Motivation in Foreign Language Learning :
In the Case of Japanese University Students

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Abstract　A questionnaire on motivation for learning English was administered with 77 Japanese university students in order to investigate the hypothesis that English learning in an EFL (English as a Foreign Language) setting is a complex construct, to investigate major components of motivation that Japanese university students have for studying English, and to examine the relationship between motivation and language proficiency, using TOEIC and final exam scores. Through principal components analysis, five motivational factors were found: Integrative-Oriented Motivation, Instrumental Motivation and Valency, Intrinsic and Overall Motivation Strength, Expectancy, and Language Aptitude. In addition, correlation coefficients among the five motivational factors, TOEIC scores, and final examination scores suggested that language aptitude was correlated with both test scores, and Expectancy and Language Aptitude were correlated with each other. Therefore, the results supported the hypothesis that English learning is a complex construct in an EFL setting, and revealed that the more expectancy of success and language aptitude the students associated with themselves, the higher test scores they gained.

Key words　a questionnaire on motivation, an EFL setting, principal components analysis, correlation coefficients

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日本人大学生の英語学習における動機付けについて（英文）

要旨　この研究の目的は，日本人大学生の英語学習に対する動機を調査分類することで動機の種類を把握すること，さらに調査分類された動機と TOEIC テストや定期試験の結果との関係を調べることで，動機の種類と英語能力の相関性を調べることであった。これらの目的を達成するため，77人の日本人大学生を対象に英語学習における動機付けに関するアンケートを行い，そのアンケート結果を因子分析し主な動機を5種類に分類した。さらに，動機と英語能力の関係を調べるため，5種類の動機と上記2種類のテスト結果を相関分析した。その結果，動機5種類のうちの一つである適性（Aptitude）が英語能力と相関関係にあること，また，適性（Aptitude）と学習成功の見込み（Expectancy）が相関関係にあることが分かった。これらの結果から，日本人大学生の英語学習における動機の多様さ，また，英語学習に対する適性や成功の見込みを高く自己評価する学生は，テストにおいて高得点を取る傾向が強いことなどが明らかになった。

キーワード　動機に関するアンケート，EFL，因子分析，相関分析
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1. Introduction

Most language teachers agree that motivation plays an important role in success in language learning, but it is almost impossible to have one theory explain all aspects of motivation. In other words, motivation is complex and context-specific, and therefore, the concept of motivation varies according to which context the research is focusing on. At the same time, it is still possible to conceptualize motivation broadly, in spite of its context-specific component.

The study of motivation in second language acquisition (SLA) became a major research area after Gardner and Lambert (1959, 1972) found that success in language attainment was dependent upon the learner's attitudes towards the target language community, and also towards potential pragmatic gains of the target language proficiency. This finding led them to conceptualize the former as integrative motivation, defined as the desire to acquire the language of a valued second language (L2) community in order to communicate with the group members, and the latter as instrumental motivation, defined as the desire to learn the target language for practical purposes such as getting a better job (Gardner & Lambert, 1972 ; Gardner, Smythe, Clement, & Gliksman, 1976).

Furthermore, Gardner (1985) and Gardner and MacIntyre (1993) defined integrative motivation as a construct made up of three main components: integrativeness, attitudes towards the learning situation, and motivation. Integrativeness refers to the learner's willingness and interest in social interaction with people of the target language culture, and attitudes towards the learning situation refer to attitudes towards the L2 teacher and the course. And these two components direct motivation, which refers to effort, desire, and affect towards learning the L2.

Moreover, Gardner and MacIntyre (1993) proposed a socio-educational model of SLA, which consists of four aspects of the SLA process. These four aspects of the SLA process are clearly separated into the following : (1) antecedent factors that can be biological or experiential such as gender or learning history ;

(2) individual difference variables ; (3) language acquisition contexts that can be formal or informal ; and (4) learning outcomes that can be linguistic or non-linguistic. Individual difference variables include intelligence, language aptitude, language learning strategies, language attitudes, motivation, and language anxiety, and these variables affect L2 attainment and outcomes.

Taking other possible kinds of L2 learning motivation and their importance into consideration (Oxford & Shearin, 1994), Trembly and Gardner (1995) expanded this socio-educational model of SLA by adding recent cognitive motivational theories such as expectancy-value theory or goal theory. As a result, the revised model of L2 motivation is a process that begins with language attitudes and moves to motivational behavior, and then results in achievement, with three variables existing between language attitudes and motivational behavior. In this model, language attitudes refer to the elements of integrative motivation mentioned earlier (Gardner, 1985 ; Gardner & MacIntyre, 1993), and instrumental orientation. The three variables that are produced by language attitudes and direct motivational behavior are goal salience (goal specificity and frequency of goal-setting strategies used), valence (desire and attitudes towards learning the L2), and self-efficacy (performance expectancy and L2 use/class anxiety). This revised model, therefore, demonstrates that additional cognitive variables can be incorporated into Gardner's previous socio-educational model of SLA (Dörnyei, 2001). In Masgoret and Gardner's (2003) study with 10489 Canadian and non-Canadian individuals in ESL and EFL settings, they reported the correlations between achievement and motivation were higher than achievement and other elements in this revised socio-educational model. They also stated that the correlations between achievement and the learning environment, and between achievement and age or language availability (ESL or EFL) were not significant.

Many studies supported the fact that integrative motivation played an important role in L2 learning regardless of the nature of the learning context (Dörnyei, 2001). For example, Dornyei and Clement (2000) found that integrative motivation was the most powerful motivational component for the

students in Hungary to exert efforts towards learning a foreign language (Dörnyei, 2001).

However, other studies (Au, 1988 ; Crookes & Schmidt, 1991 ; Dörnyei, 1990 ; Ely, 1986) did not support the idea of integrative motivation being the most powerful motivational component in language learning, especially in English as a Foreign Language (EFL) contexts, where learners have limited contact with the target language community. Littlewood (1984) mentioned that in EFL contexts, learners tend not to have much experience of the target language community in order to form concrete attitudes for or against the community, and therefore, their purpose of learning the language is not generally to integrate into the community. Dörnyei (1990) stated that integrative motivation might be less relevant for foreign language learners than for second language learners, because foreign language learners rarely have sufficient experience with the target language community compared with second language learners who learn the target language in a location where the language is used as a dominant language in everyday communication. Chen, Warden, and Chang's (2005) study of English learning motivation constructs with 567 respondents in Taiwan concluded that integrativeness was not a significant factor in motivating language learning efforts in Chinese cultural environment, but the required motivation played a significant role in motivating language learning efforts.

Intrinsic and extrinsic motivation are well-known distinctions in motivation theories. The former deals with motivational behavior performed in order to experience pleasure and satisfaction such as fulfilling one's curiosity. The latter deals with motivational behavior performed in order to gain extrinsic rewards such as good grades or to avoid punishment (Dörnyei, 2001).

From a perspective of motivational psychology, however, Deci and Ryan(1985) did not see intrinsic and extrinsic motivation as opposing components, but saw them on a continuum between self-determined (intrinsic) and controlled (extrinsic) forms of motivation. Deci and Ryan (1985) called their theory self-determination theory, and also mentioned that people would be more self-determined in performing an activity when they had more autonomy, competence,

and relatedness. Autonomy here refers to one's own choice of behavior. Competence refers to self-rated abilities to accomplish behavior, and relatedness refers to the feeling connected to other individuals (Dörnyei, 2001). Deci and Ryan's (1985) theory of intrinsic/extrinsic motivation and self-determination theory have influenced L2 research, and some studies have concluded that L2 motivation and learner autonomy were closely related and this combination of motivation and autonomy was effective in language learning (Dickinson, 1995).

In motivational psychology, Atkinson's (1974) achievement theory was the first model of achievement motivation and his theory was established within an expectancy-value framework because he considered achievement behaviors to be determined by expectancy of success and incentive values. He also added two other components in his theory : need for achievement and fear of failure. The former refers to the notion that people with a great need for achievement are intrinsically interested in achieving tasks. The latter refers to the opposite idea of need for achievement since the main purpose of achieving tasks here comes from avoiding negative outcomes.

Atkinson's achievement theory has influenced L2 motivation research, and components related to the expectancy-value framework, i.e., expectancy-value theory, have been woven into various L2 research areas (Dörnyei, 2001). For instance, in expectancy-value theory in SLA, motivation to perform activities is produced through two key factors : expectancy of success, and the value of outcomes. Therefore, expectancy-value theory claims that the greater expectancy for success and the greater value the individual associates with success in the task, the higher the degree of the individual's positive motivation becomes (Dörnyei, 2001). Factors that determine the expectancy of success include past experiences (attribution theory), self-rated abilities (self-efficacy theory), and maintenance of self-esteem (self-worth theory proposed by Covington (1992)) (Dörnyei, 2001). According to Eccles and Wigfield (1995), the value of outcomes is determined by the following four components : attainment value, intrinsic value, extrinsic utility value, and cost. Attainment value refers to the individual's perception of importance of success in a task. Intrinsic value refers

to interest or enjoyment the individual experiences through a task while extrinsic utility value refers to the usefulness of the task for present and future purposes. Cost refers to perceived negative aspects of performing a task, and includes expended effort and time, and emotional expenditures such as anxiety or fear of failure (Dörnyei, 2001).

Though language learning motivation is multidimensional and complex, Dörnyei (1998, 2001) attempted to generalize dimensions that comprise the motivational components of L2 learners. Consequently, he found seven broad dimensions as follows: (1) the affective/ integrative dimension (a general affective aspect of the L2 motivation variables such as integrative motivation and intrinsic motivation); (2) the instrumental/ pragmatic dimension (extrinsic factors); (3) the macrocontext-related dimension (broad socio-cultural factors such as multicultural and intergroup relations); (4) the self-concept-related dimension (learner-specific variables such as self-confidence and anxiety); (5) the goal-related dimension (various goal characteristics); (6) the educational context-related dimension (evaluation of the immediate learning environment such as classroom or school); and (7) the significant others-related dimension (influence of parents, family, and friends). Moreover, Dörnyei (2005) proposed the L2 Motivational Self System, which refers to the importance of L2 motivation as a way to fulfill discrepancies between the learner's actual self and his or her ideal and 'ought-to' L2 selves. In Csizer and Dörnyei's (2005a) study with 8593 13- and 14-year-old Hungarian students learning various foreign languages, they found that most motivated learners were the ones who had successfully developed ideal L2 selves, which was also related to their greater interests in foreign language. Csizer and Dörnyei (2005b) further stated that integrativeness was a key factor to achieve ideal L2 selves.

Considering these theories and findings that suggest the complexity of L2 motivation, this study attempts to investigate what comprises foreign language learning motivation in EFL settings. This study is designed for an EFL context, using integrative-instrumental theories, intrinsic-extrinsic theories, self-determination theory, and expectancy-value theory. It is hypothesized that

foreign language learning will be a complex and context-specific construct. Therefore, the research questions for the present study are : (1) What are the major components of motivation present that result in Japanese university students having the desire to study English in an EFL setting ? ; and (2) What is the relationship between motivation and language proficiency ?

2. Method

2.1. Participants

I investigated 77 first-year university students of three English classes taught by the author at Kinki University in Osaka, Japan. They were 62 male and 15 female students majoring in economics. This English class, English 2, is required for all first-year students, and the students are divided according to their English proficiency levels measured by a placement test students take before the class starts. The placement test, a multiple choice written test, consists of short conversations, grammar questions, vocabulary questions, and short reading passages. Each class has 25 to 35 students, and the class meets twice a week for 90 minutes each. The purpose of this English class is to develop overall English communication skills mainly including three skills : listening, speaking, and reading skills. Therefore, the students learn basic skills such as grammar and vocabulary, oral communication skills, and reading skills. In addition, the course prepares the students for the TOEIC Test (Test of English for International Communication). First-year students also have to take a class, Oral English 2, taught by a native speaker of English, and that class, also divided according to the same levels as English 2, meets once a week for 90 minutes. In Oral English 2, students learn conversation skills on daily life topics.

The three classes in this study were of better-than-average students in the Department of Economics, and their average TOEIC score was 438 whereas the average score of all first-year students of the same department was 351. Even though their level was better than the average students in the Department of Economics, their English proficiency was only around low-intermediate to

intermediate as their TOEIC scores show.

2.2. Materials

At the end of the fall semester 2005, a 47-item, seven-point Likert scale questionnaire was administered in Japanese as a means of investigating students' motivation in learning English (see appendix A for the original questionnaire in Japanese, and Appendix B for its English translation).　The internal consistency estimate of reliability for the questionnaire was calculated, and Cronbach's Alpha (α) was .81.

Most of the questionnaire items were taken or revised from Schmidt and Watanabe's (2001) questionnaire items because their items were intended to measure motivation, strategy use, and pedagogical preferences in foreign language learning, and the author thought these items on motivation were relevant to the students in her study.　In addition, some items were created so that the questionnaire would better fit the participants and the context in this study.

The 47 questionnaire items were mainly based on three major motivation theories : intrinsic and extrinsic motivation, integrative and instrumental motivation, and expectancy-value theory. The questionnaire had nine subsections as follows : (1) intrinsic motivation (6 items) ; (2) extrinsic motivation (2 items) ; (3) instrumental motivation (7 items) ; (4) integrative motivation (4 items) ; (5) valency (4 items) ; (6) expectancy (6 items) ; (7) anxiety (5 items); (8) language aptitude (8 items) ; and (9) motivation strength (5 items). The participants answered each question on a seven-point Likert scale from "Strongly disagree" to "Strongly agree."

In addition to the questionnaire, language proficiency was assessed in terms of the student's TOEIC score, which was administered December 18, 2005 and counted for 20% of the whole English 2 course grade, and the student's grade, which itself was based on a composite of three assessments made throughout the fall semester, 2005.　These assessments, along with their percentage contribution to the final grade, were as follows : (1) final exam (40%), which assessed students'

achievement based on the course material covered over the fall term which mainly included reading comprehension questions ; (2) speech activity (20%), which assessed students' two prepared speeches based on content, delivery, and preparation evaluated by the instructor ; (3) grammar quizzes (20%), which were administered once a week and questions were taken from a grammar textbook used in the class. Therefore, the final English 2 course grade (100%) was calculated based on these three elements of the course grade (80%) and the TOEIC score (20%) mentioned above.

2.3. Procedures

The administration of the questionnaire took place during the fall term of the 2005-2006 academic year. The participants were notified of the fact that the questionnaire was purely for research purposes and their answers would not be reflected in their grades for the course.

The data were processed using the Statistical Package for the Social Sciences (SPSS) 14.0 (2005). In order to determine the interrelationship among items in the questionnaire, a principal components analysis with Varimax rotation was performed. The numbers of factors to be extracted was first based on the following two criteria: minimum eigenvalues of 1.0, and factor loadings of .32 and above (Tabachnick & Fidell, 1996). Then, due to the fact that these two criteria did not yield clear factors, the following new criteria were employed : minimum eigenvalues of 2.0, and factor loadings of .40 and above. Any items which did not load on any factor at >.40 or which loaded on more than two factors were eliminated (items 5, 7, 24, 25, 30, 32, 33, 36, 38, 39, and 40) from the further analysis, and five factors were found that were relevant to many of the other 36 items. Next, a principal components analysis with Direct Oblimin using the same new criteria was performed in order to compare the results with the ones with Varimax rotation. The results using Direct Oblimin showed that none of the five factors correlated with each other at a statistically significant level ($r > .30$), and therefore, Varimax rotation was chosen for further analysis in this study.

The internal consistency estimate of reliability for the questionnaire with 36

items was calculated, and α was .82. After Varimax rotation using the new criteria, a 5-factor solution was chosen, which accounted for 57.24% of the total variance in learning English motivation. Then, reliability of the items in each factor was tested and the results showed adequate reliability ($\alpha < .60$) for each factor : $\alpha = .74$ for factor 1 (11 items), $\alpha = .83$ for factor 2 (9 items), $\alpha = .84$ for factor 3 (7 items), $\alpha = .89$ for factor 4 (4 items), and $\alpha = .77$ for factor 5 (5 items).

Following the results of the principal components analysis, correlation coefficients were computed among the five factors, TOEIC scores, and the final examination scores in order to check the relationship between motivational factors and the students' English proficiency.

3. Results and Discussion

3.1. Motivation Questionnaire

Table 1 shows five factors found in the study and which items loaded on which factors along with each item's communality. Means and standard deviation can also be found in this table. Factor 1 obtained high loadings from 11 items. Those include items that were expected to split into four components, but, in fact, loaded together on this factor : intrinsic motivation (3), instrumental motivation (12, 13, 14, 15), integrative motivation (16, 17, 18, 19), and anxiety (31, 34). A close examination of the items reveal that the items of intrinsic motivation and instrumental motivation are related to a broad sense of integrative motivation, the desire to acquire the language of a valued L2 community in order to communicate with the group members. The negative loadings of the items of anxiety also indicate the students' positive attitudes towards communicating in English, which supports the integrative aspect of this factor. Thus, Factor 1 is best defined as Integrative-Oriented Motivation.

One item of intrinsic motivation and extrinsic motivation, three items of instrumental motivation, and four items of valency loaded on Factor 2. Close examination of the items reveals that the items on this factor are all related to

instrumental orientation, the desire to learn the target language for practical purposes, or the value of learning outcomes. Therefore, Factor 2 was named Instrumental Motivation and Valency.

Factor 3 obtained high loadings from seven items, three from intrinsic motivation and four from motivational strength, and it seems obvious that intrinsic motivation and motivational strength are positively related with each other. In other words, it seems natural that students with more intrinsic motivation, the desire to experience pleasure and satisfaction through language learning, tend to have stronger motivation, or students with stronger motivation tend to have more intrinsic motivation. Therefore, Factor 3 was defined as Intrinsic and Overall Motivational Strength.

All four items originally grouped under the heading of expectancy, i.e., expectancy of success, loaded on Factor 4. Thus, Factor 4 was labeled Expectancy. All five items originally grouped under the heading of language aptitude loaded on Factor 5. Thus, Factor 5 was labeled Language Aptitude.

By examining these five factors closely, it seems that the students with more language aptitude and expectancy of success in these English classes tended to have stronger motivation in terms of integrative, instrumental, and intrinsic motivation. This result corresponds with the fact that the students in these English classes were better-than-average students in the department and they tended to have more confidence in their English proficiency, which may have helped them become more motivated to study English than the students in lower level classes.

Table 1 (original by the author)

Means, Standard Deviation, Rotated Factor Loadings, and Communalities for Motivation Questionnaire Items

| Item | M | SD | Factor loadings | | | | | h^2 |
			1	2	3	4	5	
3. I want to use English outside of class whenever I have a chance.	5.01	1.46	.68	.02	.39	.02	.01	.62
12. I am learning English because I would like to understand movies or music in English.	5.12	1.57	.64	.07	.11	.03	−.07	.43

		Mean	SD	F1	F2	F3	F4	F5	h²
13.	I am studying English because I would like to live abroad in the future.	2.65	1.68	**.71**	.10	−.18	−.07	.23	.61
14.	I would like to use the English I studied when I travel overseas.	5.45	1.38	**.68**	−.37	.14	.17	−.02	.51
15.	By studying English, I hope I will be able to read English novels, newspapers, or magazines.	4.73	1.78	**.72**	.05	.23	.01	−.11	.59
16.	Studying English is important because it will allow me to interact with people who speak it.	5.04	1.60	**.82**	.08	.11	.18	.04	.72
17.	I am learning English to be able to make friends who speak it.	4.96	1.62	**.81**	.05	.00	.18	−.03	.70
18.	I want to be more a part of the cultural group that speaks English.	4.09	1.62	**.73**	.14	−.12	.12	.13	.60
19.	Studying English is important because it will enable me to better understand the lifestyles and culture of people who speak it.	4.26	1.50	**.61**	.15	−.25	.27	−.00	.54
31.	It embarrasses me to volunteer answers in this English class.	3.86	1.80	**−.64**	.13	−.35	−.13	−.03	.56
34.	I would feel uncomfortable speaking English under any circumstances.	3.45	1.72	**−.53**	.23	−.24	−.27	−.13	.48
6.	Studying English is important because it helps me become a more intellectual person.	4.23	1.59	−.10	**.60**	.24	−.09	−.03	.44
8.	I am studying English mainly because I would like to get good grades.	3.30	1.43	−.31	**.43**	−.14	−.09	.29	.40
9.	Being able to speak English will help me get a good job.	5.52	1.34	.05	**.76**	−.08	−.16	.05	.61
10.	Studying English is important because it will give me an edge in competing with others.	5.01	1.57	.09	**.55**	.09	−.18	.08	.35
11.	Studying English is important because it will make me more educated.	4.78	1.38	−.08	**.60**	.17	.13	.03	.42
20.	I think improving TOEIC skills and scores is important.	5.75	1.40	.10	**.75**	.09	.15	−.16	.63
21.	I think improving reading strategies is important.	5.92	1.09	.16	**.76**	.12	.08	−.21	.66
22.	I think improving grammar skills is important.	5.51	1.42	−.00	**.76**	.01	.20	−.22	.67
23.	I think improving presentation skills is important.	6.04	1.04	.35	**.65**	.16	−.07	.00	.57
1.	I enjoy learning English.	4.31	1.30	.33	.20	**.61**	.03	.25	.60
2.	This English class is a challenge that I enjoy.	4.73	1.28	.21	.06	**.70**	−.05	.13	.55
4.	I would take this class even if it were not required.	4.48	1.56	.18	.34	**.62**	−.01	.04	.52

	Mean	SD	F1	F2	F3	F4	F5	h^2
44. When I have a problem understanding something I am learning in this English class, I always ask the instructor for help.	4.05	1.48	.16	.05	**.69**	.20	−1.7	.57
45. Even when course work is difficult, I never give up.	4.64	1.48	.05	−.11	**.76**	.07	.14	.61
46. I can truly say that I put my best effort into learning English.	3.48	1.37	−.12	.16	**.61**	.11	.08	.44
47. I plan to learn as much English as possible.	4.69	1.52	.01	.20	**.71**	−.00	.06	.55
26. I think I have the ability to improve TOEIC skills and scores in this class.	4.44	1.45	.29	.02	.02	**.83**	.08	.78
27. I think I have the ability to improve reading strategies in this class.	4.45	1.35	.18	.01	.05	**.82**	.23	.76
28. I think I have the ability to improve grammar skills in this class.	4.44	1.41	−.05	.09	.06	**.82**	.17	.72
29. I think I have the ability to improve presentation skills in this class.	3.95	1.45	.28	.07	.15	**.80**	.03	.74
35. I am good at listening in English.	2.91	1.53	.37	−.29	−.15	.03	**.52**	.52
37. I am good at reading in English.	3.56	1.53	.23	−.09	.12	.32	**.61**	.56
40. My grades for English classes at junior and senior high schools were good.	4.48	1.85	−.19	.02	.18	.08	**.78**	.69
41. I liked English classes at junior and senior high schools.	3.81	1.79	−.05	.02	.29	.06	**.74**	.64
42. In general, I am an exceptionally good language learner.	3.49	1.64	.01	−.07	−.01	.31	**.71**	.60
% of variance			16.99	11.96	10.98	9.45	7.86	

Note. Boldface indicates highest factor loadings. Factor 1 = Integrative-Oriented Motivation ; Factor 2 = Instrumental Motivation and Valency ; Factor 3 = Intrinsic and Overall Motivational Strength ; Factor 4 = Expectancy ; Factor 5 = Language Aptitude ; h^2 = communality.

3.2. TOEIC Scores and Final Exam

Correlation coefficients were computed among the five factors, TOEIC scores, and the final examination scores in order to examine the relationship between motivation and English proficiency (see Table 2). Using the Bonferroni approach to control for Type I error across the seven correlations, a *p* value of less than .007 (.05/7 = .007) was required for significance.

The results reveal that TOEIC scores and the final examination scores are highly correlated ($r(75) = .50$, $p = .000$), which indicates that the students who gained higher scores on the TOEIC test tended to gain higher scores on the final exam as well. Factor 4 (Expectancy) and 5 (Language Aptitude) are correlated

($r(75)=.35$, $p=.002$), which suggests that the students who rated their English proficiency higher tended to expect more success in class. Regarding the relationship between the five motivational factors and English proficiency, only Factor 5 (Language Aptitude) is significantly correlated with both TOEIC scores ($r(75)=.48$, $p=.000$) and the final examination scores ($r(75)=.37$, $p=.001$). This suggests that the students who rated their English proficiency higher tended to score higher both on the TOEIC test and the final examination in this study.

Table 2 (original by the author)

Means, Standard Deviations, and Intercorrelations for Two Tests and Five Factors

		M	SD	1	2	3	4	5	6	7
1.	TOEIC	435.18	67.34	—						
2.	Final Exam.	74.19	12.55	.49*	—					
3.	Factor 1	48.06	9.43	−.06	−.08	—				
4.	Factor 2	46.06	8.09	−.14	−.11	.15	—			
5.	Factor 3	30.38	7.12	.14	.15	.19	.27	—		
6.	Factor 4	17.29	4.90	.23	.26	.26	.05	.20	—	
7.	Factor 5	18.25	6.04	.48*	.37*	.04	−.13	.21	.35*	—

*$p<.007$

4. Conclusion

This study drew upon the motivational theories derived from integrative-instrumental theory, intrinsic-extrinsic theory, self-determination theory, and expectancy-value theory, and most of the questionnaire items were taken or revised from Schmidt and Watanabe's (2001) questionnaire items in addition to some items created by the author in order to make the questionnaire better fit the participants (Japanese university students) and the context (EFL) in this study. In addition, TOEIC scores and final examination scores were used in order to examine the relationship between motivational factors and English proficiency. Therefore, the present study was designed and carried out in order to investigate the hypothesis that English learning in an EFL setting is a complex and context-specific construct, to investigate major components of motivation that result in Japanese university students having the desire to study English in an

EFL setting, and to examine the relationship between motivation and language proficiency.

Through principal components analysis, five motivational factors were found: Integrative-Oriented Motivation (Factor 1), Instrumental Motivation and Valency (Factor 2), Intrinsic and Overall Motivational Strength (Factor 3), Expectancy (Factor 4), and Language Aptitude (Factor 5). The majority of the items were expected to cluster into nine aspects of motivational aspects derived from the motivational theories mentioned before. However, four items in instrumental motivation, four items in integrative motivation, and two items in anxiety loaded on Factor 1, and closer examination revealed that the items on Factor 1 were related to integrative motivation, which measures the desire to integrate into an L2 community. Therefore, Factor 1 was defined as Integrative-Oriented Motivation. Four items in valency and three items in instrumental motivation loaded on Factor 2 and this factor was labeled Instrumental Motivation and Valency. Four items in motivational strength and three items in intrinsic motivation loaded on Factor 3, which suggested that the students with more motivation tended to have more intrinsic motivation towards learning English. Factors 4 and 5 gained high loadings from a single construct originally designed for this study.

Correlation coefficients among the five motivational factors, TOEIC scores, and final examination scores were computed in order to investigate the relationship between motivational factors and English proficiency. The results suggested that only language aptitude (Factor 5) was correlated with both TOEIC scores and final examination scores at a statistically significant level ($p < .007$). This result seemed logical because it is natural that students who rated their English skills higher tended to score higher in both tests. Moreover, Factor 4 (Expectancy) and 5 (Language Aptitude) were correlated at a statistically significant level ($r(75) = .35$, $p = .002$). This result also seemed logical because students who rated their English abilities higher tended to be more confident in success in class. In conclusion, intercorrelations among Factor 5 and the two tests, and between Factor 4 and 5 suggested that the students in this study who

thought they had high English proficiency and expected to succeed in class tended to gain higher test scores.

The results of the analyses of the questionnaire on motivation, TOEIC scores, and final examination scores support the hypothesis that learning English is complex and context-specific because the analyses revealed various constructs of motivation existed among the students. Therefore, according to this study, the major components of motivation that lead Japanese university students to study English seem to be multidimensional (e.g., integrative, instrumental, intrinsic, motivational strength, expectancy, and language aptitude).

The results of this study showing integrative motivation as an important construct of the students' motivation correspond to findings of some motivational studies (e.g., Gardner & Lambert, 1959, 1972 ; Csizér & Dörnyei, 2005b ; Dörnyei & Clement, 2000) which were carried out both in ESL and EFL. On the other hand, the results of this study showing instrumental, intrinsic and expectancy motivation, and language aptitude as other important constructs of the students' motivation correspond to the findings of some other motivational studies (eg., Chen, Warden & Chang, 2005;Crookes & Schmidt, 1991;Dörnyei, 1990;Littlewood, 1984) carried out in EFL contexts, which found other constructs than integrative motivation as a major construct.

In addition, the results of this study that the students who rated their English proficiency higher tended to score higher in the tests correspond to Deci and Ryan's (1985) self-determination theory where competence (self-rated abilities) is one of the major components that is responsible for better learning. Furthermore, the results of this study that those who expected success in class tended to score higher in the tests correspond to Atkinson's (1974) achievement theory in an expectancy-value framework where achievement behaviors are determined by expectancy of success and incentive values.

Although the n-size (77) of the present study was rather small and more research is needed to generalize the results to all university students studying English in Japan, the results supported the hypothesis that English learning is a complex and context-specific construct, factoring in multi-motivational

constructs such as integrative and instrumental motivation as major motivational constructs. Moreover, the results revealed that the more expectancy of success and language aptitude the students associated with themselves, the higher test scores they gained. More research is essential to explore the motivational constructs Japanese university students have in learning English, and to explore the relationship between motivation and proficiency in order to seek better ways of teaching English at the university level in Japan.

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Appendix A（Original Questionnaire on Motivation）

英語学習に関する質問

**＊成績には一切関係ありません＊**

氏名：

先日（12月18日）受験した TOEIC のスコアを書いてください。　＿＿＿＿＿＿　点

各質問を読んで，以下の１〜７までで，最も自分の意見に近いものに○をしてください。

1　全くそう思わない。

2　そう思わない。

3　どちらかと言えばそう思わない。

4　どちらでもない。

5　どちらかと言えばそう思う。

6　そう思う。

7　非常にそう思う。

質問

全くそう思わない　　　　　　　非常にそう思う
1　2　3　4　5　6　7

(1)　英語を勉強することは楽しい。

(2)　この英語の授業は大変だがやりがいがある。

(3)　機会があれば授業以外でも英語を使うようにしたい。

(4)　たとえ必修でなくてもこの授業を履修したい。

(5)　英語を完璧に話せるようになりたい。

(6)　英語を勉強することでより知的な人間になれる。

1　2　3　4　5　6　7

(7)　英語を勉強しているのは主に卒業単位を満たすためだ。

(8)　英語を勉強しているのは主に良い成績をとるためだ。

1　2　3　4　5　6　7

(9)　英語を勉強することで良い仕事につける可能性が高まる。

⑽　英語を勉強することは，英語ができれば他人との競争において武器になるので重要だ。

⑾　英語を勉強することは，英語ができればより教養がつくので重要だ。

⑿　英語を勉強することで，英語の映画や音楽を理解したい。
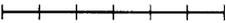
⒀　英語を勉強するのは，将来海外に住みたいからである。

⒁　海外旅行に行ったら，学んだ英語を使ってみたい。

⒂　英語を勉強することで英語の小説，新聞，雑誌などを読めるようになりたい。
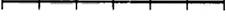
⒃　英語を勉強することで，英語を話す人々と交流したい。
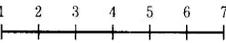
⒄　英語を勉強することで，英語を話す人々と友達になりたい。

⒅　英語圏の文化にとけこみたい。

⒆　英語を勉強することで，英語圏の人々の生活や文化をより理解したい。
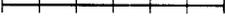
⒇　TOEIC 力と TOEIC スコアを上げることは重要だ。
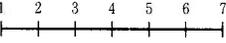
(21)　英語の読解技術を身につけることは重要だ。
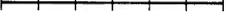
(22)　英語の文法力を身につけることは重要だ。

(23)　英語の発表能力（プレゼンテーションやスピーチ）を身につけることは重要だ。

(24)　この授業での内容をマスターできたと思う。
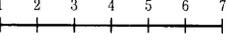
(25)　この授業では良い成績をとることができると思う。

(26)　私には TOEIC 力と TOEIC スコアを上げる能力があると思う。

(27)　私には英語の読解技術を身につける能力があると思う。

(28)　私には英語の文法力を身につける能力があると思う。

(29)　私には英語の発表能力（プレゼンテーションやスピーチ）を身につける能力があると思う。

(30)　この授業で英語を話すとき，あまり心地よく感じない。　　1　2　3　4　5　6　7
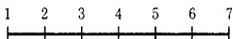
(31)　この授業で，自分からすすんで質問に答えることは恥ずかしい。
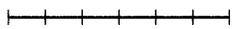
(32)　この授業でテストを受けるとき，不安で落ち着かない。
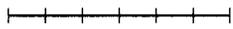
(33)　他の授業に比べてこの授業ではより緊張する。
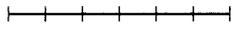
(34)　いかなる場面においても，英語を話すことにためらいを感じる。

(35)　英語のリスニングが得意だ。　　1　2　3　4　5　6　7
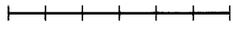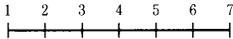
(36)　英語を話すことが得意だ。
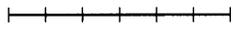
(37)　英語を読むことが得意だ。
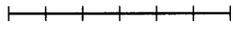
(38)　英語を書くことが得意だ。
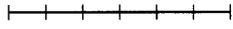
(39)　英語での発表（プレゼンテーションやスピーチ）が得意だ。
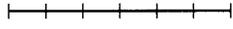
(40)　中学や高校での英語の成績は良かった。
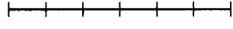
(41)　中学や高校での英語の授業は好きだった。
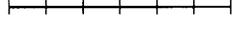
(42)　全般的に，私は言語学習が得意だ。
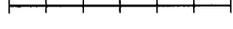
(43)　たとえこの授業でやっていることが好きではなくても一生懸命に取り組む。　　1　2　3　4　5　6　7
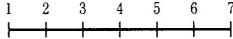
(44)　この授業で分からないことがあるときは先生に聞く。
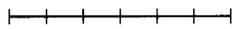
(45)　たとえ授業が難しくても決してあきらめずに取り組む。
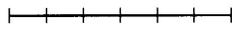
(46)　英語学習に全力を尽くしている。
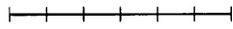
(47)　できるだけ英語を習得しようと努力している。
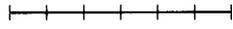
ご協力ありがとうございました。

Appendix B (English Translation of the Questionnaire on Motivation)

Intrinsic motivation

1. I enjoy learning English.

2. This English class is a challenge that I enjoy.

3. I want to use English outside of class whenever I have a chance.

4. I would take this class even if it were not required.

5. I wish I could speak English perfectly.

6. Studying English is important to me because it helps me become a more intellectual person.

Extrinsic motivation

7. I mainly study English to satisfy the university language requirement.

8. I am studying English mainly because I would like to get good grades.

Instrumental orientation

9. Being able to speak English will help me get a good job.

10. Studying English is important because it will give me an edge in competing with others.

11. Studying English is important because it will make me more educated.

12. I am learning English because I would like to understand movies or music in English.

13. I am studying English because I would like to live abroad in the future.

14. I would like to use the English I studied when I travel overseas.

15. By studying English, I hope I will be able to read English novels, newspapers, or magazines.

Integrative orientation

16. Studying English is important because it will allow me to interact with people who speak it.

17. I am learning English to be able to make friends who speak it.

18. I want to be more a part of the cultural group that speaks English.

19. Studying English is important because it will enable me to better understand the lifestyle and culture of people who speak it.

Valency

20. I think improving TOEIC skills and scores is important.

21. I think improving reading strategies is important.

22. I think improving grammar skills is important.

23. I think improving presentation skills is important.

Expectancy

24. I am certain I can master the skills being taught in this class.

25. I believe I will receive an excellent grade in this class.

26. I think I have the ability to improve TOEIC skills and scores in this class.

27. I think I have the ability to improve reading strategies in this class.

28. I think I have the ability to improve grammar skills in this class.

29. I think I have the ability to improve presentation skills in this class.

Anxiety

30. I feel uncomfortable when I have to speak English in this class.

31. It embarrasses me to volunteer answers in this English class.

32. I have an uneasy, upset feeling when I take a test in this class.

33. I feel more tense and nervous in this class than in my other classes.

34. I would feel uncomfortable speaking English under any circumstances.

Language aptitude

35. I am good at listening in English.

36. I am good at speaking in English.

37. I am good at reading in English.

38. I am good at writing in English.

39. I have good presentation skills in English.

40. My grades for English classes at junior and senior high schools were good.

41. I liked English classes at junior and senior high schools.

42. In general, I am an exceptionally good language learner.

Motivational strength

43. I work hard in this class even when I do not like what we are doing.

44. When I have a problem understanding something I am learning in this English class, I always ask the instructor for help.

45. Even when course work is difficult, I never give up.

46. I can truly say that I put my best effort into learning English.

47. I plan to learn as much English as possible.