

Increasing University Students' Willingness to Communicate Via Skills Training

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Students at a Japanese science and technology university were given before and after questionnaires to assess their willingness to communicate in various situations. Respondents were separated into two groups: One group received training in public speaking; the other group received discussion and general conversation training. After 6 months, the public-speaking group showed significant increases in self-confidence and lowered anxiety in public-speaking tasks compared with the discussion group, indicating that task training can impact willingness to communicate over the long term.

科学技術を学ぶ大学生に、様々な場面でコミュニケーションする意欲を測定する為に、事前事後のアンケートを行った。対象者をプレゼンテーションの訓練を受けたグループと、ディスカッションと一般的な会話のトレーニングを受けたグループの2グループに分けた。6ヶ月後、プレゼンテーションの訓練を受けたグループは、ディスカッショングループと比べて有意差的に自信が付き、緊張が減少した結果が見られた。この結果から、タスクトレーニングは、長期的に見てコミュニケーションする意欲に効果的であるということが判明した。

Motivation to learn a foreign language has received a great deal of attention in the past two decades; hundreds of papers and numerous books have been published on the subject (Dörnyei, Henry, & Muir, 2016). Researchers working in Japan and studying Japanese learners of EFL have been at the forefront of this movement. Despite this abundance of research, however, Japanese university students appear to possess especially low levels of motivation to learn English. A 1998 survey of over 300 instructors at national universities in Japan found that 85% of teachers believed that declining academ-

ic performance in the previous decade was a serious problem and motivation to tackle assignments voluntarily and willingly was lacking (Suzuki, Arai, & Yanai, 1999).

There are many possible reasons for this low motivation. Years of test-oriented, grammar-based instruction and the stressful entrance exam system can leave many students exhausted and “burned out” by the time they reach university. The weak economic climate and poor job prospects for graduates may leave some students feeling that the rewards of studying English are not worth the effort required. Moreover, an increasing tendency among young people towards *uchimuki* (literally, “facing inwards,” a decreased interest in the world outside of Japan), in contrast with attitudes in previous decades when *kokusaika*, or internationalization, was emphasized, may result in a lower level of international posture—a key component of motivation among Japanese learners (Furuichi, 2014; Yashima, 2000, 2013).

Japanese science and engineering students appear to be particularly susceptible to lower achievement in English—possibly related to lower motivation—than their peers (Falout & Maruyama, 2004; Suzuki, Arai, & Yanai, 1999). In 2013, the average TOEIC score for Japanese science and engineering students was 411; information science students scored 399. This can be compared to 434 for law and sociology majors and 472 for students of international relations (Educational Testing Service, 2013).

Closely connected to language learning motivation is willingness to communicate (WTC). Some students seek out opportunities to communicate using English. Others avoid them: Barely speaking in class and contributing very little, they tend to end conversations as quickly as possible. That practicing genuine communication is key to improving language skill is, nowadays at least, taken as given. However, many Japanese students seem to be unwilling to communicate in English. The question, then, is: What can Japanese university teachers, and in particular those of us working with students of science and technology, do to improve this situation? This paper is an examination of one attempt to increase motivation and WTC through the application of skills training.

Research Into Motivation and WTC

WTC was originally conceived of in an L1 context by McCroskey and Baer (1985), who defined it as the probability of engaging in communication when free to do so. It was considered a stable, trait-like characteristic, influenced by communication apprehension, perceived competence, and introversion-extroversion (McCroskey & Richmond, 1987). MacIntyre, Dörnyei, Clément, and Noels (1998) sought to expand the notion of WTC to the L2 and redefined it as “a situational variable with both transient and enduring influences” (p. 546). They noted that it “varies considerably over time and across situations” (p. 545). The well-known heuristic model for WTC conceived by MacIntyre *et al.* is presented in Figure 1. It consists of a pyramid-like structure with six layers. Relatively stable, underlying factors are at the bottom, in Layers 4, 5, and 6. Above them are more immediate and situation-specific factors (Layers 2 and 3), leading to the apex of the pyramid—manifested L2 use. Importantly, Layer 4 consists of motivational propensities: interpersonal motivation, intergroup motivation, and self-confidence. Thus, motivation should be regarded as a direct antecedent to WTC and actual L2 use.

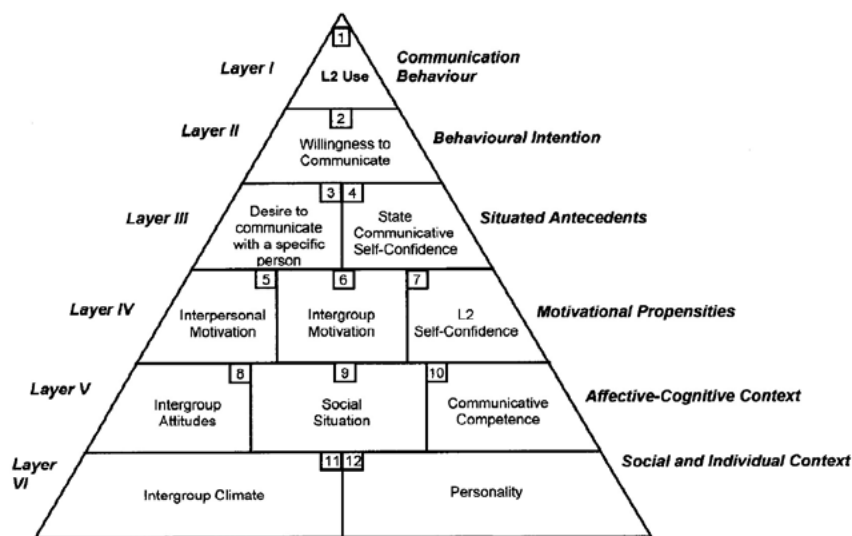


Figure 1. Pyramid model of L2 willingness to communicate (from MacIntyre, Dörnyei, Clément, & Noels, 1998; reproduced with permission).

Recently, motivation has been considered from a complex dynamic systems perspective (e.g., Dörnyei, Henry, & Muir, 2016; Dörnyei, McIntyre, & Henry, 2015). In this view, motivation is a dynamic system that can fluctuate rapidly in the short term and ebb and flow over the long term. It is complex in the sense that it is driven by a great number of variables; past successes and failures provide the system with positive and negative feedback, such that the future direction of the system is a function of both current and past states, making it very hard to predict.

The issue of WTC as a dynamic variable has been explored by a number of researchers. Kang (2005) gave learners L2 tasks and then interviewed participants about their WTC, which was found to stem from feelings of excitement, responsibility, and security, which in turn were related to situational variables such as topic, interlocutor, and context. Kang concluded that L2 WTC should be redefined as a state variable that can change from moment to moment. MacIntyre and Legatto (2011) gave evidence for this in a study in which they videotaped learners during communicative tasks and then asked subjects to rate their level of WTC at various times during the tasks. WTC was found to fluctuate rapidly depending on the task and the corresponding anxiety level. MacIntyre (2007) also emphasized WTC as a volitional process, made spontaneously while balancing (among other factors) a desire to communicate with a fear of failure or embarrassment.

In the existing literature, however, there is very little research dealing with the issue of what educators can do to directly influence a learner's WTC. This study was an attempt to address this gap; it deals with the possibility of raising motivation and WTC through the use of skills training. The research question guiding this study was the following: Can targeted skills training produce long-term changes in self-confidence, language anxiety, and desire to communicate?

Method

Participants

The participants ($N = 208$; 182 male, 26 female) were 1st-year ($n = 110$) and 2nd-year ($n = 98$) Japanese students aged 18-21 at a private Tokyo-area university specializing in science and technology. Student majors were in one of five areas: physical sciences, biological sciences, engineering technology, information technology, or architecture.

Participants were enrolled in either the author's 1st-year or 2nd-year compulsory Communicative English courses. Each course consisted of two 15-week semesters, with one 90-minute lesson per week. Classes were comprised of students who had received similar scores on a placement test, with these students falling in the third cohort of

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8. Class sizes ranged from 20-28 students. In the 1st-year course (Group 1), students learned small-group discussion skills with an emphasis on stating and supporting opinions and questioning others. All 2nd-year (Group 2) students had, by necessity, successfully completed a 1st-year course, although the majority had done so with a different instructor than the author and with a different course focus. The 2nd-year course incorporated some discussions but focused mainly on presentation skills. A new skill was taught each week, and students were given a topic about which they would create an impromptu speech while practicing that skill. Typically, students practiced their talks a number of times in pairs before giving a mini-presentation in front of a small group of peers. As a result, Group 2 received extensive training and practice in giving presentations; Group 1 received no such training or practice. This division of groups necessarily utilized intact classes, which, although in widespread use, has been criticized as statistically problematic by some researchers (e.g., Baumgartner, 1969). I address some of these problems below.

In addition to Communicative English, all students were also enrolled in a concurrent English reading and writing course at the 1st- or 2nd-year level with a different instructor. None of the students participating in this study had spent any significant time (i.e., more than a week) studying English abroad. Participant groups are summarized in Table 1.

Table 1. Participant Breakdown

Student group	Male	Female	Total
First-year (Group 1)	96	14	110
Second-year (Group 2)	86	12	98
All	182	26	208

Instruments

A WTC questionnaire (see Appendix A) was used, based on the one used by Matsuoka (2009) but with five additional items asking students to rate the actual activities they might do in their Communicative English classes (e.g., “Stand in front of the class and talk about your vacation for 3 minutes” and “Discuss your opinions in a group of 4”) for a total of 35 communicative situations. For each situation, respondents rated their self-confidence, anxiety, and desire to communicate on a scale from 0 (*none at all*) to 3 (*a great deal*). The questionnaire was administered twice, first during the 1st week of May 2014, and again approximately 6 months later, at the end of October or early November 2014.

Both questionnaires were given to students on a voluntary basis with the assurance that responses would have no bearing on their class grades. Due to absences and other irregularities, not all participants completed both questionnaires. Respondents were requested to double check their papers for missing answers before submission, so the rate of missing values was very low. In the case of missing data, the mode value for that question was substituted rather than list-wise omission of that entire case. A number of questionnaires were returned with unacceptable answer patterns (for example, the selection of “3” for every answer) and these were excluded from analysis. The reliability of the questionnaire was assessed and found to be reasonably high, with subscales having a Cronbach’s alpha ranging from .702 to .875 (see Appendix B).

A repeated-measures ANOVA was conducted using IBM SPSS 22 to determine if changes in public speaking confidence and public speaking anxiety with peers after 6 months of instruction were different between the two groups.

Results and Discussion

Results of the WTC Questionnaires

The raw results of the WTC questionnaires administered in Semesters 1 and 2 are presented below, in Figure 2 (Group 1) and Figure 3 (Group 2). Descriptive statistics are presented in Appendix 2. Three sets of results are presented on the same x-axes: self-confidence, anxiety, and desire.

A few general trends common to both groups should be noted. Unsurprisingly, items about which respondents had high confidence tended to have correspondingly high desire and low anxiety levels. Speaking with peers gave respondents the highest feelings of confidence, lowest anxiety, and highest desire or WTC. A large increase in confidence was observed in Group 1, as they became more comfortable speaking with their peers; this increase was smaller for Group 2. As Group 2 students were in their 2nd year, they may already have been somewhat familiar with the members of their classes and therefore experienced less of an increase. At the other end of the scale, performing a public speaking task for an audience of foreigners gave respondents the highest anxiety and correspondingly low confidence and desire. Revealingly, speaking with a foreign stranger was the cause of as much or more anxiety as performing a speech in front of peers. Most people would rate public speaking as extremely stressful, so this shows how difficult respondents imagined it would be to approach and converse with a foreign stranger outside of the classroom. Indeed, the average results indicate that most students would be more comfortable interacting with a Japanese teacher than a foreign teacher, even in English, despite their relative familiarity with the author (a foreign resident of Japan).

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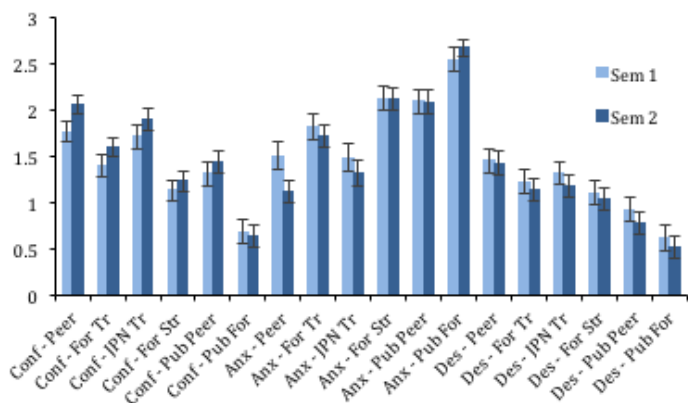


Figure 2. WTC Changes in Group 1 (1st-year students, $n = 103$). Conf = confidence, Anx = anxiety, Des = desire, Peer = speaking with peers, For Tr = speaking with a foreign teacher of English, Jpn Tr = speaking with a Japanese teacher of English, For Str = speaking with a foreign stranger, Pub Peer = performing a public speaking task for an audience of peers, Pub For = performing a public speaking task for an audience of foreigners; Error bars represent the 95% confidence interval of the mean.

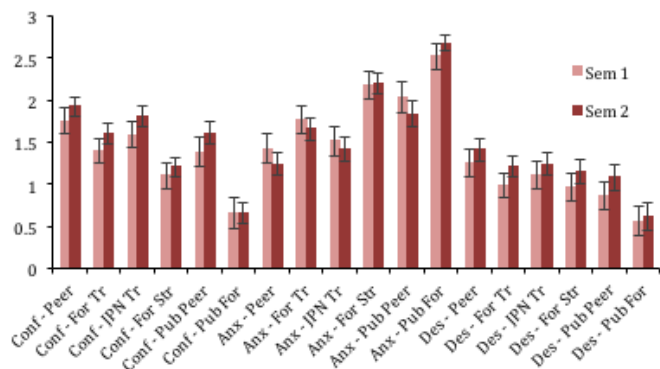


Figure 3. WTC Changes in Group 2 (2nd-year students, $n = 90$). Conf = confidence, Anx = anxiety, Des = desire, Peer = speaking with peers, For Tr = speaking with a foreign teacher of English, Jpn Tr = speaking with a Japanese teacher of English, For Str = speaking with a foreign stranger, Pub Peer = performing a public speaking task for an audience of peers, Pub For = performing a public speaking task for an audience of foreigners; Error bars represent the 95% confidence interval of the mean.

Results also reveal some important differences between the two groups. Recall that Group 1 received discussion training and Group 2 received training in giving presentations. The results from Group 2 show that confidence in public speaking tasks rose after 6 months, as did desire. Anxiety when giving a speech to peers declined, although anxiety rose when respondents considered speaking to a foreign audience. Group 1, the discussion training group, had varying results. Confidence in public speaking to peers rose, but declined for foreigners. Anxiety declined slightly with peers but rose with foreigners, and desire to perform a public speaking task declined for both kinds of audience. Considering the size of the error involved with the estimate of the mean for all measures, however, these results are only tentative and further investigation is required.

Another puzzling difference is that in Group 1, desire to communicate decreased; in contrast, in Group 2 this measure started lower but increased slightly. This may be due to the initial enthusiasm of 1st-year students becoming dampened over time, but the difference may also be due to the different kinds of activities students performed in class. Further investigation through methods such as individual interviews may shed light on why levels of desire changed as they did.

In the first test of public speaking confidence, there were two outliers in the data, as assessed by inspection of a boxplot for values greater than 1.5 box-lengths from the edge of the box. These outliers were removed from the analysis. Following this, the results for public speaking confidence were normally distributed for Group 2 at both time points, as assessed by Shapiro-Wilk's test ($p > .05$). They were not normally distributed for Group 1, however, with Shapiro-Wilk's tests of $p = .019$ before and $p = .001$ after treatment. It was decided to proceed with the ANOVA as it is considered somewhat robust. There was homogeneity of variances, as assessed by Levene's test ($p > .05$), and homogeneity of covariances, as assessed by Box's test of equality of covariance matrices ($p = .219$). Results of the ANOVA are summarized in Table 2. There was no statistically significant interaction between teaching method and time on public speaking confidence. The main effect of time showed a statistically significant difference in public speaking confidence at the different time points. Cohen's d was 1.058, indicating a large effect size (Cohen, 1988). The main effect of group showed no statistically significant difference between groups.

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Table 2. ANOVA Results for Public Speaking Confidence

Criteria	df	F	Partial η^2	p
Interaction of teaching methods, time	155	9.789	.050	.101
Time	155	42.089	.185	< .0005
Group	155	2.859	.015	.093

In the analysis of public speaking anxiety, several outliers were found by examining boxplots. These were removed from the analysis. The Shapiro-Wilk's tests showed that public speaking anxiety was normally distributed for one data set (2nd year, Time 2), but the other three sets were not normally distributed ($p < .05$) and were skewed towards high public speaking anxiety. Again, it was decided to proceed with the analysis, making note of the nonnormal distributions. There was homogeneity of variances, as assessed by Levene's test ($p > .05$), as well as homogeneity of covariances, as assessed by Box's test of equality of covariance matrices ($p = .072$). Results are summarized in Table 3. There was no statistically significant interaction between the teaching methods and time on public speaking anxiety. The main effect of time showed a statistically significant difference in public speaking anxiety at the different time points, Cohen's $d = .685$, an intermediate effect size. The main effect of group also showed a significant difference between groups.

Table 3. ANOVA Results for Public Speaking Anxiety

Criteria	df	F	Partial η^2	p
Interaction of teaching methods, time	152	6.030	.032	.150
Time	152	17.218	.086	< .0005
Group	152	11.006	.057	.001

Changes are summarized in Table 4 and depicted in Figure 4. Data are presented as mean \pm standard error. Public speaking confidence increased from $1.275 \pm .064$ to $1.406 \pm .063$ for Group 1 and from $1.296 \pm .069$ to $1.672 \pm .068$ for Group 2. Public speaking anxiety decreased from $2.192 \pm .066$ to $2.11 \pm .066$ in Group 1 and from $2.030 \pm .071$ to $1.715 \pm .071$ in Group 2.

Table 4. Group Changes in Public Speaking WTC

Group	Public speaking confidence		Public speaking anxiety	
	Before	After	Before	After
1	$1.275 \pm .064$ (1.149-1.400)	$1.406 \pm .063$ (1.281-1.530)	$2.192 \pm .066$ (2.062-2.322)	$2.111 \pm .066$ (1.981-2.241)
2	$1.296 \pm .069$ (1.160-1.432)	$1.672 \pm .068$ (1.537-1.806)	$2.030 \pm .071$ (1.891-2.170)	$1.715 \pm .071$ (1.576-1.855)

Note. Figures are mean \pm SE (95% confidence interval).

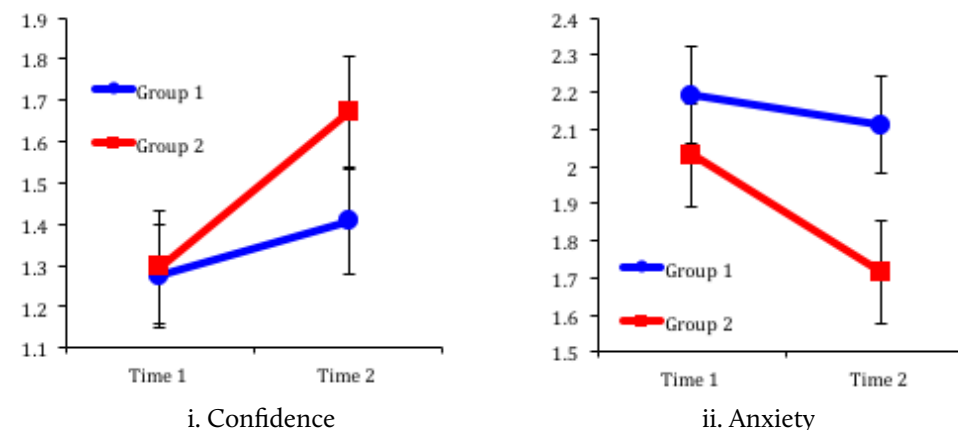


Figure 4. Changes in public speaking WTC over 6 months. Error bars represent 95% confidence intervals.

In Group 1, the discussion group, no significant changes were observed, but in Group 2, the public speaking group that received extensive training and practice, confidence increased and anxiety, a crucial impediment to WTC, decreased. No significant changes at the $p = .05$ level were found in desire to perform public speaking tasks.

On one hand, these results may seem to be of the common-sense variety: Train students in a particular task and their confidence with that task will increase while their anxiety decreases. The possible significance of these results, however, lies in the relative

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scarcity of similar results in the literature. No other studies that this author is aware of have reported long-term changes in learner WTC as a result of task training.

Discussion

The results are encouraging to classroom teachers for a number of reasons. When considering motivation—and the resulting WTC—as a complex dynamic system, it may be tempting to throw up one's hands and declare that motivation is so intricate that we cannot hope to fully understand it, let alone consciously influence it. On the contrary, the classroom environment (of which instructors are a key component) is an extremely influential part of the learning experience and exerts a huge influence on learner motivation. Furthermore, motivational factors are interlinked and should be viewed not as an inscrutable *black box*, so to speak, but rather as a *web*; pulling on one strand can have a wide-ranging influence with long-lasting repercussions. An activity done in class may lead to increased curiosity about some aspect of English, a change in attitudes toward the L2 community, or even a decision to study abroad.

Many recent studies of motivation have had a tendency to remove the teacher from the equation, focusing instead on the learners and their individual psychological differences. Although these factors are doubtless crucial, I would like to put an emphasis back on the role played by the classroom instructor. In particular, the results of this study suggest that teachers can directly influence learner WTC by the types of activities done in the classroom. Practicing a particular skill can increase confidence while lowering anxiety. Exposing students to a wide variety of communicative situations and providing them with the skills necessary to navigate those waters seem to be concrete ways of potentially increasing students' WTC.

Limitations of the Study

This study has treated Group 1 as a kind of control group, as they received no presentation skills training, in contrast to Group 2, considered the treatment group. The two groups were drawn from different academic years, however, so this may have introduced important differences, for example in levels of confidence, anxiety, and desire to communicate with peers. Ideally, the study would have been conducted with groups drawn randomly from the same population, but for practical and ethical reasons all students enrolled in the presentation group had to be taught the same skills.

As some researchers have pointed out (e.g., Baumgartner, 1969) it can be dangerous to utilize nonrandomly selected intact classes in studies in which one entire group receives

a particular treatment and another group receives a different treatment, because the different results may be due to fundamental group differences as opposed to the effect of the treatment itself. One difference could be initial ability. As Baumgartner stated, "If Class A is significantly better than Class B at the beginning of the experiment, then either Class A will still be significantly better at the end of the experiment or the two classes will not differ significantly in ability" (p. 632). Note, however, that in this study it was Group 2, the 2nd-year students, who experienced a greater improvement; it is unlikely that Group 1 failed to improve simply because of a ceiling effect or higher initial ability. Anecdotally, this author and other instructors at the same university agreed that there was little or no difference in speaking ability between 1st- and 2nd-year students. Both groups were placed in the author's classes following an initial placement test, with both 1st- and 2nd-year groups consisting of those students placing in the 3rd cohort of 8. These facts together make it likely that Groups 1 and 2 were very similar in initial communicative ability. An aptitude test, such as the TOEIC test, would have been helpful in supporting this assumption. Random sampling would have been necessary to strengthen the statistical conclusions of this study, but as this was classroom research, a study with a control group that received no training whatsoever was, for obvious reasons, impossible.

Outliers

During the initial data screening, a small number of respondents were found to have submitted questionnaires with unacceptable answer patterns, such as the selection of "3" for every answer. It is clearly contradictory to view an activity with extremely high confidence and high desire while experiencing an accompanying maximum anxiety, so these responses were discarded. In subsequent data screenings, a number of outliers were identified. An examination of these questionnaires revealed that respondents had circled responses essentially at random. Unfortunately, we must interpret these results as indicating that the participants did not have enough motivation to complete the survey properly. These results seem to imply that it may be impossible to use questionnaires with learners whose motivation is so low that they will not participate earnestly.

Conclusions and Future Directions

This study examined the changes in WTC over 6 months in two groups: a group that received training in presentation skills and a group that received no presentation training but instead learned discussion and conversation skills. The presentation group was found to have undergone a significant increase in self-confidence when giving speeches to their peers and an accompanying decrease in anxiety. No significant change was observed in

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their desire to speak publicly; although the raw results show an increase, the estimation errors mean this result was not statistically significant.

Considering the relative scarcity of similar studies, future research should attempt to replicate these results under more controlled conditions. One area to improve might be increasing the resolution of the questionnaire scale, which currently is somewhat coarse, running from 0-3. Some researchers (e.g., Larson-Hall, 2010) suggest that a level of .10 may be more appropriate for EFL studies, so checking the results at this level may yield more statistically robust findings. A longitudinal study of more than a year would also be desirable, possibly incorporating a mixed-methods approach with interviews in which subjects could expand in more detail on how and why their feelings of confidence, anxiety, and desire to communicate changed. Interviews may also be an effective way of gaining information about very low-motivation individuals who do not complete questionnaires accurately. The combination of qualitative and quantitative approaches in a longitudinal study may help address the inherent complexity of this topic. Finally, a questionnaire incorporating items related to discussion skills could determine whether learners obtaining discussion training undergo similar increases in WTC.

Bio Data

Jeff Broderick has been teaching at universities in Japan since 2004 and at Tokyo Denki University since 2013. His research interests centre on motivation and willingness to communicate, but he is also interested in Japanese cultural studies and translation. In his free time, he practices Japanese martial arts.

References

- Baumgartner, T. (1969). A study of intact classes. *Research Quarterly, American Association for Health, Physical Education and Recreation*, 40, 632-634.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Dörnyei, Z., Henry, A., & Muir, C. (2016). *Motivational currents in language learning: Frameworks for focused interventions*. New York, NY: Routledge.
- Dörnyei, Z., McIntyre, P., & Henry, A. (Eds.). (2015). *Motivational dynamics in language learning*. Bristol, UK: Multilingual Matters.
- Educational Testing Service. (2013). *TOEIC test data & analysis 2013*. Retrieved from <http://www.toeic.or.jp/library/toeic_data/toeic_en/pdf/data/TOEIC_Program_DAA.pdf>
- Falout, J., & Maruyama, M. (2004). A comparative study of proficiency and learner demotivation. *The Language Teacher*, 28(8), 3-9.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London, UK: Sage.
- Furuichi, N. (2014, September 17). The fragile happiness of Japan's "insular" youth. *East Asia Forum*. Retrieved from <<http://www.eastasiaforum.org/2014/09/17/the-fragile-happiness-of-japans-insular-youth/>>
- Hutcheson, G., & Sofroniou, N. (1999). *The multivariate social scientist*. London, UK: Sage.
- Kang, S. J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System*, 33, 277-292.
- Larson-Hall, J. (2010). *A Guide to doing statistics in second language research using SPSS*. New York, NY: Routledge.
- MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The Modern Language Journal*, 91, 564-576.
- MacIntyre, P. D., Dörnyei, Z., Clément, R., & Noels, K. (1998). Conceptualizing willingness to communicate in a L2: A situation model of L2 confidence and affiliation. *The Modern Language Journal*, 82, 545-562.
- MacIntyre, P. D., & Legatto, J. J. (2011). A dynamic system approach to willingness to communicate: Developing an idiodynamic method to capture rapidly changing affect. *Applied Linguistics*, 32, 149-171.
- Matsuoka, R. (2009). *Japanese college students' willingness to communicate in English*. Saarbrücken, Germany: Lambert.
- McCroskey, J. C., & Baer, J. E. (1985, November). *Willingness to communicate: The construct and its measurement*. Paper presented at the annual convention of the Speech Communication Association, Denver, CO.
- McCroskey, J. C., & Richmond, V. P. (1987). Willingness to communicate. In J. C. McCroskey & J. A. Daly (Eds.), *Personality and interpersonal communication* (pp. 129-156). Newbury Park, CA: Sage.
- Suzuki, N., Arai, K., & Yanai, H. (1999). *Daigakusei no gakuryoku teika ni kansuru chousa kekka* [Results of a survey on the decline in college students' performance]. *Daigaku Nyushi Forum*, 22, 50-56.
- Yashima, T. (2000). Orientations and motivation in foreign language learning: A study of Japanese college students. *JACET Bulletin*, 31, 121-133.
- Yashima, T. (2013). Imagined L2 selves and motivation for intercultural communication. In M. Apple, D. Da Silva, & T. Fellner (Eds.), *Language learning motivation in Japan* (pp. 35-53). Bristol, UK: Multilingual Matters.

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Appendix A
WTC Questionnaire and Results

Questionnaire adapted from Matsuoka (2009), with additional items by the author.

Scale:

Self-Confidence	Anxiety	Desire
3: can do this easily	3: feel extremely anxious	3: definitely want to try
2: can maybe do this	2: feel quite anxious	2: would like to try
1: probably can't do this	1: feel a bit anxious	1: depends on time, place
0: definitely can't do this	0: don't feel anxious at all	0: would avoid if possible

Note: For each question, upper number is the 1st-year mean; lower is the 2nd-year mean. Results are from the first questionnaire in May 2014.

Item No.	Communicative Situation	Self Conf.	Anxiety	Desire
1 In Class With Peers				
7	Ask your pairwork partner what time it is	2.33 2.18	1.03 1.04	1.82 1.52
12	Talk to your pairwork partner about a TV show you saw	1.60 1.73	1.59 1.21	1.38 1.31
14	Discuss your opinions in a group of 4	1.69 1.55	1.56 1.69	1.34 1.07
15	Stand and discuss your hobbies with a partner for 3 minutes	1.54 1.59	1.68 1.62	1.23 1.07
26	Explain to your pairwork partner how to get to a location using a map	1.57 1.54	1.75 1.61	1.39 1.21
27	With your pairwork partner, say 5 words beginning with "s"	2.17 2.11	1.18 1.14	1.76 1.54
31	With your pairwork partner, talk about your summer vacation for 3 minutes	1.52 1.56	1.77 1.69	1.26 1.01
2 With a Foreign (Native English) Teacher				

3	Tell your native speaker teacher that the listening test audio was too fast	1.03 0.79	2.05 2.03	0.79 0.62
9	Ask a native speaker teacher the meaning of a word	1.97 1.89	1.41 1.42	1.81 1.35
11	Tell a native teacher that you would like the hand-outs from a class you missed	1.59 1.69	1.68 1.59	1.51 1.21
21	Answer questions about your vacation trip from a native speaker teacher	0.95 0.97	2.27 2.25	0.81 0.68
28	Ask a native speaker teacher to make a listening tape for you	1.13 1.28	2.03 1.87	1.03 0.76
35	Say hello to your native speaker teacher in the cafeteria	1.75 1.77	1.52 1.46	1.42 1.35
3 With a Japanese Teacher				
1	Ask your Japanese teacher to make a listening tape for you	1.71 1.48	1.56 1.58	1.17 0.77
2	Tell your Japanese teacher that the listening test audio was too fast	1.43 1.10	1.62 1.60	1.05 0.96
29	Using "classroom English" ask a Japanese teacher the meaning of a word	1.75 1.66	1.61 1.63	1.44 1.25
33	Say hello to your Japanese teacher in the cafeteria	2.00 2.13	1.18 1.15	1.65 1.44
4 With Foreign Strangers				
5	Phone a hotel in an English country to make a reservation	0.93 0.92	2.44 2.34	1.02 0.89
6	Interview a native speaker for an article in the school newspaper	1.28 1.17	1.98 2.08	1.09 0.92
8	Speak to a foreigner sitting beside you on the train	0.76 0.79	2.22 2.30	0.73 0.68
17	In a restaurant, help a foreigner who seems unable to read the menu	1.05 1.06	2.14 2.10	1.17 1.08
18	Ask a foreign person for the time	1.61 1.34	1.67 1.97	1.26 0.96

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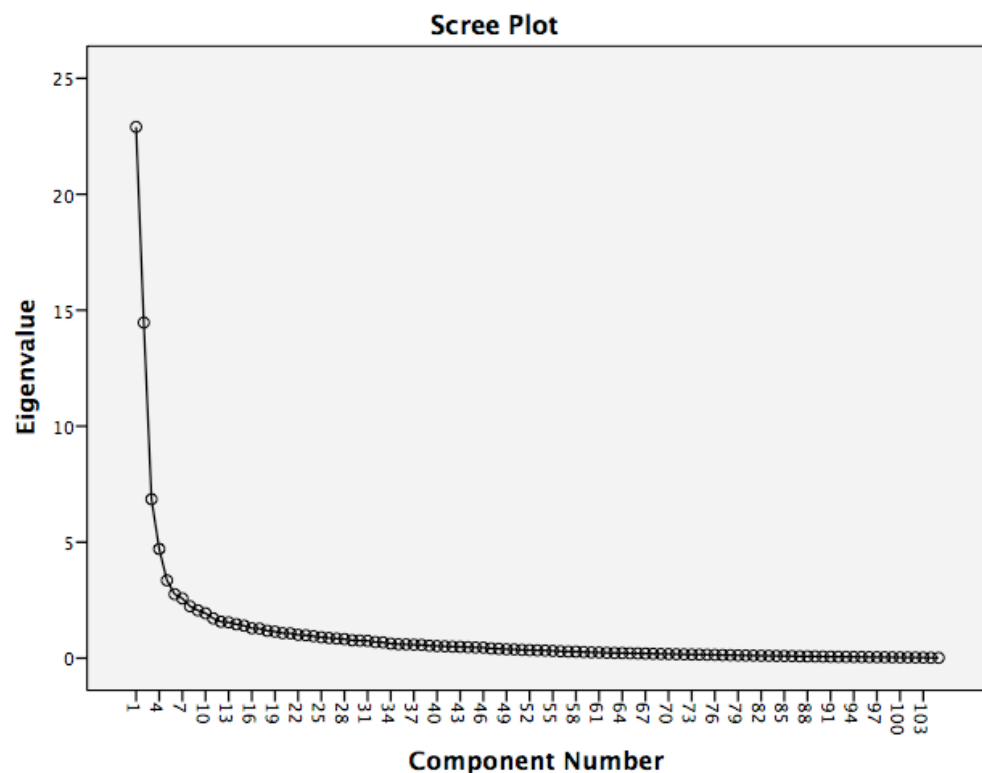
19	In the supermarket, help a foreigner who seems unable to understand what the cashier is saying	1.05 1.06	2.13 2.11	1.00 1.03
23	Phone an American CD shop to buy a rare CD available only overseas	0.95 1.00	2.35 2.28	1.00 0.85
25	Phone your host family to thank them for letting you stay with them	1.40 1.39	2.06 2.24	1.41 1.25
32	At the station, help a confused-looking foreigner	1.13 1.20	2.19 2.23	1.24 1.09
5 Public Speaking to Foreigners				
4	Do an interview for American TV about Japanese student life	0.79 0.72	2.46 2.48	0.69 0.75
20	Give a short welcome speech on behalf of your school for some visiting researchers from America	0.64 0.52	2.59 2.54	0.58 0.49
34	Participate in an English speech contest for Japanese students, judged by native English speakers	0.63 0.75	2.61 2.55	0.57 0.44
6 Public Speaking to Peers				
13	Stand in front of the class and talk about a TV show you saw	1.11 1.25	2.28 2.11	0.75 0.79
16	Stand in front of the class and discuss your hobbies for 3 minutes	1.12 1.34	2.22 2.11	0.80 0.83
22	Stand in front of the class and talk about your summer vacation for 3 minutes	1.08 1.20	2.29 2.14	0.75 0.76
30	Stand in front of the class and say 5 words beginning with "t"	1.96 1.75	1.59 1.75	1.40 1.06
7 Miscellaneous				
10	Phone an English-speaking friend to invite them to a party	1.25 1.13	1.98 1.80	1.20 1.04
24	Take a small group of English speaking visitors on a day trip around Tokyo	0.60 0.72	2.53 2.42	0.58 0.63

Appendix B
Descriptive Statistics of the WTC Questionnaire, Grouped

The bold figure in each column is the item mean, followed by the standard deviation.

Item	Group 1 (n = 103)		Group 2 (n = 90)					
	Sem 1	Sem 2	Sem 1	Sem 2				
Conf - Peer	1.76	0.58	2.05	0.49	1.75	0.64	1.93	0.55
Conf - For Tr	1.40	0.56	1.59	0.49	1.40	0.59	1.60	0.58
Conf - JPN Tr	1.71	0.60	1.90	0.59	1.59	0.68	1.81	0.61
Conf - For Str	1.13	0.57	1.23	0.53	1.10	0.65	1.20	0.54
Conf - Pub Peer	1.31	0.66	1.44	0.63	1.38	0.74	1.61	0.67
Conf - Pub For	0.68	0.68	0.63	0.59	0.66	0.76	0.65	0.58
Anx - Peer	1.50	0.74	1.11	0.61	1.43	0.72	1.24	0.65
Anx - For Tr	1.82	0.67	1.71	0.60	1.77	0.70	1.66	0.62
Anx - JPN Tr	1.48	0.73	1.32	0.69	1.52	0.75	1.42	0.66
Anx - For Str	2.12	0.63	2.12	0.60	2.18	0.71	2.20	0.58
Anx - Pub Peer	2.09	0.66	2.08	0.64	2.03	0.79	1.83	0.73
Anx - Pub For	2.54	0.60	2.67	0.46	2.52	0.68	2.67	0.44
Des - Peer	1.45	0.65	1.42	0.66	1.25	0.70	1.41	0.64
Des - For Tr	1.22	0.60	1.14	0.59	1.00	0.61	1.21	0.60
Des - JPN Tr	1.32	0.60	1.17	0.62	1.11	0.72	1.24	0.66
Des - For Str	1.10	0.66	1.03	0.60	0.97	0.68	1.15	0.67
Des - Pub Peer	0.92	0.66	0.78	0.61	0.86	0.72	1.08	0.73
Des - Pub For	0.61	0.72	0.52	0.63	0.56	0.74	0.62	0.76

Appendix C
WTC Questionnaire Scree Plot and Reliability



SPSS was used to perform a factor analysis on the WTC questionnaire data. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .775 (“good” according to Hutcheson & Sofroniou, 1999) and all KMO values for individual items were above the acceptable limit of .5 (Field, 2013). The resulting Scree Plot indicates that either 4 or 5 components should be retained. In examining the contributing items, the decision was made to retain the first 5 components for reasons of interpretability. These 5 factors in combination explained 49.80% of the variance. The first component is a combination of “self-confidence” and “desire to communicate” questionnaire

items. The second component, which scaled negatively, consists of “anxiety” items. The third component seems to consist of items connected to public speaking. The fourth component is ambiguous but mainly contains items related to speaking with peers or Japanese teachers. The fifth component is ambiguous. These factors are summarized below.

Summary of exploratory factor analysis results for WTC questionnaire (n = 193)

Factor	Name	No. of items	% of variance	Cronbach's Alpha
1	Self-confidence, desire to communicate	42	21.81	.875
2	Anxiety	30	13.78	.822
3	Willingness to speak publicly	7	6.53	.779
4	Desire to speak with peers, Japanese teachers	7	4.48	.745
5	Other	5	3.20	.702