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【 Research Paper 】

A Cross-Cultural Study on Student Academic Motivation in Japanese Tertiary Education: Implications for Intercultural Communication in Class

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Abstract. The present study investigated academic motivation among first-year undergraduate students in Japan. A survey of 177 Japanese and international students identified the differences between the two cohorts of students in relation to their academic motivation. Results revealed that international students demonstrated higher extrinsic and intrinsic motivation to learn than domestic students, owing to their cultural background. The results of the study highlight the cross-cultural variance of students' academic motivation. Implications for the internationalization of Japanese tertiary education, management of cultural diversity, and meaningful intercultural communication between Japanese and international students are discussed.

INTRODUCTION

Internationalization of tertiary education is a lifeline for universities in Japan seeking to attain global competitiveness (Ninomiya, Knight & Watanabe, 2009). In what has been primarily a government-led movement, two major government initiatives have sought to increase international student enrollments in large numbers: the 100,000 plan in 1983 and the 300,000 plan in 2008 (Kawamura, 2009). Each initiative has had a significant impact on Japanese higher education. According to the Japan Student Services Organization (JASSO), over the past three decades international enrollments in Japanese colleges and universities have radically increased, rising from 10,428 in 1983 to 118,498 in 2007 to almost 140,000 in 2014. Estimates for 2020 place international student enrollments at 300,000 (Economic and Fiscal Policy, 2008, p. 9). Japanese universities have enrolled international students from Asia

under the plan for international development cooperation, which is financially supported by the government's overseas development assistance budget. So far, 92.4% of international students enrolled in Japanese institutions of higher education are from Asia (Ninomiya, Knight & Watanabe, 2009).

Importantly, many higher education institutions in non-English speaking countries offer English-medium courses to attract more international students, increase diversity in campus populations, and internationalize the education of domestic students (Wachter, 2005). Under Japan's Global 30 Project plan to raise the number of international students, core Japanese universities have introduced an English-only curriculum. However, the English-only initiative has been criticized as facilitating the co-existence of the national language and English without formalizing the status of English as a medium of instruction (Hashimoto, 2013). Furthermore, critics have argued that the over-promotion of English in Japan has been energetically driven by the nation-building agenda (Le Ha, 2013).

From 1950 to the early years of the 21st century, internationalization of Japanese higher education passed through three phases (Ninomiya, Knight & Watanabe, 2009), and it has lately become a research topic of growing interest, especially in terms of the impact of student diversity on the current system of Japanese education. For example, Lassegard (2006) has expressed concern about the effects of larger numbers of foreign students on the quality of education at Japanese universities and has stressed the need for adjusting the paradigm of learning and teaching to accommodate increased diversity. Kawamura (2009) has highlighted the challenges facing Japanese higher education in terms of increasing the capacity to diversify the campus population and program offerings.

Recent research on internationalization of Japan tertiary education mainly discusses policy issues (Tsuruta, 2013) or institutional challenges for adopting English-based teaching (Hashimoto, 2013; Le Ha, 2013), with very little research being grounded in proven theoretical frameworks that analyze student factors in Japanese higher education programs with large international student cohorts. With the rapid growth of international student enrollment, the need arises to better understand academic motivations among students from different cultural backgrounds. These motivations have significant implications not only for teaching styles and curriculum design, but also for Japanese and international students to engage in meaningful intercultural interactions in classrooms. The purpose of this research is to begin addressing this deficit.

By drawing on self-determination theory (Deci & Ryan, 1985, 2000), this investigation sought to determine the influence of motivational style on international and domestic students in Japan. Two objectives guided the study: first, to determine whether the Academic Motivation Scale is a valid and reliable instrument for use in the Japanese context, and second, to identify whether international and Japanese students differ in their academic motivation. Based on the results, this article also seeks to improve intercultural communication between Japanese and international students for effective classroom instructions and designs.

LITERATURE REVIEW

Self-determination Theory

Self-determination theory (SDT) assumes that motivation and its orientation vary significantly (Deci & Ryan, 1985, 2000). SDT proposes that behavior can be categorized as being intrinsically motivated (IM), extrinsically motivated (EM), or amotivated (AM). Intrinsic motivation is defined as the drive to engage in activities for the pleasure, satisfaction, and challenges they present. It allows individuals to exercise, explore, and extend their capabilities (Ryan & Deci, 2000a, 2000b). Extrinsically motivated behaviors are performed in response to external influences, such as obtaining a reward or being subject to punishment. Finally, individuals are amotivated when they experience neither intrinsic nor extrinsic motivation toward a particular activity. Rather, they experience feelings of incompetence and accept no responsibility for their behavior. SDT proposes that these levels of motivation fall along a motivational continuum that can be differentiated into more specific motives (Fairchild, Horst, Finney & Barron, 2005; Vallerand et al., 1992). The degree of self-determined behavior runs from amotivation on one end through extrinsic motivation leading to intrinsic motivation at the opposite end (Deci & Ryan, 2000).

Academic Motivation Scale

Extending the SDT to the academic context, Vallerand et al. (1993) developed the Academic Motivation Scale (AMS) and found adequate levels of concurrent and construct validity and reliability, which were congruent with the predictions of the SDT. Seven dimensions of academic motivation were identified along the SDT continuum, including amotivation, three extrinsic motivation sub-constructs, and three intrinsic sub-constructs.

Amotivation (AMOT). The amotivation conceptualization can be described as a simple lack of motivation coupled with a lack of perceived contingencies between actions or behavior and outcomes (Deci & Ryan, 1985).

Extrinsic motivation—external regulation (EMER). The external regulation sub-construct involves acts that are regulated through external means like rewards and constraints (Vallerand et al., 1992). Thus, the locus of initiation is external to the person (Deci et al., 1991).

Extrinsic motivation—introjected regulation (EMIN). Introjected regulation refers to the internalization of the reasons for an action, and although internal, the regulation is not truly self-determined because it is limited to past external contingencies (Deci et al., 1991; Vallerand & Bissonnette, 1992).

Extrinsic motivation—identified regulation (EMID). Identified regulation, which is the highest level of self-regulation among the extrinsic sub-systems, occurs if a behavior becomes valued, is judged by the individual to be important, and is chosen by the individual (Deci et al., 1991; Vallerand & Bissonnette, 1992).

Intrinsic motivation to know (IMTK). Intrinsic motivation to know relates to several constructs that are applicable to the academic context, such as exploration, curiosity, learning goals, intrinsic intellectuality, and intrinsic motivation to learn. It is defined as "performing

activity for the pleasure and satisfaction that one experiences while learning, exploring or trying to understand something new" (Vallerand et al., 1992, p. 1005).

Intrinsic motivation to accomplish (IMTA). Intrinsic motivation to accomplish—also referred to as the motivation of mastery—is defined as "engaging in an act for the pleasure and satisfaction involved when attempting to accomplish or create something" (Vallerand et al., 1992, p. 1005). Individuals motivated by IMTA will focus on the means of achieving the task rather than the end.

Intrinsic motivation to experience stimulation (IMES). Intrinsic motivation to experience stimulation involves activities that engender stimulating sensations, such as feelings of excitement and stimulating aesthetic experiences (Vallerand et al., 1992). For instance, students go to class to experience interesting discussions or read a book for the intense feeling of cognitive pleasure because the book or passage is exciting.

The first research on the construct validity of the AMS, using the French-Canadian version, found sufficient evidence of the factor validity of the AMS measurement model (Vallerand et al., 1989, cited in Guay et al., 2015). However, some types of intrinsic motivation (to accomplish tasks and to experience stimulation) correlated more positively with introjected regulation than with identified regulation. Moreover, correlations among types of intrinsic motivation were relatively high (r=.52 to .64). A second investigation, using the English version of the AMS, allowed 26 residuals to be correlated in a CFA model that produced adequate fit indexes (Vallerand et al., 1992). A third investigation tested the construct validity of responses provided on the English version of the AMS and identified similar problems of correlation between EMIN and EMID as well as among the factors of intrinsic motivation (Vallerand et al., 1993).

A number of subsequent studies testing the construct validity of the AMS scale identified similar issues. For example, Cokley, Bernard, Cunningham, and Motoike (2001) tested the English version of the AMS, with CFA results mostly supporting the factor structure of the AMS measurement model with adequate comparative indexes. Fairchild et al. (2005) analyzed the English version of the AMS and found CFA fit indexes supported the factor structure of the AMS measurement model. However, the three types of intrinsic motivation correlated more positively with introjected regulation than with identified regulation. Also, correlations among types of intrinsic motivation were quite high.

On the one hand, most studies supported the factor structure of the AMS measurement model, although some fit indexes were not consistently high according to some standards. On the other hand, these studies did not fully support the convergent and divergent validity of the AMS scores. This peculiar pattern of relationships among the sub-scales and criterion variables has led some researchers to propose retesting the AMS items (Guay et al., 2015) or validating the AMS across cultures (Rynne, Kwek, & Bui, 2013).

Recently, Lim and Chapman (2014) adapted the AMS and assessed the properties of the adapted instrument with a sample of 1,610 students from Singapore. Exploratory and confirmatory factor analyses indicated a five-factor structure for the modified instrument (the

three original AMS intrinsic sub-scales collapsed into a single factor). Another study comparing domestic and international students in Australia found domestic Australian students were negatively influenced by amotivation while international students (mainly from Asia) were more intrinsically motivated (Rynne, Kwek & Bui, 2013).

Prior research has investigated the relationship between autonomous motivation and academic adjustment among Japanese junior high school students (Nishimura & Sakurai, 2013). The findings of that study generally supported the basic hypothesis of the SDT that a more autonomous regulation style was strongly related to academic adjustment. The results also showed that persons with a style comprising high autonomous regulation and low controlled regulation were the most adaptive. Applying the SDT to the particular context of Japanese education, researchers concluded that focusing on these similarities when introducing the concepts and strategies underlying self-determination will help Japanese professionals operationalize what they have done, what they have tried to do, and what they are going to do (Ohtake & Wehmeyer, 2004).

Tanaka and Yamauchi (2000) examined the effects of motivational styles that differed in the degree of autonomy on perceived control beliefs and self-regulated learning of English by Japanese undergraduate students. The results of the study confirmed that intrinsic motivation and identified regulation positively affected students' academic performances through adaptive self-regulated learning. However, the study adapted the motivational scale to reduce the dimensions of intrinsic motivation.

Among the very few studies that compare Japanese students to other nationalities, a study investigating the differences between Japanese and Indonesian students' motivation to study accounting subjects showed that feelings of self-efficacy, their accounting self-concept, and their perception of mastery goals, performance goals, and social goals had a significant influence on motivation (Saito, Mayangsari & Hiramatsu, 2013). Nationality also had an impact on students' motivation, as Japanese students were more motivated to study accounting subjects than were Indonesian students.

However, no comparative study has tested the original AMS within the Japanese educational context. Given the increasing number of international students in Japan, with many students coming from neighboring Asian countries, it is now timely to investigate Japanese and international students in Japan with respect to their academic motivation. Understanding Japanese and international student academic motivation will add further understanding of the cross-cultural variance of the AMS.

METHODS

This research explores the academic motivation of first-year students at an international university in Japan. Courses in the first year are offered in both English and Japanese. While Japanese students mainly choose Japanese-based subjects, international students often enroll in English-based courses even though international students with a high level of Japanese proficiency could enroll in the Japanese curriculum. Drawing on a large

sample as well as previous research, this study hypothesizes that differences exist in the type and level of motivation between Japanese and international students at the tertiary level in Japan.

The Academic Motivation Scale (AMS) was used to measure intrinsic and extrinsic motivation and amotivation. As previously noted, the AMS is a 28-item scale consisting of seven sub-scales. Each sub-scale comprised four questions. Extrinsic motivation—external regulation (EMER) was measured with items such as "because with only a high-school degree I would not find a high-paying job later on" or "because eventually it will enable me to enter the job market in a field that I like." Extrinsic motivation—introjected regulation (EMIN) included items such as "to prove to myself that I am capable of completing my university degree" or "to show myself that I am an intelligent person." Extrinsic motivation—identified regulation (EMID) included items such as "because I want to have 'the good life' later on" and "because I believe that a few additional years of education will improve my competence as a worker." Intrinsic motivation to know (IMTK) was indicated by items such as "because I experience pleasure and satisfaction while learning new things" and "for the pleasure I experience when I discover new things never seen before." Intrinsic motivation to accomplish (IMTA) was measured by items such as "for the pleasure I experience while surpassing myself in my studies" and "for the pleasure that I experience while I am surpassing myself in one of my personal accomplishments." Intrinsic motivation to experience stimulation (IMTES) was measured by items like "for the 'high' feeling that I experience while reading about various interesting subjects" or "for the pleasure that I experience when I feel completely absorbed by what certain authors have written." Amotivation (AMOT) was measured by items like "I don't know; I can't understand what I am doing in school" and "I can't see why I attend university and frankly, I couldn't care less." Participants indicated on a seven-point Likert-type scale the extent to which they disagreed (1) or agreed (7) with each of the 28 AMS statements

Students enrolled in a large first-year core course at an international university in Japan were invited to complete a paper-based questionnaire containing the AMS and requesting demographic information. In all, 400 surveys were distributed and 177 were completed, comprising responses from 91 international and 86 domestic students. The majority of international students were from China, Korea, and Southeast Asia.

The applicability of the AMS factor structure was determined via CFA using SPSS Amos 20. Confirmatory factor analysis indicates how well data fit in a particular theoretical model (Kline, 2005), which in this case involved the factor structure of the AMS. Additional analysis supporting the CFA included assessing internal consistency via Cronbach's alphas and calculating means and standard deviations for each of the AMS sub-scales. On the basis of the hypothesized suitability of the AMS factor structure, motivational differences were assessed using one-way ANOVAs for significant differences between international and domestic students on each of the AMS factors.

RESULTS

Objective 1: To determine whether the AMS is a valid and reliable instrument for use in a Japanese context.

Determining the suitability of the AMS as an appropriate instrument to evaluate students' motivation was a two-step process. The first step was to test the validity of the factor structure through CFA (Cokley et al., 2001; Fairchild et al., 2005; Vallerand et al., 1992). In line with results of previous studies on the number of dimensions of academic motivation scale, as well as a high correlation between the three dimensions of intrinsic motivation, the study validated the AMS scale by completing four CFA models of single factors, three factors (amotivation, intrinsic, and extrinsic), five factors (amotivation, three sub-constructs of external motivation, and one intrinsic motivation) and seven factors according to the theoretical design of the scale.

To justify the validity of the AMS scale in this research, multiple fit indices of different types were used. In addition to $\chi 2$ statistics, CFI and RMSEA often provide sufficient information to evaluate a model (Hair et al., 2005). Comparative fit indices such as GFI and CFI range from 0 to 1, with higher values indicating better fit. The SRMR is the absolute value of the average fitted residuals of particular model. SRMR values range from 0 to 1. Values of less than 0.08 indicate an adequate fit (Hair et al., 2005), as is the case in this research. The RMSEA focuses on estimated population fit with values ranging from 0 to 1, where values of less than .08 are considered reasonable (Brown & Cudeck, 1993; Hair et. al., 2005). Therefore in this research, the data fit the seven-factor model as the value of SRMR = 0.07 was within the range of acceptance.

Regarding the test for validity, the CFA of the AMS indicated that the seven-factor model as proposed by Vallerand et al. (1992) was consistent with this sample. Table 1 shows the results of testing four models, that is, the theoretical model consists of seven correlated factors of AMS: three types of extrinsic motivation, three types of intrinsic motivation and one amotivation factor. In this research, the goodness of fit was evaluated by several criteria that included chi-square ($\chi 2$=626.82), the ratio of chi-square to degrees of freedom ($\chi 2$/df =1.94), the goodness-of-fit (CFI=.80), the comparative fit index (CFI=0.87), the standardized root mean square residual (SRMR=.071), and the root mean square error of approximation (RMSEA = .093). As shown in Table 1, the range of fit indexes for the seven-factor model is better than any other option. The remaining three models showed comparative fit indexes far below the threshold of .90 and RMSEAs were greater than .08. Therefore, the seven-factor model is the best fit to the study's dataset.

On this basis, the seven factor names of the original study were retained. Given that the factor structure was valid, the second step was to assess the reliability of the AMS. The reliabilities of the seven AMS sub-scales were within the acceptable range (α >0.70) except for EMIN (α=0.54) and EMER (α=0.69) owing to the low factor loading. However, the reliability of EMER was very close to 0.70. For the case of EMIN, two items showed low loading (< 0.50). However, for the exploratory purpose of the study in the Japanese context, all items were

Table 1. Results of model competition

	$\chi 2$	df	$\chi 2$/df	GFI	TLI	CFI	RMSEA	SRMR
One-factor model	1221.48	350	3.49	.61	.58	.61	.116	.107
Three-factor model	966.20	347	2.77	.71	.70	.72	.098	.102
Five-factor model	838.39	340	2.47	.75	.76	.78	.089	.094
Seven-factor model	626.82	323	1.94	.80	.84	.87	.071	.093

retained for further analysis. Table 2 details the factor loadings, reliabilities, and means of the summated scale.

To further determine the psychometric viability of the AMS, inter-correlation of the seven factors was completed. A high level of correlation between 0.64 and 0.82 was detected among the three extrinsic motivations (EMER, EMID, and EMIN). Correlations between the three factors of intrinsic motivation (IMTK, IMTA, IMES) ranged from .28 to .85. In addition, the results from the current study showed that the relationships between the three intrinsic motivation factors were higher than those reported by Vallerand et al. (1993), but lower than those reported by Fairchild et al. (2005).

The psychometric evaluation of the AMS in this research indicated that it is a valid and reliable scale to measure student academic motivation. On this basis, the instrument was suitable to study the variation of AMS scores between domestic and international students.

Objective 2: To identify whether international and domestic students differ in their academic motivation.

To disentangle the cross-cultural effects on student motivation and academic performance, a one-way ANOVA was conducted comparing international and domestic students on academic motivation. Results indicated significant differences in two factors of the AMS scales (Table 3).

As shown in Table 3, Japanese and international students were significantly different in the mean scores (at $p < .005$) in two motivational factors. International students had higher mean scores in EMIN and IMTA. In other words, international students are highly motivated by intrinsic motivation to accomplish. They have a higher sense of accomplishment than Japanese students. On the other hand, the score for external motivation (introjected) is much higher than Japanese students. Introjected regulated behaviors are influenced in part by internal reward/punishment contingencies. In this context, the rewards and punishment in education refer to grades and financial awards such as scholarships. International students are more inclined to look for rewards such as higher grades, which document their study effort. The findings thus reflect that international students in Japan experience a higher sense of accomplishment and their study is motivated by higher grading rewards. In contrast, Japanese students have lower expectations and less concern about grading.

DISCUSSION AND CONCLUSION

Validity

This research examines the validity of the Academic Motivation Scale in the context of Japanese tertiary education to identify whether Japanese students' academic motivation differs from that of international students enrolled at the same school. To ensure that student perceptions of motivation style conformed to the self-determination model, the psychometric properties of the AMS were reviewed before testing across cultures. Confirmatory factor analysis confirmed that the psychometric properties of the AMS were applicable to Japanese tertiary education, and the current study's findings are consistent with previous research supporting the factor validity (Cokley et al., 2001; Fairchild et al., 2005; Vallarand et al., 1992). Six of the seven factors had relatively good sub-scale internal consistency with Cronbach's alpha scores close to or greater than .70, with the remaining factor (EMIN) having a score of α=.54.

Intercultural Implications

While Rynne at el. (2013) found that Asian students were identified as highly outcome-oriented or extrinsically motivated—suggesting that the purpose of higher education was to, for example, obtain a good job and fulfill their parental obligation—this study provides evidence of cross-cultural variance of the AMS. In particular, Japanese students show a lower sense of accomplishment and are less motivated by external factors. While prior research shows that Japanese students are more motivated to study accounting subjects than are Indonesian students (Saito et al., 2013), our study reveals that international students are more motivated to study than their Japanese counterparts. Findings from the current study share similarities with previous research concerning the degree of autonomous regulation and academic adjustment (Nishimura & Sakurai, 2013). International students in Japan have to adapt to local cultures, languages, and learning styles at a Japanese institution—a process that could not be completed without a high level of autonomous regulation and that might explain the higher sense of accomplishment found among international students in this study.

Understanding how Japanese students differ from other Asian students would be essential to developing students' sensitivity to cultural differences as well as their likelihood to take more proactive approach in intercultural interactions. This research establishes the importance of considering contextual and cultural variables in classroom dynamics, especially the differences between international and Japanese students. As international students show a higher sense of accomplishment and are motivated by introjected regulation, teaching activities in the classroom should be designed to recognize their effort. In the case of intercultural settings, such as group work or discussion with Japanese and international students in specialized subjects rather than language or cultural classes intentionally organized to increase intercultural interaction, a cooperative disparity may become obvious in the contribution of time, effort, and passion. Although such differences might be conducive to conflict, instructors can enhance mutual learning by focusing on developing individual skills or/and knowledge. In particular, instructions can be made specific enough for Japanese

Table 2: Seven AMS sub-scales

Items/Factors	Factor loading	t-value	Cronbach's α	Means
Amotivation (AMOT)			0.77	2.11
am12	0.61	6.55		
am19	0.70	7.20		
am26	0.78	7.63		
am5	0.63	N/A		
Extrinsic Motivation External Regulation (EMER)			0.69	4.03
am1	0.35	4.60		
am3	0.71	9.39		
am10	0.70	9.50		
am17	0.74	N/A		
Extrinsic Motivation Introjected Regulation (EMIN)			0.54	3.38
am28	0.41	4.31		
am21	0.67	5.78		
am7	0.63	5.63		
am27	0.47	N/A		
Extrinsic Motivation Identified Regulation (EMID)			0.81	3.87
am22	0.85	8.13		
am15	0.67	7.11		
am8	0.81	8.03		
am24	0.58	N/A		
Intrinsic Motivation to Know (IMTK)			0.83	4.11
am2	0.67	9.07		
am9	0.81	11.39		
am16	0.76	10.65		
am23	0.75	N/A		
Intrinsic Motivation to Accomplish (IMTA)			0.71	3.35
am6	0.65	6.53		
am13	0.62	6.35		
am20	0.70	6.86		
am14	0.55	N/A		
Intrinsic Motivation to Experience Stimulation (IMES)			0.76	3.31
am4	0.43	0.07		
am11	0.85	0.08		
am25	0.63	0.08		
am18	0.81	N/A		

Table 3. ANOVA test on AMS

Motivational Factor	Japanese (N=86)	International (N=91)	df	Mean Square	F	p (<.05)
AMOT	2.19	2.00	1	1.53	1.83	.178
EMER	3.96	4.15	1	1.63	3.21	.075
EMIN	3.06	3.74	1	20.02	21.12	.000
EMID	3.77	4.00	1	2.38	3.41	.067
IMTK	4.00	4.22	1	2.17	3.79	.053
IMTA	3.37	3.70	1	4.80	8.66	.004
IMES	4.00	4.22	1	1.29	2.27	.110

students to learn how they can challenge and surpass themselves and also foster intellectual skills and abilities while still being inspiring enough for international students to develop and improve their skills and techniques for leading, influencing, or involving unmotivated individuals.

The results of this study indicate that international students are more inclined to look for rewards that provide evidence of their study effort. This behavior might be explained by the policy of granting generous scholarships to encourage international students to enroll in Japanese universities. Not only does the government provide scholarships for international students from Asia under a development aid plan, but in addition Japanese universities waive tuition fees for international students, providing external introjection motivation to students to maintain good performance to retain the scholarship and tuition fee waiver. In classes Japanese and international students take together, scholarship recipients are likely to strive to obtain good grades by attending class and working hard so as not to lose their scholarship. In contrast, those who are not on scholarship might be easily satisfied with passing grades since their grade does not affect their financial ability to continue on in higher education. Even when financial support being tied to the grade is not an issue, “free riders” are always a source of concern when engaging in joint projects. To generate dynamic intercultural interactions, students need to internalize the value of cooperative learning and take in skills and knowledge for working with others, for which instructors are responsible for carefully conveying the invisible benefits and social needs obtained from a group project for a global society.

A higher degree of extrinsic motivation by introjected regulation among international students can be also related to their strong desire of self-expression to gain self-confidence and self-efficacy. Since Japanese students tend to feel anxious about expressing themselves or are not used to showing their abilities, they can learn how they should and can explain their work and efforts explicitly to their peers and instructors. On the other hand, international students can explore various styles, manners and techniques on how, where, and when they can be best understood and recognized by others. Peer support and learning should be able to promote positive interactions and productive intercultural communication.

The current study investigates academic motivation of first-year students. Importantly, the transition from high school to university can be challenging for both domestic and international students. As international students in their first year in Japan may encounter difficulties in language and culture transition, an ongoing pedagogical commitment to and intercultural learning for sustaining student interest and school life are essential and are central to eventually attracting more international students.

Future Concerns and Limitations

With respect to internationalization of Japanese education and the goal of the Global 30 Project to raise international student enrollment to 300,000 by 2020, an important strategic decision is whether to increase the number of English-only courses at universities. As noted, prior investigators have questioned the viability of the English-only initiative without formalizing the status of English as a medium of instruction (Hashimoto, 2013). From our perspective, building a successful English-based curriculum is not solely a matter of language, but includes internationalizing the teaching contents, the faculty, and the strategic thinking involved in promoting effective intercultural communication. That is, building a successful English-based curriculum would not involve a simple language switch of Japanese classes to English. Major modifications in class content, management, grading rubrics, and interactions with Japanese students are necessary to satisfy international students who are not just seeking English as a medium of instruction, but are looking for curricula, educational and intellectual quality that meet international standards. Therefore, the success of the Global 30 Project and any follow-up plan will require more than just adding a few more English-based courses to the current course offerings. This argument is in line with others who have expressed the need to adjust the paradigm of learning and teaching to accommodate increased diversity on campus (Lassegard, 2006; Kawamura, 2009). Furthermore, the findings from this research stress encouraging more discussion in relation to students and classroom teaching instead of discussing policy issues (Tsuruta, 2013).

While the findings of this study take a crucial step toward acknowledging the existence of cultural differences in academic motivation among domestic and international students in Japan, the study is subject to several limitations. Firstly, this study was conducted in a single Japanese university and investigated the motivations of first-year undergraduate students in a particular course. Secondly, this study was conducted with only one instrument, the Academic Motivation Scale. Further research should investigate and clarify those factors that facilitate intrinsic motivation in learning, establish whether motivational differences exist across the undergraduate experience from the first to the third year, investigate diverse learning strategies, and lead to effective intercultural communication among domestic and international students from a motivational perspective.

Another opportunity for future research is offered by the cohort of international students in Japanese-based classes. It would be interesting and helpful to compare the motivation of these students to domestic Japanese students or international students taking English courses. This comparison will provide more insightful implications for tertiary

education and intercultural classroom communication in Japan, where the system is heavily dominated by a Japanese-based curriculum.

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