of competence about learning activities and interaction with others play important roles in terms of internalizing an awareness of the value of learning behavior. Consequently, for learners who are unable to find a positive value in learning English, satisfying the needs for competence and relatedness are

important in terms of enhancing motivation. In other words, in order to motivate these learners, it can be said that it is necessary to provide learning support that instills a sense of competence in the form of “you can learn English if you try,” as well as a sense of solidarity with educators and other learners. However, for learners who are already motivated and take the initiative in engaging in learning on their own, collaborative work with others is not always required, and in order to more effectively enhance such learners’ will to learn on their own, it is essential to satisfy their need for autonomy. To put it differently, in order to motivate these learners, it can be said to be important to motivate them so that they have an awareness of taking the initiative in engaging in learning English on their own.

Concluding Remarks

This study examined the role of the three psychological needs that enhance L2 learners’ motivation with reference to SDT. As a result, it was found that the three psychological needs play an important role in enhancing learners’ motivation, while it was also demonstrated that it is necessary to approach learners using methods that correspond to their level of motivation in order to support their motivational development. Although there has conventionally been a strong need for learning support that accommodates individual differences, this study provides a specific perspective in terms of providing effective guidance for that purpose. Moreover, the majority of L2 motivation research thus far has consisted of descriptive surveys. Under the present circumstances, since this study deployed educational intervention over a fixed period of time followed by verification of those effects, it is believed to be an important and significant attempt at elucidating the process and mechanism by which learner motivation develops and changes, and it is hoped that the study will be able to contribute to the construction of more refined *motivating* theory as well as *motivation* theory.

Notes

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Appendix

Writing Task (5)

ID: NAME:

<Today's Theme>

What's the most important thing for your life? Why? (around 100 words)

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<Questions with annotations>

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<What I wanted to say is.....>

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<Comments from your teacher / partner (Name:)>

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