

Are the Effects of L2-Motivational Change Language-Specific?

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Abstract

This longitudinal study investigates whether Japanese high school students' L2-motivational changes over the high school years predict achievement in English and overall subjects at the end of high school. A questionnaire was developed drawing on the Attitude/Motivation Test Battery (Gardner, 1985), the self-determination-theory scale (Noels, Pelletier, Clément, & Vallerand, 2000), and the willingness to communicate scale (McCroskey, 1992), and administered to 190 students 3 times at yearly intervals. Twelve constructs were identified. Achievement was measured using the school's final achievement tests given 5 months before graduation. The effects of motivational change on achievement were analyzed with latent growth curve modeling. The results showed that higher achievement in English was predicted by the growth of motivational intensity, attitudes toward learning English, and intrinsic motivation and the decline of amotivation. Achievement in overall subjects was predicted by the changes in all these constructs except amotivation and in 2 other constructs. The changes in the remaining 6 constructs did not predict achievement in English or overall subjects. The results suggested that the effects of motivational intensity, attitudes toward learning English, and intrinsic motivation are not language-specific and that teachers may be encouraged to focus on these constructs for tangible outcomes.

Keywords: L2 motivation, socio-educational model, self-determination theory, willingness to communicate, Japanese high school

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Introduction

This paper extends the author's (Watanabe, 2017) ACLL presentation/proceedings. Watanabe investigated Japanese high school students' L2-motivational changes over the high school years and showed that their L2-motivation consists of multiple constructs and that the growth/decline of some constructs over the high school years predicted achievement in English at the end of high school. Considering the growing importance of integrated (interdisciplinary) studies in elementary/secondary education (e.g., the Japanese Ministry of Education, Culture, Sports, Science and Technology; MEXT, 2013), the effects of L2-motivational change on achievement in overall subjects should also be investigated. If the growth/decline of a construct predicts achievement in both English and overall subjects, teachers will have additional grounds to focus on the construct.

Literature Review

This study draws on three theoretical models, which have been used in the Japanese context and are provided with established instruments to measure their constructs.

Gardner (1985) developed the socio-educational model of L2 acquisition based on research in Canada. The latest version of the model (Figure 1; Gardner, 2010) includes the following constructs. Integrativeness refers to the learner's will to interact with the native speakers of the L2; it is measured by integrative orientation, interest in foreign languages, and attitudes toward native speakers of the L2. Attitudes to the learning situation reflect the learner's attitudes to the teacher and the class. Instrumentality represents the pragmatic value of learning the L2. Motivation refers to the driving force; it comprises motivational intensity, desire to learn the L2, and attitudes toward learning the L2. Language anxiety reflects the learner's apprehension. According to Gardner's (2010) hypothesis, motivation, language anxiety, and aptitude can have a direct effect on L2 achievement, whereas integrativeness, attitudes to the learning situation, and instrumentality can exert an indirect effect on L2 achievement via motivation (The broken arrow from instrumentality to motivation indicates the instability of the effect). Gardner (1985) developed the Attitude/Motivation Test Battery (AMTB) to measure these constructs.

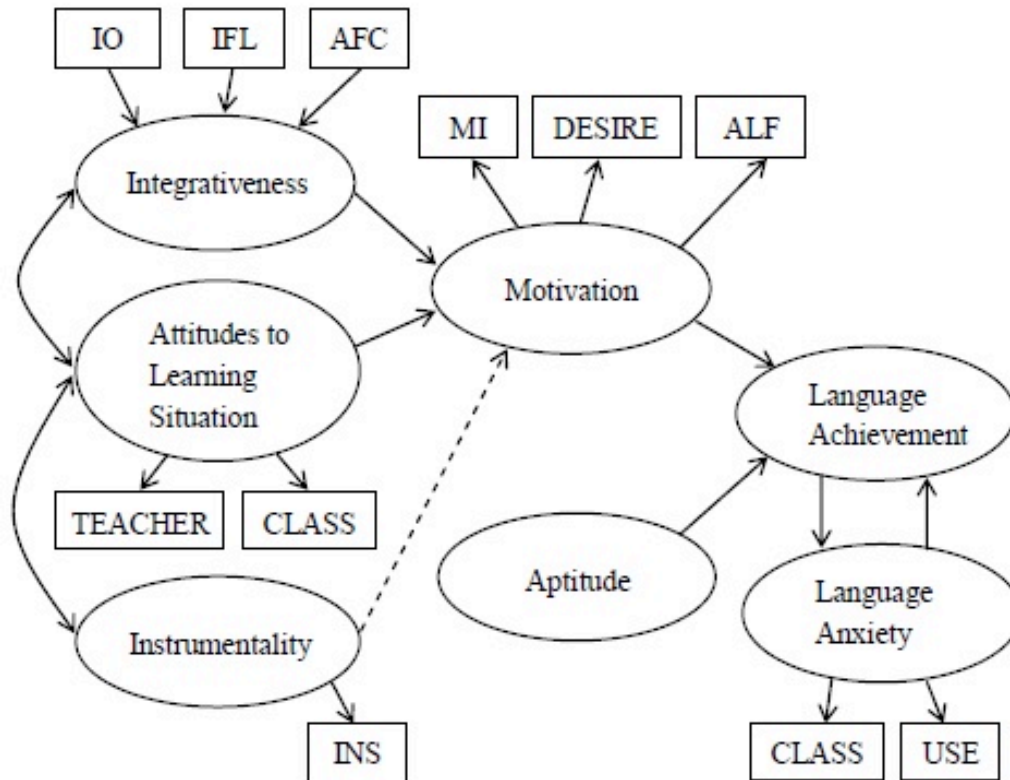


Figure 1. The socio-educational model, re-created from Gardner (2010, p. 88). IO = integrative orientation; IFL = interest in foreign languages; AFC = attitudes toward French Canadians; MI = motivational intensity; DESIRE = desire to learn French; ALF = attitudes toward learning French; INS = instrumental orientation.

Noels and colleagues (e.g., Noels, Clément, & Pelletier, 1999) introduced self-determination theory (SDT; Deci & Ryan, 1985) into the L2 motivation field. SDT concerns amotivation (i.e., lack of motivation to act), extrinsic motivation (i.e., motivation to act in order to obtain separable outcome), and intrinsic motivation (i.e., inherent motivation to act) on a hypothesized continuum. Extrinsic motivation is categorized into four regulations based on the extent to which it is externally motivated. External regulation, the most externally motivated form, is propelled by a demand or reward from outside the self. Introjected regulation, which entails an intake of a regulation but not a complete intake as one's own, refers to behaviors conducted to avoid guilt or anxiety or to uplift one's ego. Identified regulation refers to cases where one consciously conducts an activity that agrees with a personally important goal. Integrated regulation, the least externally motivated form, refers to cases in which the activity agrees with one's other goals, beliefs, and activities, so that conducting the activity expresses the self. SDT claims that external regulation can be internalized over time: It can change into a less externally motivated form of extrinsic motivation (i.e., introjected, identified, or integrated regulation). Noels, Pelletier, Clément, and Vallerand (2000) developed an instrument to assess these components of SDT in L2 learning.

McCroskey and Richmond (1985) conceptualized willingness to communicate (WTC) with reference to the first language as the probability of a person's engaging in

communication when free to do so. McCroskey (1992) developed a scale to measure WTC. MacIntyre and colleagues (e.g., MacIntyre & Charos, 1996) started using WTC in L2 studies.

Regarding the effects of L2 motivation on achievement, Gardner (2010; Figure 1) hypothesized on the direct and indirect effects of various L2 motivational constructs on L2 achievement, using structural equation modeling and bivariate correlations. Watanabe (2017) showed that the growth of motivational intensity, attitudes toward learning English, and intrinsic motivation and the decline of amotivation over the high school years predicted higher achievement in English at the end of high school, using latent growth curve modeling. However, achievement in the literature was confined to L2 achievement. Considering that Japanese high school students are required to take integrated studies (MEXT, 2009), in which they conduct research on a topic of their choice beyond subject boundaries, the effects of their L2 motivational change on achievement in overall subjects should also be investigated.

Research Question

Do Japanese high school students' L2-motivational changes over the high school years predict achievement in English and overall subjects at the end of high school?

Method

Participants

The participants were 190 students at a private boys' school in eastern Japan. Due to absenteeism and attrition, 185, 173, and 172 of them answered the questionnaire in the first, second, and third years of high school, respectively. Because the participants had all passed the school's competitive entrance examination and intended to proceed to university, their English proficiency (early intermediate) and their academic ability in general were above the national average.

Instrumentation

A questionnaire (see Appendix) was developed based on Gardner's (1985) AMTB, Noels et al.'s (2000) SDT scale, and McCroskey's (1992) WTC scale. Most items in the questionnaire were the same as the original items. However, some items were reworded or added anew in accordance with the Japanese context, while the characteristic quality of the variables was maintained.

The AMTB section (35 items) was designed to measure eight variables: integrative orientation (IO), interest in foreign languages (IFL), attitudes toward native English speakers (ANES), motivational intensity (MI), desire to learn English (DLE), attitudes toward learning English (ALE), instrumental orientation (INST), and language class anxiety (ANX). The MI and the DLE items were three-choice items as in Gardner's (1985) AMTB. A 5-point Likert scale (1 = *disagree*, 2 = *slightly disagree*, 3 = *neutral*, 4 = *slightly agree*, and 5 = *agree*) was used for the other items, whereas a 7-point Likert scale was used in his AMTB, to reduce the cognitive burden on the participants.

The SDT section (18 items) was designed to measure four variables: amotivation (AMOT), external regulation (ER), introjected/identified regulation (IIR), and intrinsic motivation (IM). Introjected and identified regulations were not distinguished because the distinction is subtle in practice: Students who study English to pursue a personally important goal (identified regulation) may also study it to avoid guilt or anxiety or to uplift their ego (introjected regulation) with their goal as a backdrop. In line with SDT's claim that ER can be internalized over time, IIR was viewed as an internalized form of ER. The same 5-point Likert scale as used in the AMTB section was used.

The WTC section (19 items) was designed to measure WTC. Seven items (items 54, 55, 59, 62, 65, 68, and 70) were fillers. The remaining 12 legitimate items were combinations of four situations (speaking in a dyad, speaking in a group of about five people, speaking in a meeting of about 10 people, and speaking in public to a group of about 30 people) and three types of receivers (strangers, acquaintances, and friends). Thus, the legitimate items represent 12 contexts: 4 (situations) x 3 (types of receivers). The participants were instructed to imagine that they were living in an English-speaking country and indicate the percentage of times they would choose to communicate in English in each context when free to do so.

A Japanese translation of the questionnaire was administered to the participants with the school principal's permission 1 month after the beginning of the first, second, and third years of high school (Time 1, Time 2, and Time 3, respectively) during a homeroom hour.

Achievement

Achievement was measured by the participants' scores on the final high school achievement tests given 5 months before graduation. Many teachers used past university-entrance-examination questions to make these tests. As the participants entered this private school mainly to prepare for university entrance examinations, their scores on these tests were considered to be appropriate measures of their achievement. The participants' raw scores were converted into *T* scores (standardized).¹ Achievement in overall subjects was measured by their *T* scores on five subjects: Japanese, math, English, social studies, and science.

Data Analysis

First, the constructs that the variables in the questionnaire were expected to measure were validated with the Rasch rating scale model (Rasch, 1960), using WINSTEPS 3.68.2 (Linacre & Wright, 2009). A Rasch analysis of item fit and a Rasch PCA of item residuals was performed on each construct. The validation was carried out by ensuring acceptable item fit to the Rasch model and ensuring that each construct was acceptably unidimensional. The results indicated that one motivational intensity item (item 44) and two introjected/identified regulation items (items 35 and 36) did not measure the constructs these items were expected to measure. These items were deleted from further analysis. As integrative orientation (IO), interest in foreign languages (IFL), and attitudes toward native English speakers (ANES) are hypothesized to measure integrativeness in Gardner's (2010) model (Figure 1), the IO, IFL, and ANES items were analyzed together. The results showed that the IO and IFL

items measured one construct, whereas the ANES items measured another. The participants might have perceived the IO and IFL items as more abstract, whereas they might have found the ANES items easier to relate to because they had been taught by native English-speaking teachers. Hence, IO and IFL were separated from ANES and clustered together. External regulation (ER) and instrumental orientation (INST) belong to different theoretical models. However, instrumental reasons originate from outside the self and, therefore, are naturally considered to be external regulations. Indeed, the ER and the INST items are similar: Both items include reference to university entrance examinations and good jobs in the future. Thus, the ER and INST items were analyzed together. The results indicated that one INST item (item 13) did not measure the same construct as the other items. This item was deleted from further analysis, and ER and INST were clustered together. The WTC scale was designed to measure one construct. However, the results of the Rasch analysis indicated that it measured two distinctive constructs. Following the examination of its items, it was decided that eight items measured WTC with friends and acquaintances and four items measured WTC with strangers. As a result, 12 fundamentally unidimensional constructs were identified across the three waves of data: Integrative Orientation + Interest in Foreign Languages (IO + IFL), Attitudes Toward Native English Speakers (ANES), Motivational Intensity (MI), Desire to Learn English (DLE), Attitudes Toward Learning English (ALE), Language Class Anxiety (ANX), Amotivation (AMOT), External Regulation + Instrumental Orientation (ER + INST), Introjected/Identified Regulation (IIR), Intrinsic Motivation (IM), Willingness to Communicate with Friends and Acquaintances (WTCFA), and Willingness to Communicate with Strangers (WTCS).

Next, the participants' raw scores from the questionnaire were converted into interval Rasch person measures: A person measure was given to each participant for each construct for each measurement time.

Finally, to evaluate the effects of motivational change on achievement, the participants' questionnaire data and their test scores were analyzed with latent growth curve modeling involving sequelae of change, using EQS version 6.1 (Bentler & Wu, 2007). Figure 2 shows one of the models (linear-growth model) used in this study for each construct. V1, V2, and V3 represent the participants' person measures for the construct at Times 1, 2, and 3, respectively; achievement represents their scores on the achievement tests. These four squares in the figure are observed variables. In the middle are two circles: They are latent variables, which are estimated. The intercept represents the participants' initial individual differences at Time 1; the slope represents the changes in those differences over the high school years between Time 1 and Time 3. In the model, achievement is hypothesized to be predicted by the intercept and the slope: The thick arrows from the intercept and the slope to achievement represent this hypothesis. The asterisks indicate that the parameters, which indicate the strength of the effect, are estimated.

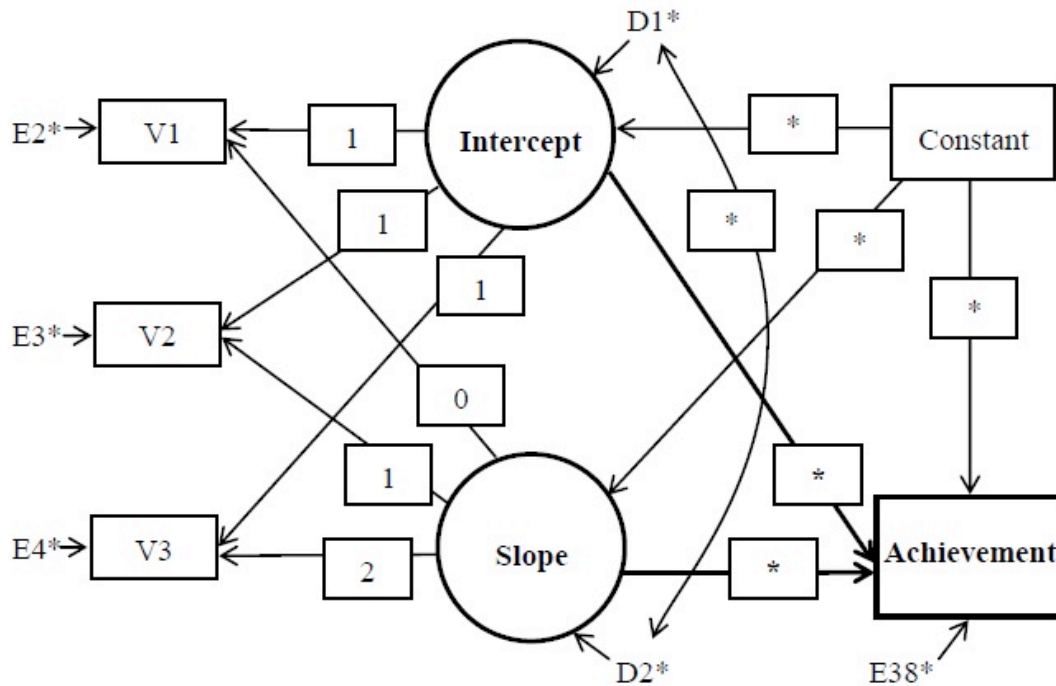


Figure 2. Representation of the linear-growth LGC model used in this study. V's = observed variables; D's = disturbances; E's = errors.

As shown in Figure 2, the factor loadings for the slope were set linearly at 0: 1: 2 originally. However, the growth rate that fits the data best might not always be linear. Thus, in addition to the linear-growth model, two non-linear models were made for each construct and tested for comparison. In the first model, the growth rate was set so that it reflected the construct's mean person measures at Times 1, 2, and 3.² In the second model, the growth rate was set so that the t value for the slope \rightarrow achievement parameter was largest³ (A t value greater than $|1.96|$ indicates that the growth/decline of the construct predicts achievement). As a result, three models (one linear and two non-linear models) were obtained for each construct for each achievement (English or overall subjects), and the best-fitting model was selected. Goodness of fit was evaluated using the chi-square (χ^2), comparative fit index (CFI), and root mean square error of approximation (RMSEA).

Results

Table 1 shows that higher achievement in English was predicted by the growth of Motivational Intensity (MI), Attitudes Toward Learning English (ALE), and Intrinsic Motivation (IM) and the decline of Amotivation (AMOT) (The negative parameter value for AMOT indicates that its decline predicted higher achievement). Table 2 shows that higher achievement in overall subjects was predicted by the growth of Integrative Orientation + Interest in Foreign Languages (IO + IFL), Motivational Intensity (MI), Attitudes Toward Learning English (ALE), Introjected/Identified Regulation (IIR), and Intrinsic Motivation (IM). These results indicate that the effects of MI, ALE, and IM were not language-specific.

Table 1

Predicting Achievement in English by the Best-Fitting Models

Construct	Slope → Achievement		Growth rate			Fit index				
	Parameter	<i>t</i>	T1:	T2:	T3	<i>df</i>	χ^2	<i>p</i>	CFI	RMSEA
IO + IFL	.19	1.76	0:	1:	2.00	2	1.51	.47	1.00	.05
ANES	.31	1.62	0:	1:	1.53	2	.77	.68	1.00	.00
MI	.41	2.85*	0:	1:	3.45	2	6.33	.04	.97	.18
DLE	-.48	-1.40	0:	-1:	-1.46	2	.23	.89	1.00	.00
ALE	.26	2.47*	0:	1:	2.00	1	.06	.80	1.00	.00
ANX	-.01	-.05	0:	1:	4.13	2	.34	.84	1.00	.00
AMOT	-.39	-2.52*	0:	1:	1.17	2	1.06	.59	1.00	.02
ER + INST	.25	.17	0:	-1:	-.13	1	.50	.48	1.00	.00
IIR	.18	1.70	0:	1:	1.58	2	2.78	.25	1.00	.00
IM	.38	3.04*	0:	1:	1.87	2	2.58	.28	1.00	.00
WTCFA	-.07	-.25	0:	1:	1.63	2	.21	.90	1.00	.00
WTCS	.14	.79	0:	1:	1.35	2	.15	.93	1.00	.00

Note. The *t* values greater than |1.96| indicate a parameter estimate that is significantly different from zero. Parameters estimated for regression (→) are presented in standardized form. A free parameter was added to the ALE and the ER + INST models based on the Lagrange Multiplier test. IO + IFL = Integrative Orientation + Interest in Foreign Languages; ANES = Attitudes Toward Native English Speakers; MI = Motivational Intensity; DLE = Desire to Learn English; ALE = Attitudes Toward Learning English; ANX = Language Class Anxiety; AMOT = Amotivation; ER + INST = External Regulation + Instrumental Orientation; IIR = Introjected/Identified Regulation; IM = Intrinsic Motivation; WTCFA = Willingness to Communicate with Friends and Acquaintances; WTCS = Willingness to Communicate with Strangers; CFI = comparative fit index; RMSEA = root mean square error of approximation.

Table 2

Predicting Achievement in Overall Subjects by the Best-Fitting Models

Construct	Slope → Achievement		Growth rate			Fit index				
	Parameter	<i>t</i>	T1:	T2:	T3	<i>df</i>	χ^2	<i>p</i>	CFI	RMSEA
IO + IFL	.28	1.96*	0:	1:	2.32	2	.10	.95	1.00	.00
ANES	.45	1.61	0:	1:	1.61	2	.99	.61	1.00	.00
MI	.28	2.03*	0:	1:	3.55	2	6.02	.05	.97	.18
DLE	-.46	-1.14	0:	-1:	-1.46	2	.43	.81	1.00	.00
ALE	.34	2.88*	0:	1:	1.32	1	.09	.76	1.00	.00
ANX	.18	.61	0:	1:	4.13	2	2.80	.25	.99	.11
AMOT	-.29	-1.88	0:	1:	1.22	2	.03	.99	1.00	.00
ER + INST	.03	.22	0:	1:	2.00	2	.60	.74	1.00	.00
IIR	.27	2.41*	0:	1:	1.57	2	2.87	.24	1.00	.00
IM	.32	2.53*	0:	1:	1.90	2	2.60	.27	1.00	.00
WTCFA	.02	.22	0:	1:	6.94	2	.07	.97	1.00	.00
WTCS	.10	.56	0:	1:	1.52	2	.22	.89	1.00	.00

Note. The *t* values greater than |1.96| indicate a parameter estimate that is significantly different from zero. Parameters estimated for regression (→) are presented in standardized form. A free parameter was added to the ALE model based on the Lagrange Multiplier test. IO + IFL = Integrative Orientation + Interest in Foreign Languages; ANES = Attitudes Toward Native English Speakers; MI = Motivational Intensity; DLE = Desire to Learn English; ALE = Attitudes Toward Learning English; ANX = Language Class Anxiety; AMOT = Amotivation; ER + INST = External Regulation + Instrumental Orientation; IIR = Introjected/Identified Regulation; IM = Intrinsic Motivation; WTCFA = Willingness to Communicate with Friends and Acquaintances; WTCS = Willingness to Communicate with Strangers; CFI = comparative fit index; RMSEA = root mean square error of approximation.

Discussion

Why were the effects of Motivational Intensity (MI), Attitudes Toward Learning English (ALE), and Intrinsic Motivation (IM) not language-specific? According to Gardner's (2010) model (Figure 1), MI and ALE are components of motivation. IM is not included in his model. However, IM fits into motivation because it concerns positive affect toward learning English. As MI, ALE, and IM are all components of motivation, which can influence L2 achievement directly, their effects on achievement in English accord with his model. In addition, MI, ALE, and IM represent students' behavior, attitudes, and inherent motivation toward learning English, respectively, which may be applicable to other subjects. The MI items include: "When it comes to English homework, I work very carefully, making sure I understand everything" (item 46); "After I get my English test back, I always correct my mistakes" (item 47). When students have such behavior toward learning English, they may have the same behavior toward learning other subjects as well. The ALE items include: "English is an important part of the school program" (item 21); "I plan to learn as much English as possible" (item 22). When students have these attitudes toward learning English, they may have similar attitudes toward learning other subjects, too. Students with IM, who enjoy obtaining new knowledge (items 26-27), accomplishing the challenging (items 28-29), and getting stimulated (items 30-31) when learning English, may also enjoy the same when learning other subjects. Although some individual differences may exist, this underlying universal nature of these constructs may explain their effects on achievement in overall subjects on the whole.

Integrative Orientation + Interest in Foreign Languages (IO + IFL) and Introjected/Identified Regulation (IIR) predicted achievement in overall subjects but not in English. Why not? According to Gardner's (2010) model (Figure 1), IO and IFL can influence L2 achievement indirectly via motivation. IIR is not included in his model. However, as IIR is a somewhat-internalized form of External Regulation + Instrumental Orientation, which corresponds to instrumental orientation in his model, IIR fits between instrumentality and motivation and can influence L2 achievement indirectly via motivation.⁴ Perhaps, the growth of IO + IFL and IIR does not necessarily lead to higher motivation immediately. Thus, in this case, the effects of these constructs on achievement in English may not have materialized yet.

Amotivation predicted achievement in English but not in overall subjects. Amotivation is not included in Gardner's (2010) model. However, as Amotivation is the antithesis of motivation, it fits into motivation in his model although in the opposite way from its other components. As motivation can influence L2 achievement directly, the prediction of achievement in English by Amotivation agrees with his model. On the other hand, Amotivation may be English-specific. The Amotivation items include: "I feel I am wasting my time in studying English" (item 41); "I wouldn't make progress in English even if I tried hard" (item 42). Affect represented by these items may not extend beyond the subject.

Conclusion

This study investigated the effects of Japanese high school students' L2-motivational change on achievement. The results showed that the growth of Motivational Intensity

(MI), Attitudes Toward Learning English (ALE), and Intrinsic Motivation (IM) predicted higher achievement in both English and overall subjects and indicated that the effects of these constructs were not language-specific.

One pedagogical implication of the results is that teachers may be encouraged to focus on MI, ALE, and IM for tangible outcomes. According to Watanabe (2017), in general, MI and ALE grew as university entrance examinations drew near. It may be natural for MI and ALE, which represent students' behavior and attitudes toward learning English, respectively, to rise as the high-stake examinations approach. Then, teachers might want to concentrate on IM. To help develop students' IM, teachers should engage students in more activities in which students learn English through their use of English. As students get better at using English, they will naturally find more enjoyment in using and learning it.

The limitations of this study include what follows. First, as the participants were from a private school whose students all intended to go to university, they do not represent the entire Japanese high school student population. Second, the achievement tests, which were similar to university entrance examinations in Japan, may not have captured the participants' full attainment (For example, the English test did not include a speaking component). Third, this is a three-year-longitudinal study: Those constructs that did not predict achievement might influence achievement in the long run. Therefore, due caution is necessary before generalizing the results of this study.

Notes

¹ $T = 10z + 50$. The T score is known as *hensachi* in Japan.

²For example, for Language Class Anxiety (ANX) for achievement in English, the growth rate was set at 0: 1: 4.13 because the difference between the means at Time 1 and Time 3 was 4.13 times as large as the difference between the means at Time 1 and Time 2: $(50.27 - 49.94) / (50.02 - 49.94) \doteq 4.13$.

³The first two loadings of the original 0: 1: 2 loadings were retained and the third loading was changed until the t value for the slope \rightarrow achievement parameter was at its largest value. For instance, the maximum t value for the slope \rightarrow achievement parameter for Motivational Intensity (MI) for achievement in English occurred when the third loading was 3.45; hence, the growth rate was set at 0: 1: 3.45.

⁴IIR should not be identified with motivation because it is still extrinsic and concerns separable outcome.

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Appendix

The Questionnaire

I. Following are statements with which some people agree and others disagree. Please indicate the extent to which you agree or disagree with each statement by checking (✓) one of the numbers to its right. The numbers mean:

1 	2 	3 	4 	5
Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree

Example: Japanese soccer players are better than American soccer players. 1 2 3 ✓ 5

Some people would check Disagree (1), others would check Agree (5), and still others would check one of the alternatives in between (4 is checked (✓) in this example). There is no right or wrong answer. All that is important is that the number you checked would indicate your own feelings. Please begin.

Integrative Orientation

1. Studying English is important for me because it will allow me to meet and converse with more and varied people. 1 2 3 4 5
2. Studying English is important for me because it will enable me to better understand the culture of English-speaking countries. 1 2 3 4 5

Interest in Foreign Languages

3. If I were visiting a foreign country, I would like to be able to speak the language of the people. 1 2 3 4 5
4. I wish I could speak another language perfectly. 1 2 3 4 5
5. I wish I could read books, newspapers and magazines in another language. 1 2 3 4 5
6. I would take a foreign language in school even if it were not required. 1 2 3 4 5
7. I enjoy meeting and listening to people who speak other languages. 1 2 3 4 5

Attitudes toward Native English Speakers

8. I have a favorable attitude towards native English speakers. 1 2 3 4 5
9. Native English speakers are trustworthy and dependable. 1 2 3 4 5
10. Native English speakers are friendly and hospitable. 1 2 3 4 5
11. I would like to get to know native English speakers better. 1 2 3 4 5
12. Native English speakers are kind and generous. 1 2 3 4 5

Instrumental Orientation

13. Studying English is important for me because it will make me a more knowledgeable person. 1 2 3 4 5
14. Studying English is important for me because I think it will someday be useful in getting a good job. 1 2 3 4 5
15. Studying English is important for me because taking an English test is required on university entrance examinations. 1 2 3 4 5

Language Class Anxiety

16. It embarrasses me to volunteer answers in our English class. 1 2 3 4 5
17. I feel that the other students speak English better than I do. 1 2 3 4 5
18. I get nervous and confused when I am speaking in my English class. 1 2 3 4 5
19. I am afraid the other students will laugh at me when I speak English. 1 2 3 4 5

Attitudes toward Learning English

20. I enjoy learning English. 1 2 3 4 5
21. English is an important part of the school program. 1 2 3 4 5
22. I plan to learn as much English as possible. 1 2 3 4 5
23. I would rather spend my time on subjects other than English. 1 2 3 4 5
24. I think that learning English is dull. 1 2 3 4 5
25. When I leave school, I shall give up the study of English entirely because I am not interested in it. 1 2 3 4 5

II. Following are some possible reasons why one studies (or does not study) English. Please indicate the extent to which you agree or disagree with each reason by checking (✓) one of the numbers to its right. The numbers mean:

1	2	3	4	5
Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree

Intrinsic Motivation: Knowledge

26. For the pleasure I get in finding out new things. 1 2 3 4 5
27. Because I enjoy the feeling of learning about English-speaking people and their way of life. 1 2 3 4 5

Intrinsic Motivation: Accomplishment

28. For the enjoyment I experience when I understand a difficult idea in English. 1 2 3 4 5
29. For the satisfaction I feel when I am doing difficult exercises in English. 1 2 3 4 5

Intrinsic Motivation: Stimulation

30. For the 'high' that I get while speaking English. 1 2 3 4 5
31. For the pleasure I get from hearing English spoken by English-speaking people. 1 2 3 4 5

Introjected/Identified Regulation

32. Because I think it is important for my personal development. 1 2 3 4 5
33. Because I choose to be the kind of person who can speak English. 1 2 3 4 5
34. Because I choose to be the kind of person who can speak more than one language. 1 2 3 4 5
35. Because I would feel guilty if I didn't know English. 1 2 3 4 5
36. Because I would feel ashamed if I had English-speaking friends but couldn't speak to them in English. 1 2 3 4 5
37. Because with my ability I should do well in English. 1 2 3 4 5

External Regulation

38. In order to succeed in university entrance examinations. 1 2 3 4 5
39. In order to get a good job in the future. 1 2 3 4 5
40. In order to get a good position in society. 1 2 3 4 5

Amotivation

41. I feel I am wasting my time in studying English. 1 2 3 4 5
42. I wouldn't make progress in English even if I tried hard. 1 2 3 4 5
43. I don't know why I study English. 1 2 3 4 5

III. In the following, please circle the alternative (a or b or c) which appears most applicable to you. We would urge you to be accurate because the success of this investigation depends upon it.

Motivational Intensity

44. If English were not taught in school, I would:
a) pick up English in everyday situations (i.e., read English books and newspapers, try to speak it to foreigners, etc.).
b) not bother learning English at all.
c) try to obtain lessons in English somewhere else.
45. When I have a problem understanding something in English class, I:
a) always ask the teacher or look it up in the dictionary or the study aid.
b) ask the teacher or look it up in the dictionary or the study aid just before the test.
c) do nothing and forget about it.
46. When it comes to English homework, I:
a) put some effort into it, but not as much as I could.
b) work very carefully, making sure I understand everything.
c) just skim over it.

47. After I get my English test back, I:
- a) always correct my mistakes.
 - b) do nothing and just forget it.
 - c) look it over, but don't bother correcting mistakes.

48. If there were a local English TV station, I would:
- a) never watch it.
 - b) turn it on occasionally.
 - c) try to watch it often.

Desire to Learn English

49. During English class, I would like:
- a) to have a combination of English and Japanese spoken.
 - b) to have as much Japanese as possible spoken.
 - c) to have only English spoken.

50. If it were up to me whether or not to take English, I:
- a) would definitely take it.
 - b) would drop it.
 - c) don't know whether I would take it or not.

51. If I had the opportunity to see an English play, I would:
- a) go only if I have nothing else to do.
 - b) definitely go.
 - c) not go.

52. If there were English-speaking families in my neighborhood, I would:
- a) never speak English to them.
 - b) speak English with them sometimes.
 - c) speak English with them as much as possible.

53. If I knew enough English, I would read English magazines and newspapers:
- a) as often as I could.
 - b) never.
 - c) not very often.

Willingness to Communicate

IV. The last questions. Imagine that you live in an English-speaking country and face the following 19 situations. You have completely free choice to initiate or avoid communication. Please indicate in the underlined space at the left the percentage of times you would choose to communicate in English in each type of situation.

0 % = never, 100 % = always

- _____ 54. Talk with an acquaintance in an elevator.
_____ 55. Talk with a stranger on the bus.
_____ 56. Speak in public to a group (about 30 people) of strangers.

- _____ 57. Talk with an acquaintance while standing in line.
- _____ 58. Talk in a large meeting (about 10 people) of friends.
- _____ 59. Talk with a janitor/resident manager.
- _____ 60. Talk in a small group (about 5 people) of strangers.
- _____ 61. Talk with a friend while standing in line.
- _____ 62. Talk with a waiter/waitress in a restaurant.
- _____ 63. Talk in a large meeting (about 10 people) of acquaintances.
- _____ 64. Talk with a stranger while standing in line.
- _____ 65. Talk with a shop clerk.
- _____ 66. Speak in public to a group (about 30 people) of friends.
- _____ 67. Talk in a small group (about 5 people) of acquaintances.
- _____ 68. Talk with a garbage collector.
- _____ 69. Talk in a large meeting (about 10 people) of strangers.
- _____ 70. Talk with a librarian.
- _____ 71. Talk in a small group (about 5 people) of friends.
- _____ 72. Speak in public to a group (about 30 people) of acquaintances.