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短期留学が大学生の英語不安を和らげる？  
－効果を図るためのアンケート発展－

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## 〈研究ノート〉

## Can a short-term exchange program reduce foreign language anxiety?

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### Abstract

Many universities in Japan offer short-term overseas programs to their students, from a few days to a number of weeks. These programs are touted as an opportunity to learn English or to experience using it. However, it is unrealistic to expect a short-term program to measurably raise linguistic ability levels among participants. As Japanese universities deal with increasingly tighter budgets, the value of financially supporting these programs is put under scrutiny. But can a short-term program be shown to measurably improve something other than linguistic ability? This paper briefly outlines the development of a short survey for Japanese university students participating in a short-term Japan-Thailand exchange program. It outlines the work in progress with reference to relevant literature. Responses to the surveys are presented in raw form with commentary on general trends, and suggestions are offered for a future statistical analysis.

### 短期留学が大学生の英語不安を和らげる？ － 効果を図るためのアンケート発展 －

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### 要旨

日本では近年、大学が用意したプログラムを利用して短期留学する学生が多くなっている。この種の留学プログラムは、英語学習あるいはコミュニケーション実践の機会としてもてはやされている。しかし、短期留学プログラムの多くは一ヶ月程度であり、学生の英語能力を計れる程度までに引き上げるために十分な期間ではないと思われる。少子化に伴い、日本の大学は緊縮予算が続いている。短期留学支援のための予算も、毎年の評価替えを余儀なくされている。しかし、短期留学プログラムも、英語能力以外の何かを向上させることができるのではないだろうか。本研究は、短期留学に参加した学生へのアンケートの推移を概説するものである。関連文献を参照しながら、アンケートの仕組みを見直し、今後の報告における統計的分析の対象とするための方向性について検討する。

**Keywords:** short-term exchange program      English as a lingua franca (ELF)  
foreign language anxiety      Likert-style survey

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## 1. Introduction: The cost and value of short-term exchange programs

A *Japan Times* article dated 9 August 2017 by James McCrostie stated that, even as the number of students enrolled at universities in Japan falls, the number of university students studying abroad is increasing. This would seem like good news for Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), whose support for the internationalization of Japanese universities includes, among others initiatives, the Project for Promotion of Global Human Resource Development. This project, MEXT states, "aims to overcome the Japanese younger generation's 'inward tendency' and to foster human resources who can positively meet the challenges and succeed in the global field, as the basis for improving Japan's global competitiveness and enhancing the ties between nations." (MEXT Website A). The project receives financial support from MEXT to 'internationalize' all or part of a participating university. While the project is a noble effort, its scale is small: only 42 universities were accepted for funding nationwide.

The spirit of programs such as these is attractive. At very least, MEXT's initiatives provide attractive buzzwords: Global, global-minded, and global human resource are easy-to-find examples at any Japanese university. When it comes to the international exchange programs they offer, the idea of becoming 'global' is an enticing answer to the well-documented trend on tendencies among the younger Japanese generation toward social withdrawal (see e.g. Teo & Gaw, 2010; Toivonen, Norasakkunkit & Uchida, 2011; Uchida & Norasakkunkit, 2015). The idea is that an essential part of becoming global is by actually travelling somewhere on the globe outside of your own country.

McCrostie's (2017) article also reported, however, that while more Japanese university students are going abroad, 61 percent of them are on programs that last less than a month. These figures are according to the Japan Student Services organization (JASSO), a support entity that acts in tandem with MEXT to help universities fund these overseas programs. The problem is, as student enrollment in Japanese universities falls, university budgets are squeezed. Notwithstanding help from JASSO or other support agencies, the cost versus the value of funding overseas study programs is repeatedly thrown into question by university administrations.

The goal of a university-sponsored overseas program cannot avoid having an academic orientation. Otherwise, it could be considered

university-sponsored sightseeing. The goal of sending students overseas would seem to be to raise their foreign language ability. However, fostering proficiency in any foreign language takes a lot of time and effort, and depends on a number of factors, including learners' age, location, and motivation. Ultimately, a short-term exchange program is not likely to have any measurable effect on proficiency, and so it seems reasonable to argue that university budget funds could better be used for other, more immediate needs. On the other hand, the fact that JASSO financially supports mostly short-term programs (more than 20,000 in 2016) and the fact that JASSO acts in tandem with—but not under the direct supervision of—MEXT, suggests that higher powers regard these programs as worthwhile in some way. (MEXT Website B)

When it comes to approving budgets at universities, however, the key term is JASSO support. JASSO pays part, but universities must cover a significant portion of total costs. Positive student feedback is helpful in justifying those costs to university officials. However, often that feedback is not often formally recorded and reported. If it is, it occurs as anecdotal commentary from teachers: participants used a lot of English, it improved, they enjoyed it. . . and the like. Clear evidence—in particular graphable, chartable data—make a more convincing appeal to those who apportion yearly budgets for keeping any particular program in place.

Such is the case with a short-term ICT task-based Japan-Thailand exchange program at Hokkaido Information University. Begun in 2011, the program involves a group of 36 students, 18 Japanese and 18 Thai, who work together on ICT-related projects over the span of about a month. Students spend eight days in Japan and eight days in Thailand, collaborating on internationally themed Web pages, short films and computer applications. The program is supported by JASSO, but since it is currently registered as a start-up program rather than a permanent program, the amount of that support decreases each year. So, each year, arguments for continuing the program need to become more persuasive.

In order to show results to HIU administration, a short 7-item survey was constructed and given in 2014 and 2015. The results of this survey were included as part of a final report to administration and other HIU faculty, which is held after the program finishes each year. The survey solicited numerical data through six survey items with five answer choices for each item, as well as student comments. A seventh item asked for general comments about the program. While the results

sufficed for short, in-house presentations, the original survey was a somewhat ad-hoc creation. It was not designed with reference to any previous survey research, leaving deficits in reliability and validity, and undermining the ability to generalize results. This paper discusses an ongoing effort to construct a better instrument, to which statistical analysis could be applied and whose results could be relevant beyond in-house, program-end reports on student feedback.

## 2. Original Short Survey (2014-2015)

The short-term exchange program for which the survey instrument at the focus of this paper was created occurs annually between two universities: Hokkaido Information University (HIU), near Sapporo, Japan, and Rajamangala University of Technology Thanyaburi (RMUTT), near Bangkok, Thailand. The program centers on task-based collaboration between three teams of students from each university: a Web page team, a short film team, and a computer programming team. Each team is made up of a balanced number of Japanese and Thai students. A total of 36 students participate each year. The teams spend one week at each of HIU and RMUTT working together to produce Web pages, short films and computer applications. Throughout the program, English is used as a common language.

The need for English comes into play on the HIU-RMUTT program in three main ways. It is used (1) for general communication among students and faculty; (2) for student project contents, namely: (a) Web pages, (b) short films, and (c) computer applications; and (3) for short presentations by students to peers and instructors at the beginning and end of the program. A flow-chart of the program is given in the Appendix. Generally, problems with English arise as a result of (1) low proficiency levels among students from both universities, which tend to result in (2) over-reliance on machine translation, mostly in the form of online translation sites, as well as (3) a habit of reading scripted presentations in mumbled, halting monotone, in worst cases from scripts that are a verbatim copy-paste regurgitation

of machine-translated output. Suggestions for coping with these recurrent problems are addressed during the pre-program workshops that students attend before working with each other in person, as well as during the in-person workshops. A more detailed account is given in Rian (2016).

Ultimately, then, what do students get out of the program besides the project they complete? Do students feel it is worthwhile? Do they feel it improves their foreign language and IT skills? Could participation in the program be a mechanism to lower inhibitions toward engaging with a global community in a foreign language? Generally, student response to the program has been positive, despite its demanding schedule. In order to capture some of this student feedback, several teachers involved in the program put together a short seven-question survey in 2014. Six questions solicited students' feelings about interacting with international students. Teachers also wanted to know whether responses varied before and after the international workshops among Japanese students who (a) interacted with the Thai students, (b) applied to the program but did not participate with the international students, and (c) had nothing to do with any part of the program.

Responses to surveys for the 2014 program and 2015 program are given in Table 1. For brevity, the "program entrant but non-participant" category is omitted (which totaled not more than 20 answers each year), and free-response comments are not treated. For program participants, a combined total of 36 Japanese students for both years (18 each year) responded. Most of these were second year students, two-thirds male. For non-participants, a total of 304 students responded, mostly first-year, mostly male.

English translations are the author's, accompanied by the original Japanese. Blue figures (N=36) are pre-program responses, red figures (N=36) are post-program responses from the same participants, and green figures (N=304) are responses from students who did not participate in the program. The survey was given online, using the Moodle "feedback" module.

Table 1. Original Survey, 2014 and 2015 (combined responses)

Blue = pre-program responses, Red = post-program responses, Green = non-participant responses

1. 将来外国人と一緒に働きたいと思いますか。Would you like to work with foreigners in the future?	ぜひ一緒に働きたい。By all means.	一緒に働きたい。Yes.	少しなら働いてもいい。Maybe for a short time.	できれば避けたい。I'd like to avoid it.	一緒に働かない。No.	その他 (Other)
	4 9 35	14 10 71	15 10 141	1 5 44	1 1 5	1 1 8
2. 将来、海外に住みたいと思いますか。Would you like to live overseas in the future?	1年以上住みたい。Yes, for more than a year.	1年以内なら住みたい。Yes, if it were under a year.	数週間なら住みたい。Yes, if it were for a few weeks.	出張する程度ならいい。Yes, if it were for a few days.	海外には住みたくない。No, I don't want to live overseas.	その他 (Other)
	4 6 35	6 7 30	6 13 44	15 8 88	4 2 102	1 0 5
3. 外国人と英語で話すことは不安ですか。Are you afraid of talking with a foreigner in English?	とても楽しい。No, it's very fun.	楽しい。No, it's fun.	少し不安。I'd be a little worried.	不安 I'd be worried.	とても不安 I'd be very worried.	その他 (Other)
	0 6 5	4 12 19	7 16 89	12 2 80	13 0 109	0 0 2
4. 入学してから、あなたの英語コミュニケーション力は向上したと思いますか。In the time since you entered university, do you feel your English conversation ability has improved?	とても向上した。My ability improved a lot.	向上した。My ability improved.	少し向上した。My ability improved a little.	あまり向上していない。My ability didn't really improve.	まったく向上していない。My ability didn't improve at all.	その他 (Other)
	1 8 8	3 9 36	18 17 116	12 2 96	2 0 43	0 0 5
5. 入学してから、あなたのWeb技術、ショートフィルム技術またはプログラミング技術は向上したと思いますか。In the time since you entered university, do you feel your IT skills (Web design, short filmmaking, computer programming) have improved?	とても向上した。My skills improved a lot.	向上した。My skills improved.	少し向上した。My skills improved a little.	あまり向上していない。My skills didn't really improve.	まったく向上していない。My skills didn't improve at all.	その他 (Other)
	5 7 29	15 15 76	11 11 131	5 3 43	0 0 20	0 0 5
6. 日本の良いところ、悪いところを考えたことがありますか。Have you ever thought about Japan's good points and bad points?	ずっと前から、よく考えている。I've thought about them a lot from long before.	最近、考えるようになった。I've thought about them a lot recently.	少し考える。I've thought about them a little.	あまり考えない。Not really.	まったく考えない。Never.	その他 (Other)
	8 9 95	10 21 55	12 5 98	6 1 44	0 0 11	0 0 1

The 2014 and 2015 surveys included seven questions. Six resembled Likert items, asking students to rank agreement or disagreement to a given question on a scale of 1 to 5. A seventh question asked for open comments about the program (not treated here).

If each item is reported individually, the results seem encouraging. For example, for Item 1 we can say the number of students who answered “Would you like to work with foreigners in the future?” with “by all means” doubled, from 4 to 9. This is compared to a majority of non-participants—the control group—who answered with a more neutral “maybe for a short time.” Or, for example, we can point out the shift in answers to Item 3, “Are you

afraid of talking to a foreigner in English?” from “I'd be worried” to “I'd be a little worried,” compared with the majority of the control group who answered “I'd be worried” or “I'd be very worried.” Generally, there are increases in positive responses and decreases in negative response from pre-test to post-test, and more positive answers in program participants versus neutral and negative answers for non-participants. These results suggest that participation on the program has a positive effect on how students perceive their ability with English and their willingness to engage with a foreign audience. The data seem to suffice for a brief in-house program-end report.

When the survey instrument is considered from

a research perspective, however, a number of problems arise when making claims based on the results. Among the flaws in the instrument are:

(1) *Unbalanced response formats.* The survey appears to be Likert-style, but it is not. Each of six questions has six possible answers, five ranging from positive to negative, with an “other” option at the end. However, there is separate wording for each of the six answers to each item, and that wording is slightly different between items. So, for example, the number of responses to the fourth point in one item are not readily comparable to the number of responses to the fourth point in another item. Further, while a non-response (“other”) option is included, there is not a truly middle point on each item scale. In some items, three or more of the answer choices lean either positive or negative. Incidentally, few students chose the non-response (“other”) option. While space was provided for open comments, there were very few, and are not treated here.

(2) *Leading questions.* Items are questions to be answered with five (somewhat unbalanced) answer choices, not statements to be ranked. Of course, there is nothing wrong with asking questions in a survey. That is where the word questionnaire comes from. However, as Dörnyei (2003) points out, “Questionnaire items rarely take the form of actual questions that end with a question mark (p.28).” Because the survey employs questions, and was given by teachers to students who participated on the international program, there is a specter of social desirability bias to contend with. In other words, the likelihood exists that students desire to answer questions from a teacher—who are invested in the success of the program—favorably. In this way the questions may seem to solicit a positive answer, or ‘lead’ the respondent toward one (Polgar & Thomas, 2013). Of course, there is a counter-argument to be made that Likert-style statement items ‘lead’ just as much as questions (Johns, 2010). However, it can be argued that the act of agreeing or disagreeing to statements slightly removes the element of solicitation, slightly mollifying the chance for bias in this particular case.

(3) *Too few items.* The survey’s brevity makes it convenient to administer. Showcasing the results of several items during a presentation to other faculty and administrators near the end of the academic year may be sufficient. On the other hand, it can be argued that the result of a more robust and research-grounded instrument can be just as easily summarized and presented, and mean slightly more. Carifio and Perla (2007) recast the old saying that “One swallow a summer doth not make” into “One item a scale doth not make (p.110).” They argue that trying to draw conclusions from a single survey

item is akin to assessing a person’s IQ with a single-item test.

In order to ameliorate the shortcomings of the original survey, the current incarnation of the survey attempts to draw upon relevant literature as a base for improvement. The survey construction process, the reasoning behind it, and student responses to the new surveys are given below.

### 3. Expanded Likert-style Surveys

The first step toward a new survey instrument was to look for similar items in similar instruments that have been used before. The first two items in the original 2014-2015 survey solicit how students feel about interacting with foreign people—in this case with their Thai partners on the program—both in and outside of Japan:

- Would you like to work with foreigners in the future?
- Would you like to live overseas in the future?

Similar items appear in a survey by Yashima (2009):

- I want to make friends with international students studying in Japan.
- I try to avoid talking with foreigners if I can.
- I would talk to an international student if there were one at school.
- I wouldn’t mind sharing an apartment or room with an international student.
- I want to participate in a volunteer activity to help foreigners living in the surrounding community.
- I would feel somewhat uncomfortable if a foreigner moved in next door.

These items are part of a set of items—or a scale—in a survey that measures in Japanese EFL learners’ *international posture*. This construct embodies how Japanese EFL learners are attitudinally ‘posed’ toward interacting with a perceived international community in a foreign language, namely English. The set of items above are related to the sub-construct labelled “inter-group approach/avoidance tendency,” or learners’ inclination to approach rather than avoid dissimilar others, such as non-Japanese people in Japan. A second sub-construct in Yashima’s (2009, p.162) survey is labelled “Interest in International Vocation or Activities” and features the following items:

- I would rather stay in my hometown.
- I want to work in a foreign country.
- I want to work in an international organization such as the United Nations.
- I’m interested in an international career.
- I don’t think what’s happening overseas has much to do with my daily life.
- I’d rather avoid the kind of work that sends me overseas frequently.

The third sub-construct is “Interest and International News,” and a fourth (added in her 2009 survey) is “Having Things to Communicate to the World.” The first two items in the original 2014-

2015 survey were similar to Yashima's items for the first two sub-constructs in her 2009 survey. These were borrowed into the 2016 survey.

Yashima's construct of international posture is a Japanese-culture-specific alternative for the construct of *integrativeness*, seminally coined earlier by Gardner (1985, 1998, 2001). Integrativeness is a component in Gardner's socio-educational model that seeks to describe the dynamic of L2 learning motivation—measured, as well, by a survey: the AMTB, or Attitude/Motivation Test Battery (Gardner, 1985, 2004). L2 learners' integrativeness can be described as their desire to integrate with a specific group of L2 speakers, for example, Canadian French speakers wanting to integrate with English speakers in Canada. Since no such large-scale group exists in Japan, Gardner's model and survey are not an exact fit. If, Yashima argues, the construct of integrativeness is retooled with a construct that reflects an imagined L2 community, the results from an accompanying survey to Japanese EFL learners will be more accurate.

Yashima's quest to survey L2 motivation in the Japanese context is connected to the concept of *willingness to communicate*, or WTC. This concept is, put simply, a person's degree of willingness to initiate communication with another party. Initially this concept was developed with regard to

measuring L1 speakers (McCroskey & Richmond, 1987; McCroskey, 1992) but has since been adapted to a variety of L2 settings worldwide (see e.g. MacIntyre, Clément, Dörnyei, & Noels, (1998). Yashima's research focus, for example, is specifically concerned with WTC in the Japanese EFL context.

McCroskey (1997) notes that the concept of measuring a learners' WTC is rooted in their degree of *communication apprehension*. This apprehension occurs, he explains, is a person's "fear or anxiety associated with either real or anticipated communication with another person or persons (McCroskey, 2001, p.40)." Early research on communication apprehension was, he observes, concerned with anxiety or fear that can accompany public speaking (i.e. stage fright), but has since evolved to include other communication contexts, such as conversation. His 1997 article on Self-Report Measurement discusses a number of survey instruments that measure WTC, self-perceived communication competence, and shyness. Two other instruments deal with public speaking and interpersonal communication. One in particular, the Personal Report of Communication Apprehension (PRCA-24), features 24 items with a Likert-style 5-point response format (McCroskey, 1997, p.209), presented for reference in its entirety in Table 2.

**Table 2. McCroskey's (1997) 24-item Personal Report of Communication Apprehension**

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DIRECTIONS: This instrument is composed of twenty-four statements concerning feelings about communicating with other people. Please indicate the degree to which each statement applies to you by marking whether you (1) strongly agree, (2) agree, (3) are undecided, (4) disagree, or (5) strongly disagree. Work quickly; record your first impression.

1. I dislike participating in group discussions.
2. Generally, I am comfortable while participating in group discussions.
3. I am tense and nervous while participating in group discussions.
4. I like to get involved in group discussions.
5. Engaging in a group discussion with new people makes me tense and nervous.
6. I am calm and relaxed while participating in group discussions.
7. Generally, I am nervous when I have to participate in a meeting.
8. Usually I am calm and relaxed while participating in meetings.
9. I am very calm and relaxed when I am called upon to express an opinion at a meeting.
10. I am afraid to express myself at meetings.
11. Communicating at meetings usually makes me uncomfortable.
12. I am very relaxed when answering questions at a meeting.
13. While participating in a conversation with a new acquaintance, I feel very nervous.
14. I have no fear of speaking up in conversations.
15. Ordinarily I am very tense and nervous in conversations.
16. Ordinarily I am very calm and relaxed in conversations.
17. While conversing with a new acquaintance, I feel very relaxed.
18. I'm afraid to speak up in conversations.
19. I have no fear of giving a speech.
20. Certain parts of my body feel very tense and rigid while giving a speech.
21. I feel relaxed while giving a speech.
22. My thoughts become confused and jumbled when I am giving a speech.

23. I face the prospect of giving a speech with confidence.  
 24. While giving a speech, I get so nervous I forget facts I really know.

SCORING: To compute context subscores begin with a score of 18 for each context and follow the instructions below.

- Step 1: Group discussion context—add scores for items 2, 4, and 6. Subtract scores for items 1, 3, and 5. Scores can range from 6 to 30.  
 Step 2: Meeting context—add scores for items 8, 9, and 12. Subtract scores for items 7, 10, and 11. Scores can range from 6 to 30.  
 Step 3: Interpersonal conversation context—add scores for items 14, 16, and 17. Subtract scores for items 13, 15, and 18. Scores can range from 6 to 30.  
 Step 4: Public speaking context—add scores for items 19, 21, and 23. Subtract scores for items 20, 22, and 24. Scores can range from 6 to 30.

To compute the total score for the PRCA-24, add the four subscores. Scores above 80 = high CA, scores below 51 = low CA.

As can be seen in the scoring method in Table 2, the PRCA-24 survey is comprised of four sub-contexts (group discussion, meetings, interpersonal communication, and public speaking), each with six Likert-style items in a 5-point response format. The original 2014-2015 survey for the HIU-RMUTT exchange program used the following two items (3 and 4):

- Are you afraid of talking with a foreigner in English?
- In the time since you entered university, do you feel your English conversation ability has improved?

The most similar items in the PRCA-24 are the six under the interpersonal communication sub-context (items 13-18 in Table 1). These were also adopted into the 2016 instrument, for a total of 18 items with three working titles for scales: (1) Intergroup Approach/Avoidance Tendency, (2) Interest in International Vocation or Activities, and (3) Communication Apprehension—Interpersonal Conversation Context. The items were research-based alternatives for the original first four items in the original 2014-2015 survey. Six items for the public speaking sub-context (items 19-24) were also incorporated, because the HIU-RMUTT program involves participants giving presentations in English to faculty and peers (see Rian, 2016). The fourth scale title was relabeled Communication Apprehension—Presentation Context.

It was tempting to simply borrow the entire PRCA-24 as-is, however, the sub-context of “meetings” did not seem especially pertinent to the HIU-RMUTT program. Also, while McCroskey (1997) draws a distinction between small-group interactions and ‘dyadic’ (two-person) interactions, there is considerable overlap in these two types of interactions in the case of the HIU-RMUTT program. While students do spend a lot of time working in groups on their ICT-based projects, much of the dialogue between students occurs in pairs. Therefore, in choosing six items to balance the new survey, items from the “conversation” sub-context seemed slightly more appropriate than “group discussion.”

This yielded a total of 24 items: 12 from Yashima (2009) under two scales, and 12 from McCroskey (1997), also under two scales. The next step was to adjust some of the language. In the case of the HIU-RMUTT program, some students who complete the survey—particularly the ‘control’ group of non-participants—may not necessarily have presentation experience, especially in English. The language in some items was simplified, modal auxiliary language was added and a few words were changed. So, for example, Item 23 in the PRCA-24 “I face the prospect of giving a speech with confidence” became “I would be confident if I gave a presentation in English.”

Next, I checked for Japanese versions of the items I had borrowed. Items in Japanese from Yashima (2009) are provided in Elwood & Monoi, 2015, and items similar to McCroskey (1997) are given in Nakamura (2012). I supplied the Japanese and had it reviewed by two native Japanese colleagues with good English proficiency.

Finally, a 5-point Likert-style answer format was adopted across all four categories, based on McCroskey (1997). The items taken from Yashima’s (2009) survey had originally employed a 7-point format, although notably she has used a combination of 5-point, 7-point and 10-point formats in a single survey (Yashima, Zenuk-Nishide & Shimizu, 2004).

The resulting 2016 survey, with student responses, is given in Table 3. Red text indicates reverse-coded (negatively worded) items. These are in keeping with items in the surveys from which they were drawn. It should be pointed out for future reference that there is debate about the usefulness of negatively worded items in surveys. Dörnyei (2003) advised including them, as they help offset acquiescence bias and extreme-response bias. In other words, they keep respondents thinking about each item. However, a number of studies on negatively worded items seem to suggest a pushback to the trend, pointing out that benefits are eroded by their potential to cause problems with



miscomprehension (see e.g. Swain, Weathers & Niedrich, 2008; Weijters, Baumgartner, & Schillewaet, 2013) as well as with translations to other languages (Wong, Rindfleisch, & Burroughs, 2003).

As with the original 2014-2015 survey, Blue figures (N=17) are pre-program responses, and red figures (N=17) are post-program responses from the same participants. One participant did not respond to either survey in 2016, hence 17 instead

of 18. Green figures (N=158) are responses from students who did not participate in the program. The survey was given online, using the Moodle “feedback” module. Distributions of gender and year in university are also relatively the same as the 2014-2015 survey: program participants were mostly 2<sup>nd</sup> or 3<sup>rd</sup> years, 2/3 male, and non-participants were mostly male 1<sup>st</sup> year students. Responses are categorized below, but in the actual survey the items were randomly distributed.

**Table 3. 2016 Survey, 5-point response format**

Blue = pre-program responses, Red = post-program responses, Green = non-participant responses

SA = strongly agree, A = agree, N = no opinion, D = disagree, SD = strongly disagree

<b>Intergroup approach/avoidance tendency</b>	SA	A	N	D	SD
日本に来ている留学生など外国人と友達になりたい。(I want to make friends with international students studying in Japan.)	7	8	2	0	0
	5	10	2	0	0
	14	54	59	15	16
日本の学校で留学生がいれば気軽に声をかけようと思う。(I would talk to an international student if there were one at school.)	3	3	8	2	1
	2	6	5	4	0
	1	15	62	52	28
日本で地域の外国人を世話するような活動に参加してみたい。(I want to participate in local volunteer activities that help foreigners living in Japan.)	0	6	9	2	0
	2	6	7	2	0
	7	24	48	51	28
留学生や外国人の学生と寮アパートなどでルームメートになってもよいと思う。(I wouldn't mind sharing an apartment or room with an international student.)	2	5	3	6	1
	1	7	4	4	1
	8	45	52	28	25
外国の人と話すのを避けられれば避ける方だ。(I try to avoid talking with foreigners if I can.)	0	3	9	4	1
	0	2	8	6	1
	36	58	43	19	2
もし、日本で隣に外国人の人が越えてきたら困ったなと思う。(I would feel somewhat uncomfortable if a foreigner moved in next door.)	0	1	6	6	4
	0	1	4	6	6
	12	26	43	49	28

<b>Interest in international vocation or activities</b>	SA	A	N	D	SD
外国人がたくさんいるところで、働いてみたい。(I want to work where many people from other countries work.)	3	4	5	5	0
	3	5	8	1	0
	4	16	56	47	35
日本にずっと住むつもりである。(I plan to live in Japan my whole life.)	4	8	3	2	0
	3	8	6	0	0
	80	55	19	4	0
海外で、ボランティア活動をしてみたい。(I'm interested in doing volunteer work overseas.)	1	5	5	6	0
	2	5	7	3	0
	9	28	36	56	29
海外の出来事は、自分の日常生活とあまり関係ないと思う。(I don't think what's happening overseas is related to my daily life.)	0	2	4	9	2
	1	1	3	8	4
	9	10	32	69	38
外国で働いてみたい。(I'd like to try working in a foreign country.)	1	6	5	4	1
	2	4	7	4	0
	8	22	40	56	32
海外出張の多い仕事は避けたい。(I'd rather not have a job that sends me overseas frequently.)	2	3	5	7	0
	0	5	5	6	1
	39	57	45	13	4

<b>Communication apprehension—Interpersonal conversation context</b>	SA	A	N	D	SD
初めて会う人と英語で会話をしたらとても緊張する。(I would feel very nervous participating in a conversation in English with a new acquaintance.)	9	5	2	0	1
	6	5	1	5	0
	88	52	8	5	5
英語で会話することは楽しいと思う。(I would enjoy having a conversation in English.)	2	12	3	0	0
	4	12	0	1	0
	9	39	64	25	21
英会話に参加しようとしたら、言葉が出なくて黙ってしまう気がする。(If I tried to have an English conversation, I would be at a loss for words.)	4	8	4	0	1
	1	6	3	6	1
	71	49	21	14	3
英語で会話することは怖く思わない。(I am not afraid of participating in an English conversation.)	0	4	7	4	2
	2	10	2	3	0
	11	23	49	42	33
英語で会話すると考えただけで緊張する。(Even the idea of having a conversation in English makes me nervous.)	0	6	9	1	1
	1	5	2	8	1
	46	48	36	21	7
英語で会話することに自信がある。(I would be confident if I had a conversation in English.)	1	0	0	11	5
	1	2	5	4	5
	0	6	26	56	70

<b>Communication apprehension—Presentation context</b>	SA	A	N	D	SD
英語でプレゼンをするとても緊張する。(Giving a presentation in English would make me terribly nervous.)	7	8	1	1	0
	3	7	3	4	0
	88	42	24	4	0
人前で英語のプレゼンをする考えただけでも怖くなる。(Even the idea of giving a presentation in English makes me afraid.)	1	5	5	4	2
	2	4	2	7	2
	58	49	27	19	5
人前で英語のプレゼンをするすぐに冷静さを失う。(If I gave a presentation in English, I would quickly lose my calm.)	1	5	4	6	1
	1	5	4	6	1
	35	49	42	27	5
人前で英語のプレゼンをするのは平気である。(I would not mind speaking in English before a group.)	1	2	5	7	2
	1	8	3	3	2
	0	8	39	60	51
英語でプレゼンすることは怖く思わない。(I am not afraid of giving a presentation in English.)	0	2	8	6	1
	0	8	7	2	0
	5	17	46	53	37
英語でプレゼンすることに自信がある。(I would be confident if I gave a presentation in English.)	0	3	2	8	4
	0	3	6	3	5
	0	1	21	60	76

#### 4. Discussion and Limitations

As with responses for the original questionnaire, the data are presented here in ‘raw’ form. Generally, the same trend as the previous study can be observed: post-program responses are favorable, both to pre-program responses as well as to non-participant responses. International posture-related responses increase, and apprehension-related responses decrease. An item-by-item analysis is neither practical nor recommended. Detailed analyses and conclusions, however, have yet to be decided on, and will be the topic of a future publication. Readers are, meanwhile, free to employ the data presented here to make their own inferences.

It is tempting to treat the data as McCroskey (1997, p.209) did, with summed scores. The math is easy and convenient scores are generated. Problems, however, would also be generated. For example, while each category (scale) in the 2015 survey has been previously tested for reliability using Cronbach’s alpha in their respective sources,

the new scales are not exactly the same. As mentioned, some language has been slightly modified. So, a reapplication of Cronbach’s alpha reliability coefficient to each of the four scales would best precede any analysis. It should be noted also, however, that Cronbach’s alpha may no longer be the gold standard for reliability testing that it once was. Lee Cronbach himself commented in 2004 article cataloguing the development of Cronbach’s alpha that "I no longer regard the alpha formula as the most appropriate way to examine most data. Over the years, my associates and I developed the complex generalizability (G) theory (Cronbach *et al.*, 1963; Cronbach *et al.*, 1972; see also Brennan, 2001; Shavelson and Webb, 1991) which can be simplified to deal specifically with a simple two-way matrix and produce coefficient alpha (Cronbach, 2004, p.403)." While this does not mean that Cronbach’s alpha is no longer appropriate, it should be used with consideration to other applicable statistical options.

Another limitation to the results is the inherent problematicity of Likert-style scales and response

formats. Issues that arise with using them are well documented in the literature. Persistent ones include:

- How and when responses can be treated as interval data or ordinal data; and hence
- Whether parametric or non-parametric statistical tests should be applied;
- How many response choices to include;
- Whether to include a neutral option, and if so, which wording to use.

Another option to strengthen the statistical reliability and validity of results is Rasch analysis, using a psychometric model designed by Danish mathematician and statistician Georg Rasch. The merits of employing Rasch analysis are summarized by Matthew Apple (2013, p.8-9):

Analysis of Likert-type categorical data using the Rasch Rating Scale model (Andrich, 1978) offers several advantages over traditional analysis. The first advantage is the use of fit to demonstrate the quality of both persons and items measured by the hypothesized construct. By identifying misfitting person responses and items that do not contribute to the construct being measured, Rasch model analysis can assist the researcher in revising the questionnaire instrument in order to provide a more accurate estimation of the construct (Wolfe & Smith, 2007a). A second advantage is that, whereas a typical analysis, such as Cronbach's alpha reliability estimates, only shows the consistency of person responses (Sijtsma, 2009), Rasch analysis provides reliability figures both for person responses and for questionnaire items.

Additionally, Rasch model analysis uses separation, which shows the number of different groups within the sample and the number of different item difficulty levels (Fisher, 1992; Wright, 1996b).

Potentially, Rasch analysis could facilitate the redesign of better items for future surveys. Apple's (2013) study on foreign language classroom speaking anxiety employed a six-point Likert-style response format with no middle or neutral option. This is what a study on rating scales by Bradley, Peabody, Akers & Knutson (2015) recommends, arguing against scales that include a neutral middle category, although other studies suggest this may be a preferable, but not essential, step (Royal, Ellis, Ensslen, & Homan, 2010).

In order to help facilitate experimenting with Rasch in future, the response format for the 2017 survey was adjusted from a 5-point one to a 6-point one. All else was kept the same. Results for the 2017 survey are given in Table 4. As with the 2014-2016 surveys, Blue figures (N=18) are pre-program responses, red figures (N=18) are post-program responses from the same participants. Green figures (N=136) are responses from students who did not participate in the program. The survey was given online, using the Moodle "feedback" module. Program participants were about 3/4 male, mostly 3<sup>rd</sup> year students. Non-program participants were mostly male, largely 2<sup>nd</sup> year students. Responses are categorized below, but in the actual survey the items were randomly distributed.

**Table 4. 2017 Survey, 6-point response format**

Blue = pre-program responses, Red = post-program responses, Green = non-participant responses

A+ = strongly agree, A = agree, A- = somewhat agree,  
D- = somewhat disagree, D = disagree, D+ strongly disagree

Intergroup approach/avoidance tendency	A+	A	A-	D-	D	D+
日本に来ている留学生など外国人と友達になりたい。(I want to make friends with international students studying in Japan.)	4 4 14	7 9 23	5 4 49	2 0 25	0 1 19	0 0 6
日本の学校で留学生がいれば気軽に声をかけようと思う。(I would talk to an international student if there were one at school.)	0 0 1	2 3 5	6 8 23	4 4 53	4 2 39	2 1 15
日本で地域の外国人を世話するような活動に参加してみたい。(I want to participate in local volunteer activities that help foreigners living in Japan.)	0 1 2	2 3 7	7 5 39	3 7 39	5 0 30	1 2 19
留学生や外国人の学生と寮アパートなどでルームメートになってもよいと思う。(I wouldn't mind sharing an apartment or room with an international student.)	0 1 7	4 3 21	7 5 42	5 4 27	1 1 23	1 4 16
外国の人と話すのを避けられれば避ける方だ。(I try to avoid talking with foreigners if I can.)	1 1 20	4 2 36	4 5 48	8 4 21	1 4 8	0 2 3
もし、日本で隣に外国の人が越えてきたら困ったと思う。(I would feel somewhat uncomfortable if a foreigner moved in next door.)	0 0 8	1 0 15	3 2 22	5 3 34	8 8 36	1 5 21

<b>Interest in international vocation or activities</b>	<b>A+</b>	<b>A</b>	<b>A-</b>	<b>D-</b>	<b>D</b>	<b>D+</b>
外国人がたくさんいるところで、働いてみたい。(I want to work where many people from other countries work.)	0	2	5	4	5	2
	0	5	6	3	3	1
	5	7	29	36	40	19
日本にずっと住むつもりである。(I plan to live in Japan my whole life.)	5	7	4	2	0	0
	6	2	6	4	0	0
	63	41	23	5	3	1
海外で、ボランティア活動をしてみたい。(I'm interested in doing volunteer work overseas.)	0	1	7	3	6	1
	0	6	5	2	3	2
	3	15	34	34	27	23
海外の出来事は、自分の日常生活とあまり関係ないと思う。(I don't think what's happening overseas is related to my daily life.)	0	0	2	6	9	1
	1	0	1	4	7	5
	6	5	15	36	54	20
外国で働いてみたい。(I'd like to try working in a foreign country.)	0	3	5	6	3	1
	3	2	5	5	1	2
	5	15	29	26	32	29
海外出張の多い仕事は避けたい。(I'd rather not have a job that sends me overseas frequently.)	2	5	3	5	2	1
	1	4	4	5	4	0
	25	36	32	26	12	5

<b>Communication apprehension—Interpersonal conversation context</b>	<b>A+</b>	<b>A</b>	<b>A-</b>	<b>D-</b>	<b>D</b>	<b>D+</b>
初めて会う人と英語で会話をしたらとても緊張する。(I would feel very nervous participating in a conversation in English with a new acquaintance.)	8	8	1	1	0	0
	6	4	6	2	0	0
	71	39	9	7	9	1
英語で会話することは楽しいと思う。(I would enjoy having a conversation in English.)	1	5	9	2	1	0
	5	7	4	0	2	0
	5	21	54	31	17	8
英会話に参加しようとしたら、言葉が出なくて黙ってしまう気がする。(If I tried to have an English conversation, I would be at a loss for words.)	5	3	9	1	0	0
	4	2	9	3	0	0
	59	38	18	11	7	3
英語で会話することは怖く思わない。(I am not afraid of participating in an English conversation.)	0	1	5	6	3	3
	1	3	5	5	2	2
	8	14	23	31	36	24
英語で会話すると考えただけで緊張する。(Even the idea of having a conversation in English makes me nervous.)	3	3	9	2	1	0
	2	2	7	2	3	2
	36	35	36	19	8	2
英語で会話することに自信がある。(I would be confident if I had a conversation in English.)	0	0	1	6	7	4
	0	0	4	4	7	3
	2	3	7	27	45	52

<b>Communication apprehension—Presentation context</b>	<b>A+</b>	<b>A</b>	<b>A-</b>	<b>D-</b>	<b>D</b>	<b>D+</b>
英語でプレゼンをするととても緊張する。(Giving a presentation in English would make me terribly nervous.)	4	7	4	2	1	0
	4	4	6	3	0	1
	79	34	12	5	6	0
人前で英語のプレゼンをすると考えただけでも怖くなる。(Even the idea of giving a presentation in English makes me afraid.)	3	4	4	4	3	0
	2	0	7	5	3	1
	51	31	30	11	10	3
人前で英語のプレゼンをするとすぐに冷静さを失う。(If I gave a presentation in English, I would quickly lose my calm.)	3	2	3	7	3	0
	2	4	2	5	2	3
	31	37	28	22	16	2
人前で英語のプレゼンをするのは平気である。(I would not mind speaking in English before a group.)	0	1	6	4	4	3
	0	4	5	5	3	1
	2	5	10	27	48	44
英語でプレゼンをすることは怖く思わない。(I am not afraid of giving a presentation in English.)	0	1	3	6	4	4
	0	6	3	4	4	1
	9	9	16	32	40	30
英語でプレゼンすることに自信がある。(I would be confident if I gave a presentation in English.)	0	0	3	2	6	7
	0	2	2	5	6	3
	1	1	8	18	50	58

Again, the data is offered here only in ‘raw’ form. A statistical treatment is required to establish validity and reliability of items in each of the four contexts. There is considerable disagreement as to which statistical tests are appropriate in this case, which this short paper cannot accommodate. Generally, however, the same patterns as the 2014-2016 survey results can be seen: Post-program responses are favorable, both to pre-program responses as well as non-participant responses. Positive responses to international posture-related items increase, and negative responses to apprehension-related items decrease. In short, responses by program participants suggest that their attitude toward an international community improves, while their apprehension toward communicating in a foreign language is lowered.

Once a plan can be established as to how best to analyze the results, the details in this general pattern may emerge. It will be necessary to ascertain which items work, which items need adjusting, and which need rewriting or replacement entirely. It would also be helpful to reassess what constructs are the best measure of lowered anxiety among program participants; that is, whether it is appropriate to measure elements of international posture and communication apprehension, and whether a Likert-style survey is the most effective for this particular case, as opposed to another kind of data elicitation method. The current survey incarnation is an attempt to bolster the mechanics of a previous instrument using the context of relevant survey literature. It may be, however, that an entirely different approach—for example one that makes more use of student commentary rather than numerical responses to survey items—may be more revealing.

While a good Likert-style survey is arguably one that reduces bias to a minimum, it is arguable that undue concern over bias, and in fact

unswerving devotion to Likert scales, is not warranted. For example, John Johnson (2014), Professor Emeritus of Psychology at Pennsylvania State University, makes a convincing argument, through statistical analysis and with reference to the literature, that acquiescence and social desirability biases are in fact negligible; that they are psychometric phantoms that merely haunt the credibility of data in personality tests. Meanwhile Johns (2010) concludes his own treatise on Likert items and scales by observing that there are arguments for avoiding Likert-style surveys, because questions are better than statements. He remarks, “As quite often in survey design, then, there is a trade-off between convenience—for both researchers and respondents—and data quality. The dictates of the former mean that the Likert method will probably remain the workhorse of public opinion research (p.10).” If so, he adds, it is essential to follow the rules as much as possible. It will be helpful to continue to refer to the literature in subsequent studies that undertake statistical evaluation of the data. The employment of statistics cannot guarantee accuracy or absolute transparency in any data. Even the most rigorously polished numerical data maintain a slight opacity. Grounding how one constructs, administers and analyzes a survey within the framework of the related literature will, however, help paint the reports of future survey results in more persuasive hues.

For as much as there is argument about Likert formats, however, there are good guides to refer to (see e.g. Lietz, 2010; Carifio & Perla, 2007). In particular, J.D. Brown (2010) offers a handy list of things to remember, from his own experience with the literature. This list is reproduced in Table 5, as it may be a convenient and relevant reference point for those wishing to undertake future consideration of this study.

**Table 5. Likert advice from J.D. Brown (2010)**

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With regard to Likert *items*:

1. We must think about individual Likert items and Likert scales (made up of multiple items) in different ways.
2. Likert items represent an item format, not a scale.
3. Whether Likert items are interval or ordinal is irrelevant in using Likert scale data, which can be taken to be interval.
4. If a researcher presents the means and standard deviations (interval scale statistics) for individual Likert items, he/she should also present the percent or frequency of people who selected each option (a nominal scale statistic) and let the reader decide how to interpret the results at the Likert-item level.
5. In any case, we should not rely too heavily on interpreting single items because single items are relatively unreliable.

With regard to Likert *scales*:

1. Likert scales are totals or averages of answers to multiple Likert items.
2. Likert scales contain multiple items and are therefore likely to be more reliable than single items.
3. Naturally, the reliability of Likert scales should be checked using Cronbach alpha or another appropriate reliability estimate.

4. Likert scales contain multiple items and can be taken to be interval scales so descriptive statistics can be applied, as well as correlational analyses, factor analyses, analysis of variance procedures, etc. (if all other design conditions and assumptions are met).

## 5. Conclusion

I have offered a potential first step toward improving a survey instrument to measure several elements related to foreign language anxiety for students participating on a short-term exchange program in a setting where English is a lingua franca rather than a subject of study. Because the number of students joining these programs seems to be on the rise, it is worthwhile to pursue student feedback on their experiences. When it comes to foreign language anxiety and the reduction thereof, the majority of studies still center on the classroom learning environment (see e.g. Williams & Andrade, 2008, p.182 for a list of studies). Few are devoted to measuring anxiety with regard to conversational communication, in or out of the classroom, as well as in or out of the country. As Japanese universities refocus their overseas

programs from locations where English is predominantly a native language to locations where English is used as a lingua franca, there will be a lot of opportunities to study what effect participation in these programs has in terms of reducing students' anxiety with regard to communicating in a foreign language and interacting with a foreign community. If these programs can be shown to boost the willingness to communicate in English as a foreign language among even some students, they have a much better chance of receiving continued financial support. In some small way, then, efforts to measure and understand WTC in the ELF (English as a Lingua Franca) context may be a vital part to MEXT's vision of instilling a sense of 'globalness' in the next generation. The more quality survey instruments and techniques we can design to achieve this, the better.

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**Appendix:****Hokkaido Information University (HIU) + Rajamangala University of Technology Thanyaburi**

Exchange Program Process (from Rian, 2016, p.86, adapted from Anada, 2015, p.22, my translation)

WDC = Web Design Contest, SFC = Short Film Contest, CPC = Computer Programming Contest

