

Post-Study Abroad Foreign Language Attrition

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Introduction

THERE EXISTS AN ABUNDANCE OF RESEARCH IN RELATION TO THE language gains made by students who participant in study abroad programs (i.e. Byram & Feng 2006; DeKeyser, 2007; Freed 1995; Mikami 2014; Wood 2007), but there is a relative lack of research into the possible loss of those language gains once students return to their original environment. Many initial gains in ability and motivation made through the intensive study in an immersive environment may not survive a return to an environment where the target language is no longer vital. As such, students can experience foreign language attrition. There are various categories of attrition of which, this study specific looks at the loss of an L2 in an L1 environment (De Bot & Weltens, 1995). In this case, the attrition can be further distinguished from other L2 attrition as “foreign language attrition” due to the language being acquired explicitly through schooling (Schmid & Mehotcheva, 2012).

Of course not all students lose their language gains after returning from a study abroad program. If that was the case, then there would be no point to learning a language abroad in the first place, but why is it that some students experience attrition while others don't? What factors can affect the amount of post-study abroad foreign language attrition? Previous research related to foreign language attrition and language learning during study abroad programs may hold some clues that could lead to the answers to these questions.

Literature Review

Students' beliefs in relation to language learning were looked at in a study in New Zealand both before and after a 15-week study abroad program involving a group of Japanese university students studying in the United States of America (Tanaka & Ellis, 2003). Learner beliefs can have an effect on motivation and language acquisition and can be affected by different environments. Thus, the new educational context of a study abroad program can have the effect of changing learners existing beliefs. Beliefs related to self-efficacy and confidence experienced the greatest change during the study abroad program and, though the change was not quite as large, there was also a significant strengthening in beliefs related to analytic and experiment learning. Despite this, no significant relationship between changing beliefs related self-efficacy and confidence and TOEFL scores could be found. This result was thought to be due to two factors: one being that the effect could be more strongly related to oral proficiency rather than what was measured by the TOEFL, and the other being that possibility of a delayed relationship rather between confidence and proficiency that cannot be seen immediately after the conclusion of a study abroad program.

In a longitudinal study over the course of three and a half years, Sasaki (2011) looks at the change in the English writing ability of Japanese university students who either studied abroad or in Japan. The study abroad program was seen to have a positive effect on the student's writing ability when compared to students who only studied English in Japan, but a decrease in gained English writing ability was also observed in many students after returning from their study abroad and entering their old environment once more losing the motivational forces that propelled them to increase their ability during their study abroad program. A decrease in the number of English classes and focus on job hunting in the 4th year was seen as having an adverse effect on the students' English writing ability.

An important factor discussed by Sasaki is the idea of "imagined L2-related communities" as opposed to "actual L2 communities" that students are in contact with

during their time abroad. An imagined community is defined as “groups of people, not immediately tangible and accessible, with whom we connect through the power of imagination.” In more specific terms as it applies to this research, an imagined L2-related community often consists of online communities or other correspondence in the L2 while not being in physical contact with the L2 as one would be during a study abroad program. Many students, especially those who participated in longer programs, frequently participated in imagined L2-related communities after returning from abroad by keeping in regular contact with people they met during their time abroad. These students improved their English abilities significantly more than those who did not. Such contact with an L2 environment even if it is not physical, may be a key factor in continuing to improve language abilities and preventing foreign language attrition after completing a study abroad program and returning.

With regard to foreign language contact during a study abroad program, while students experience greater contact than in their home country, there have been mixed results when it comes to the quality and quantity of said contact with some students’ expectations of interactions with host families and other native speakers not matching the reality of their experience (Tanaka, 2007). This was reinforced through Tanaka’s study of Japanese study abroad students in New Zealand where, while some had fruitful interactions with native speakers abroad, some students also experienced difficulties due to a lack of English language proficiency as well as the availability of other Japanese speakers nearby. These results will most likely be mirrored in the case of groups of study abroad students who live in dormitories during their program as well.

While the quality and quantity of language contact during a study abroad program may vary, it is still valuable to investigate what effect contact with the target language has on the development of a learner’s language ability. While the general belief that the increased amount of contact is facilitative to gains in language ability, some studies have produced results showing a positive relationship and others no relationship (Taguchi 2008). Furthermore, Taguchi’s own research compared the language contact with gains

in both the speed of comprehension of meaning and accuracy in 44 Japanese students participating in an intensive English program at an American university and was only able to find quite weak correlations with response time in some areas and no correlation in others. On the other hand, accuracy did not show a correlation with language contact at all.

Language attrition can generally be divided into four categories, L1 loss in an L1 environment, L2 loss in an L1 environment, L1 loss in an L2 environment, and L2 loss in an L2 environment (De Bot & Weltens, 1995). For the purpose of this study, I will of course be focusing on L2 loss in an L1 environment or even more specifically L2 studied as a foreign language by students as opposed to cases such as L2 loss in returnees from a time living abroad. De Bot and Weltens also discuss what areas of language may be more or less susceptible to language attrition, and they found that grammar and vocabulary were particularly vulnerable. In fact, in a study regarding the foreign language attrition seen in French learners in the Netherlands grammatical knowledge was the only area in which attrition was clearly observed (Raffaldini, 1990), but this study only tested the participants in receptive skills rather than productive skills such as speaking.

Despite this, the amount of research in the field of language attrition when it comes to learners of a foreign language is relatively sparse compared to other linguistic fields. The study of language attrition tends to be more focused on first language attrition, but in a more recent summary of research that has been done so far, Schmid and Mehotcheva (2012) discussed the factors that influence foreign language attrition in seven points: “productive skills are more vulnerable to attrition than receptive ones”, “attrition seems to set in rapidly and then level off”, “time alone is not enough for a language to attrite”, “attrition is not a linear process”, “initial proficiency, course grades and number of courses taken might be predictors of attrition/retention”, “once a language is sufficiently established/entrenched, it becomes impervious to deterioration”, and “rehearsal during the attrition period is not a sufficient factor to prevent attrition”. It is also put forth that continued efforts to “exercise” a language is needed to stave off attrition of said language

when it is no longer used as much as it once was. The language contact and proximity also seem to have an effect on the progression of second language attrition. For example, Spanish learners from the United States are seen as less susceptible to attrition than learners of Japanese. Schmid and Mehotcheva also bring up some important issues related to studying foreign language attrition. One that is of particular interest is that attrition is quite often a long process over the course of years making it difficult to acquire data through testing and re-testing, which is a problem that will likely present itself in shorter term studies.

In a study of Japanese students returning from a study abroad program in New Zealand, a group of English teachers look at the post-study abroad activities of a group of students over three years from 2012 to 2015 (Murakami et al., 2017). Within the school involved in this study there was a great deal of attention paid to continuing the students' involvement in international culture and furthering English education. This included various English-centric school events, non-language classes conducted in English, culture studies, and preparations for the TOIEC. Though not much specific data on the students' specific English levels and the effect that returning to Japan had on such levels was included in the report, it is useful to note what is being done to prevent language attrition and in a way, continue the study abroad experience even in the learners' home country.

In summary, there are a multitude of factors that can affect a learner's possible gains during a study abroad program and their possible subsequent losses after returning to their home country. For this study, speaking skills will be specifically emphasized due to productive skills relative vulnerability to attrition (Schmid & Mehotcheva, 2012) and their relatively well documented potential for gains during a study abroad program (DeKeyser, 2007). Considering previous research into both the merits of study abroad and the effects of language attrition, I have come up with the following research questions to be investigated over the course of this research:

- When students participate in a language focused study abroad program, will they improve and continue to improve even after returning to their original environment?
- To what extent does foreign language attrition occur in students returning from a study abroad program and what factors affect said attrition?

Methodology

At the initial stage of the study, the participants in this study consisted of 35 students at a university in Central Japan, but one participant was unable to continue through the entire period of the study, so therefore the remaining 34 participants will be examined. Of these 34 participants there are 17 female university students and 17 male university students between the ages of 19 and 20 years old at the start of this study. All of the participants are native Japanese language speakers who studied English for approximately 6 years in the Japanese educational system before enrolling in university in the spring of 2018. They all were currently in their second year at a university in Central Japan and majoring in English language and English and American culture. As such they have had an additional year and a half of English study in university before applying to a study abroad program in the United States. Thus, while individual English proficiency levels do vary, each participant has had roughly the same educational background and have taken the same English courses during their time at university so far, save for several elective classes also offered. The study abroad program these students participated in consisted of a one semester (approximately 4 months) stay at a university in the American Midwest where they will take classes in English and cross-cultural communication as well as live in dormitories with American students.

Data Collection

The data collection of this study consists of three main methods to gather a variety of data related to the English ability and learning environment of the participants. The first method of data collection is a survey given in Japanese to avoid possible confusion due to varying levels of English ability among the participants. This survey measures students' average contact with the English language in order to create an English language learning profile for each student and is based on the Language Contact Profile (Freed 2004) modified and translated into Japanese. The survey is divided into four main sections (Speaking, Reading, Listening, and Writing) where students fill in how many days a week on average and how many minutes per each day on average they engage in various activities using English i.e. speaking with native English speaker friends in English or using accessing social networking sites in English.

The second method of data collection is a short speaking test given to all 34 participants to gauge each participant's English level. In order to get an accurate picture of the students' abilities, the interview portion of the Grade 2 Eiken Test in Practical English Proficiency (実用英語技能検定 or Eiken for short) is being used. This test was administered to each student individually and the audio is recorded for optimal accuracy in scoring each test. There are a few reasons why the Grade 2 Eiken Test was chosen. First, the Eiken is a widely used and respected test in Japan that provides a way for testing the participants' scores that is accepted as a valid test for measuring the speaking ability of English learners. Second, during previous work as a junior high school teacher and at an after school cram school, the author has a degree of familiarity with various levels of the Eiken and experience doing mock exams for students. Grade 2 was specifically chosen after consulting with the students' current English teachers at their university in Japan. The Pre-Grade 2 Test was also considered, but it was decided that it would be better to choose a more difficult test than an easier one to give the participants more room to improve over the course of the study.

The third method of data collection consists of one on one interviews with students where questions are asked in Japanese and the audio recorded. These questions focus on gaining more detailed information regarding topics related to those covered in the surveys including motivation for studying English, extracurricular English contact and language study, English language learning environment, etc. Before the interviews took place a template of questions to be asked was created, but depending on the answers given, some participants were also asked various additional questions. Unlike the surveys and speaking test, due to time restrictions related to the schedules of both the interviewer and interviewees, not all 34 students participated in one on one interviews. Instead, only 15 students were selected to participate in one on one interviews. The selection process was based on the students' Test of English for International Communication (TOEIC) scores that were provided to this study. To ensure representation of students with different English skill levels, the 15 selected students were divided into three groups, A, B, and C. Group A consists of the 5 students with the highest TOEIC scores, Group C consists of the 5 students with the lowest TOEIC scores, and Group B consists of students whose scores are at the approximate median of all the students' scores as a whole.

The data collection is also divided into three stages. The first stage took place before the students left for their study abroad program in the United States. In early July, the surveys were given to students during class, and each student completed them during class time and subsequently signed up for a date and time to take the English speaking test. At the end of July each student took a speaking test individually. Students who were selected to participate in the additional interview did so directly after completing their scheduled speaking test. The next stage took place shortly after they completed their study abroad program and arrive back in Japan. Like the first stage, students completed the survey during class time and then were met individually at a later date to complete speaking tests and interviews to measure how much students have improved over the course of their study abroad compared to the summer. This phase of data collection took place between late December and early January depending on the availability of the

participants. The third and final stage of data collection took place several months after returning to Japan giving them time readjust to their old environment once more. This was initially scheduled for early April, but eventually carried out in mid-May due to complications related to the Novel Corona Virus (COVID-19) pandemic. The students completed the surveys, speaking tests, and interviews one last time to determine what, if any, foreign language attrition had occurred during their time back in Japan, and what factors may have led to this phenomenon in some students but not in others.

Results

Phase 1 - Pre-Study Abroad

During the first phase of this study, the 34 participants were each given a speaking test individually over the course of an approximately two week period. Each test was recorded and subsequently scored, and a transcript was also made of each test. These scores were compared with the participants' TOEIC scores to get an initial idea of their levels as well as see what the relationship between these two sets of data is. The TOEIC score data was obtained from when the participants last took the test earlier in the year.

Two notes need to be made about the data in phase one. First, during one of the speaking tests, a problem with the recording software occurred and as such, while the speaking test was still able to be scored immediately, a full transcript was not able to be created. Second, there was one participant in the group that had not yet taken the TOEIC test at the beginning of the study. As such, in phase one the data consists of 34 speaking test scores, but only 33 TOEIC scores.

English Proficiency Summary 1

As an overall summary of the initial data from phase 1 (pre-study abroad), the participants had an average TOEIC score of approximately 453 with the highest score being 730 and the lowest being 265 out of a maximum possible score of 990. On the speaking test administered during this study, the participants had an average score of

approximately 16.6 with the highest score being 24 and the lowest being 10 out of a maximum possible score of 30. Looking at this initial data one thing that initially stands out is that there is a large amount of variation in English language proficiency among the participants. Despite each participant having similar educational backgrounds and being all enrolled in largely the same English classes at their university in Japan, clear differences in level can be seen. This can be seen when looking at the standard deviation of these metrics. The range of the TOEIC scores resulted in a standard deviation of 116.2 and the speaking tests one of 4.1.

The data shows a moderate positive correlation between speaking test scores and TOEIC scores with a correlation coefficient of approximately 0.66. While it was expected that comparing these two scores would have a positive correlation, the correlation is stronger than what was expected. The TOEIC test that the participants took did not include a speaking portion, so a weaker positive correlation was expected, but it can be seen that some of the English skills that lead learners to succeed in written tests are indeed transferable to speaking based tests. Another point of note is in the more specific distribution of the data. The participants with the very highest TOEIC scores performed below expected on the speaking test when compared with the trend line created according to the correlation coefficient, while those with the very lowest scores on the TOEIC performed above the expected level. In fact, the highest scores on the speaking test mostly came from participants in the 500-600 range.

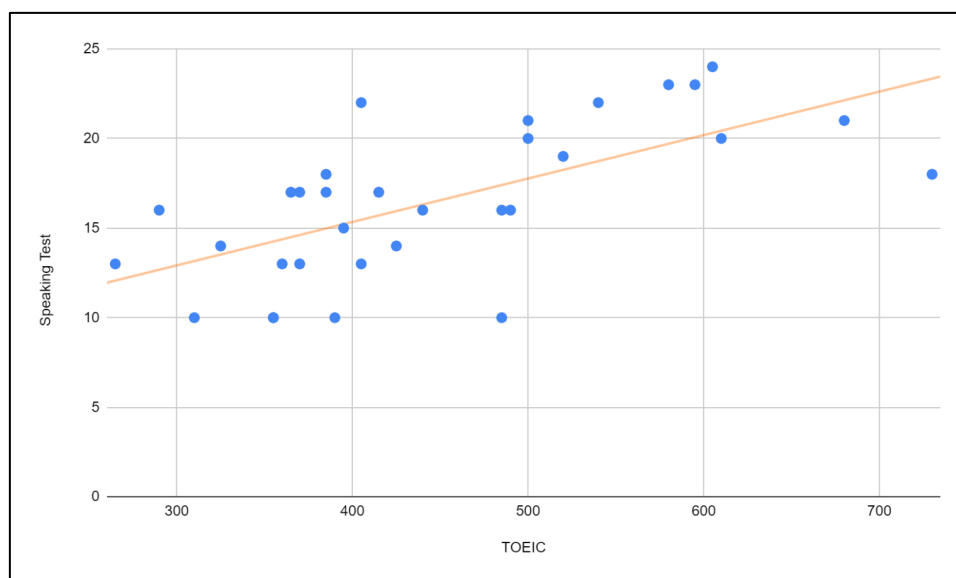


Figure 1. Phase 1 Speaking Test and TOEIC Score Correlation

Language Contact Profile Summary 1

The participants completed the Language Contact Profile survey in Japan approximately one month before beginning their study abroad program in the United States. While the survey was administered online using a Google Form, the participants completed the survey during class time at the end of a study abroad preparation meeting. There was also one student who made a mistake during the completion of the survey resulting in an amount of language contact exceeding 24 hours per day. This student was asked to redo the survey at a later date, and the subsequently completed survey was found to have no such issues and was therefore included in the final results.

The results of this survey showed that on average, students had 2.1 hours of contact with the English language per day. There was a very high amount of variation in the amount of contact with the highest average amount of daily contact being 6.6 hours and the lowest being 0.2 hours giving the data a standard deviation of 1.4 hours. Out of this contact, the largest portion of it came from listening with participants averaging 51.9 minutes per day and reading with participants averaging 46.4 minutes per day. The average amount of writing per day was 21.2 minutes while speaking was the lowest at

only 7.3 minutes per day with almost half of the participants reporting no speaking contact at all.

When these results are compared with the two sources of English language proficiency data, little correlation between the average amount of language contact a participant has with their level of English. Calculating the correlation between average hours per day of language contact and speaking score scores results in a positive correlation coefficient of 0.17, and the TOEIC scores, while still positive, do not fare much better with a correlation coefficient 0.13. Therefore, it cannot be said that there is even a weak correlation between the amount of language contact and either of these metrics in participants before participating in a study abroad program.

Interview Summary 1

During the first phase of interviews, the selected students were asked various questions relating to what motivates them to study English, what they thought about their environment learning English in Japan, and their views on how studying in an English speaking country will affect their English ability. The participants' motivations for studying English were quite similar to their peers regardless of whether their current level of English, and the majority expressed a desire to use English in their future careers. Many others gave more intrinsically motivated reasons such as a love of Western culture such as movies or music. While some students reported interactions with native speakers of English through their university or even through their part-time jobs, the participants quite consistently expressed that there was a lack of English contact in Japan especially when it comes to speaking. To rectify this a few participants even went out of their way to try to speak English with other Japanese learners of English, but this proved to have mixed results as one person reported that while he was motivated to use English with his classmates, they were often not interested.

As hinted at in the previous line of questioning, almost every participant reported that they felt limited studying English in Japan to some extent especially when it came to

speaking opportunities due to the lack of native speakers. One participant also commented that in an English-speaking country, most speakers use slang and/or speak in regional dialects that one cannot experience in Japan. As such, the participants all highly valued study abroad as a way to improve their English abilities. Every participant said that studying in the United States would improve one's English ability, though some added the caveat that one must work hard and apply themselves otherwise being in an English-speaking country loses its educational value. When asked what they planned to do to improve their English abroad, the participants consistently spoke of their desire to socialize with native speakers on campus and many expressed that just being in an environment where they will constantly be surrounded by English will aid them in improving their language abilities.

Phase 2 – Study Abroad

In the second phase of data collection, participants were given another speaking test of the same level, but with different questions, shortly after returning to Japan after spending approximately four months studying English in the United States. As with phase 1, these tests were recorded, scored, and transcripts were made all by the same scorer to ensure a higher level of consistency in the data acquired. After returning to Japan, the participants also all took the TOEIC test once more as a part of their school program, and those scores were also obtained for comparison with the other data obtained in this research.

Two things should be noted as complications towards the collection of data in phase 2. First, after returning to Japan, the participants did not have classes at their Japanese university for the remainder of the semester, and as such they only came to campus a small amount of times. While eventually all participants took the test, this complicated the scheduling of speaking tests as many of the participants lived quite far away from the university's campus leading to them being done over a period of approximately one month (from mid-December to mid-January) as opposed to the two weeks taken in phase

1. Second, while all participants took the speaking test, TOEIC, and also completed the two surveys, one of the 15 participants selected to be interviewed, was unable to be scheduled to do so resulting in 14 interviews rather than 15 for phase 2.

English Proficiency Summary 2

In summary of the data gathered during phase 2 (study abroad), the participants had an average TOEIC score of 518.2 with a maximum score of 875 and a minimum score of 335 out of a maximum possible score of 990. The second speaking test yielded an average score of 17.6 out of a total possible score of 30 with the highest score achieved being 26 and the lowest score being a 12. When looking at the variation in the data for phase 2, similarly to phase 1, despite all participants being on the same program taking the exact same classes, there was still a similar amount of variation in their English proficiency. The standard deviation for TOEIC scores in phase 2 was calculated at 123.4, a small increase compared to phase 1. On the other hand, the speaking test data showed a smaller amount of deviation when compared to phase 1 with a standard deviation of 4.1, but the change is very slight especially in the case of the speaking test where phase 1 and phase 2 resulted in almost the exact same standard deviation.

Calculating the correlation between the speaking test scores of the participants plotted against their TOEIC scores from phase 2 resulted in a correlation coefficient of 0.73 giving them a strong positive correlation. This is a slight increase when compared to phase 1's correlation coefficient of 0.66. As was seen in the data from phase 1, despite the TOEIC test taken not including a speaking portion on the exam, the skills gained during their time abroad were able to be applied well to both different styles of test and, save for the highest two scorers on the TOEIC, participants that performed above average on the TOEIC were highly likely to also perform highly on the speaking test.

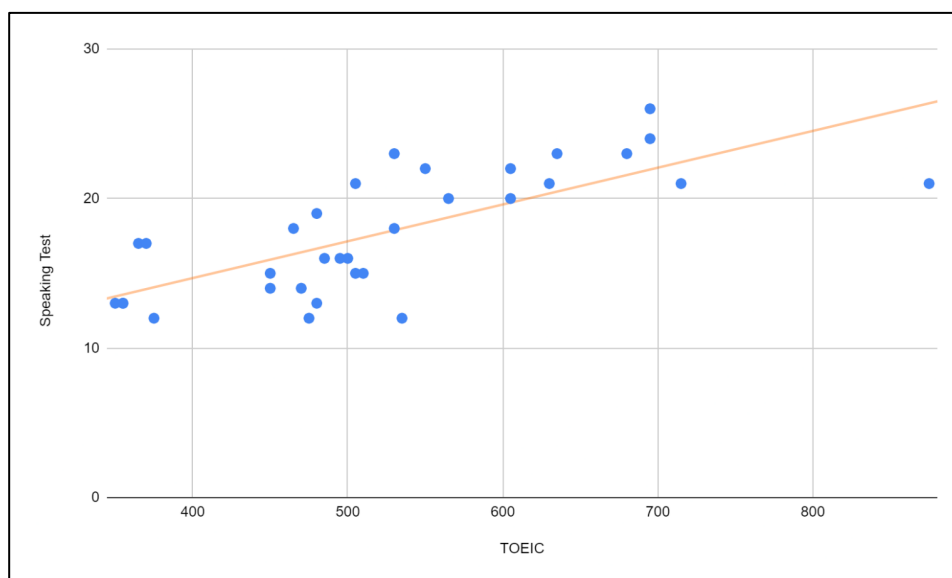


Figure 2. Phase 2 Speaking Test and TOEIC Score Correlation

Language Contact Profile Summary 2

After returning to Japan, the participants once again completed the Language Contact Profile survey, this time being instructed to consider the time they were abroad in the United States when filling in their answers. The majority of the surveys were completed in December shortly after returning to Japan during class time in a post-study abroad meeting, and the rest were completed on their own time shortly thereafter. In addition to this, there were two participants who upon examination of the data reported language contact of over 24 hours per day. These participants were instructed to redo the survey at a later date and as the newly completed surveys did not have the same problem, they were included in the final results.

Examining the data from the surveys, the students were found to have an average amount of contact with the English language of about 4.3 hours per day. While phase 1 also had a large amount of variation in the amount of contact, phase 2 showed even more significant differences between participants with the highest reported amount of contact being 17.8 hours per day and the lowest being only 0.1 hours per day giving the data a standard deviation of 4.3. Out of this contact, on average, participants reported the highest amounts of contact in the areas of speaking and listening with an average of 77.4 minutes

per day speaking and 74.9 minutes per day listening. While lower than the other two metrics, reading and writing also saw significant increases in phase 2 with reading contact increasing from 46.4 minutes per day on average in phase 1 to 61.5 in phase 2 and writing increasing from 21.2 minutes per day on average in phase 1 to 46.0 in phase 2.

Despite the overall increase in English contact and the fact that participants on average also increased their English proficiency, little correlation could be found between the amount of language contact and English proficiency in any of the metrics used in this study. Similarly to phase 1, when the correlation was calculated for the data from phase 2, it resulted in exactly the same correlation coefficient of 0.17 as phase 1 when looking at the amount of contact compared to the speaking test scores. The correlation with TOEIC scores also showed similar results with a correlation coefficient of 0.21. While again they both showed a slight positive correlation, it is not possible to conclude that language contact during a study abroad program has a significant correlation with English language proficiency.

It is also important to note that these are self-reported numbers and therefore some students with particularly high amounts of language contact were likely overestimating the amount of contact they had to some degree, and it can be difficult to differentiate between time speaking and listening during a conversation for example, so depending on the person, they may regard this as speaking contact, listening contact, or even both. In addition to possible overestimates, while some participants that reported particularly high amounts of language contact, i.e. over 10 hours per day, a not insignificant amount of this contact consisted of relatively passive activities such as listening to music in English or reading SNS (Social Networking Services) in English.

Interview Summary 2

Shortly after returning from their study abroad program in the United States, the same 15 participants were interviewed once more with much the same line of questioning as in phase 1, but this time with a focus on their experience in the United States and how

they felt having just returned to Japan. When asked about their motivation towards studying English, their answers were quite different from phase 1. While they gave more general long-term answers mostly related to their future careers, this time they focused more on the short-term. Most participants referred to being motivated by a desire to keep in touch with friends that they made during their study abroad program or a desire to increase their test scores on the TOEIC or just get better grades in general.

As would be expected from a study abroad program, they reported an increased amount of English contact especially through interactions with their roommates in the dorms and other friends that they made on campus. A majority of the students from the high group also reported that they even tried to speak English with other Japanese students while in the United States, but overall the majority of them reported that even during their time abroad they exclusively spoke Japanese with their peers. Some also placed an importance on the fact that in the United States, they are surrounded by English at all times. On the other hand, these were also the factors that participants reported as problems when coming back to Japan. From here on, they would have to go out of their way to keep in contact with native speakers and their environment had returned to one where they are surrounded by Japanese.

Much like in the initial interviews many students expressed that they would be limited in the coming semester when it comes to studying English in Japan, but to a slightly lesser extent than before their study abroad experience. Most students felt that while they were limited when it came to areas such as speaking, they were not limited in the study of grammar or vocabulary, and now they had the advantage of being able to contact native speaker friends met abroad online even in Japan. Regardless of whether they thought they would be limited in continuing studying English in Japan, all but one participant also expressed confidence that they would be able to continue to improve their English ability in the coming semester after returning to Japan.

Phase 3 – Post-Study Abroad

The third phase of data collection took place over the course of approximately two weeks in mid-May following the participants return to Japan from their study abroad program. As with the first two phases of data collection, the participants took a speaking test. This speaking test was once again of the same level, but with different specific content. Each test was recorded, graded, and a transcript was made, once again by the same scorer as phase 1 and phase 2 to ensure as much consistency as possible.

In the time between the data collection of phase 2 and phase 3, the COVID-19 pandemic began, and the outbreak reached Japan, and this had a significant impact on the data collection of phase 3 in several ways. First, the initial plan was to conduct data collection during April, but because of the state of emergency due to COVID-19, it became delayed due to difficulties contacting participants and scheduling a time to conduct individual speaking tests. As the pandemic continued, it became clear that in person testing would be impossible for the remainder of this study. As such, the final speaking tests and interviews were conducted remotely using the video conferencing software program Zoom. This allowed all 34 tests and 15 interviews to be conducted safely and successfully over the internet while both parties were in self-isolation, though the quality of the audio recordings varied from person to person. The situation at the time also resulted in the inability to acquire a TOEIC score during phase 3.

English Proficiency Summary 3

In summary of the data gathered during phase 3 (post-study abroad), the average score on the speaking test was 17.3 with the highest score attained being a 26 and the lowest score being an 11 out of a total possible score of 30. Comparing the average scores to phase 2, it can be said that there was not a significant change in either the average speaking test score (decreasing from 17.6 in phase 2). That being said, while also not a significant change, the standard deviation in the speaking test scores increased from 4.0 to 4.2.

While the average scores on the speaking test did not show a significant amount of change between phase 2 and phase 3, looking at the individual scores more closely reveals a significant difference between what happened between phase 1 and 2 and what happened between phase 2 and 3. Figure 3A shows how each individual participant's score changed between phase 1 and phase 2 while Figure 3B shows how each individual participant's score changed between phase 2 and 3. Looking at Figure 3A, the majority of participants saw an increase in their speaking test score after returning from their study abroad program in the United States with 19 people (approximately 55.9%) earned higher scores in phase 2 than in phase 1. At the same time 9 people (approximately 26.5%) did not see any change in their score and 6 people (approximately 17.6%) attained a lower score in phase 2 than they did in phase 1. On the other hand, looking at the data presented in Figure 3B, it can be seen that with 15 people (approximately 44.1%) most participants actually saw a decrease in their speaking test score between phase 2 and phase 3 despite the overall average score staying largely unchanged. The time between phase 2 and phase 3 saw a similar number of students as the time between phase 1 and phase 2 neither increasing nor decreasing their scores with 11 people (approximately 32.4%) seeing no change. While a large amount of participants' scores either decreased or stayed the same, only 8 people (approximately 23.5%) were able to further improve their English speaking ability over the course of the 5 months between the phase 2 and phase 3 speaking tests.

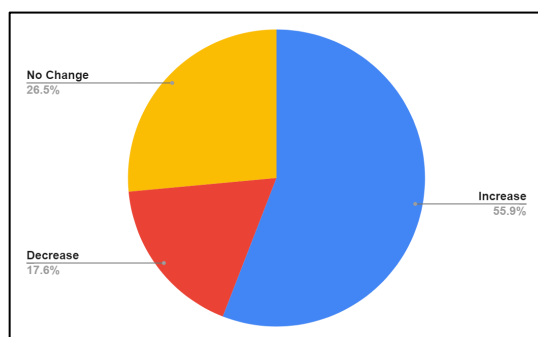


Figure 3. Change in Scores Phase 1 - 2

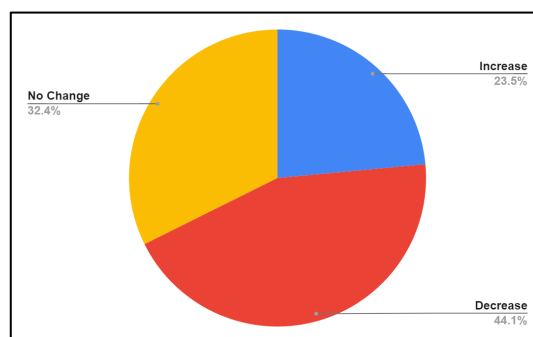


Figure 4. Change in Scores Phase 2 – 3

Language Contact Profile Summary 3

After the participants had returned to Japan and spent several months back in their original environment, they were once again asked to complete the Language Contact Profile survey. This time they were instructed to answer the questions according to the amount of English contact they had had in Japan since returning from the United States. Due to the situation related to the COVID-19 pandemic, surveys were distributed through e-mail to each of the participants for them to complete on their own time rather than using already scheduled classroom time to complete them. This resulted in the surveys being completed over the course of approximately 3 weeks in early to mid May. Similarly, to phase 1 and phase 2, in phase 3, two participants were identified who answered with an amount English contact over 24 hours per day and were subsequently asked to redo the surveys. The surveys were promptly completed once more and upon examination of the new data, it was found that there were no problems with the redone surveys, so they were thus included in the final research data.

After examining the data from the phase 3 Language Contact Profile surveys, it was found that the participants had an average amount of contact with English of 2.9 hours per day with the highest amount of English contact being 15.4 hours per day and the lowest being no English contact at all. Thus, post-study abroad, the participants had an amount of contact lower than the 4.3 hours per day seen during their study abroad program, but higher than the 2.1 hours per day that they averaged pre-study abroad. Out of this contact, participants reported that the types of contact most common were listening at an average of 62.0 minutes per day and reading at an average of 61.4 minutes per day. Writing also showed a significant amount of average daily contact at 38.2 minutes per day. On the other hand, participants only reported an average of approximately 11.1 minutes per day of speaking contact. Compared to the results of phase 2, phase 3 saw a decrease in every type of language contact with speaking seeing the most significant decrease. Unsurprisingly, the data from phase 3 showed many similarities with phase 1 with the most amount of English contact being in the form of listening followed by

reading and then writing with the least amount of contact being in the speaking category in both data sets. Despite this, phase 3 did see an increase in all forms of English language contact across the board when compared to phase 1 showing that participants did not simply regress to their pre-study abroad ways after being back in a Japanese speaking environment for several months.

Looking at the correlation between English proficiency and contact with the English language also yielded interesting results in phase 3. While phase 1 and phase 2 did not show any significant correlation between any metric of English proficiency and the data from the Language Contact Profile, for phase 3 this was not the case. Calculating the correlation between the speaking test scores and amount of language contact in phase 3 resulted in a correlation coefficient of 0.49 giving the data sets a moderate positive correlation. This is a significant change from phase 1 and phase 2 where the correlation was only 0.17 in both making it too small to say there was a significant correlation at all.

Interview Summary 3

At the same time as the final speaking test, the same 15 participants were asked many of the same questions once more in relation to the 4 to 5 months spent back in Japan after completing their study abroad program in one final interview. When asked about what motivates their study of English, they once again gave a variety of answers in a similar fashion to their phase 2 responses. In general, they were split between culturally motivated reasons such as a desire to speak with native friends or an interest in Western media and more extrinsic motivations such as grades, test scores, or their future careers with the latter having a slight majority.

Next, the participants were asked about the English contact they had had since returning to Japan. As expected from their results of the language contact profile survey, many students reported a lack of opportunities to use English since returning to Japan, and what contact was reported centered around use of the internet. As such, a majority of those interviewed reported that their main form of contact was through SNS and/or

communicating with native friends met during their time in the United States through text messaging or even video calls. In addition, in the middle group, a majority of the participants reported this form of contact, and a majority of the high group also reported the same. On the other hand, only a minority of the low group reported contact through SNS or communication with native friends met abroad.

When asked whether or not they themselves thought their English had continued to improve or not since returning to Japan, there were mixed results. In general, the participants didn't seem to be able to ascertain whether or not they had improved with only one third of them being able to accurately do so. Some also made the distinction between speaking or listening ability and grammar, reading, etc. when describing whether or not they thought they had improved or not. In those cases, all participants believed that while abilities such as grammar may not have been affected by language attrition, speaking and/or listening did. Interestingly enough, only one student who thought they had improved actually showed an improvement in the speaking test. Other participants who did actually improve tended to believe that their English ability had stayed the same or even gotten worse.

Finally, they were once again asked whether or not they have felt limited in studying English since coming back to Japan (see Table 1). While some felt limited, a slight majority of the students reported that they did not feel particularly limited studying English back in Japan. When these results were compared to their speaking test scores, an interesting pattern appeared. Participants who did not feel limited studying English back in Japan were more likely to continue to improve their English ability in a Japanese environment and in turn could also be said to be less likely to experience language attrition. Only one student who expressed that they felt limited improved their score on the speaking test while the remaining five who improved their scores all reported that they did not feel limited studying English in Japan.

Table 1. Post-study abroad feelings of limitation

	Decrease	No Change	Increase
Limited	3	2	1
Not limited	2	2	5

Discussion

This paper sought to find out the answers to two main research questions, the first of which was whether or not students who participate in a language focused study abroad program will not only improve while abroad, but also continue said improvement after returning to their home environment. The second of the two research questions deals with the amount of foreign language attrition experienced after students spent a number of months back in their original home environment and what factors had an effect on said attrition.

First, before looking at foreign language attrition, which is the focus of this thesis, it must be confirmed that the participants actually improved their English abilities while abroad. Looking at the data collected, it is clear that the participants' time abroad in the United States helped them improve their English ability in some way. While the amount of improvement did indeed vary from student to student, more than half (approximately 55.9%) of participants improved their speaking test scores post-study abroad when compared to the pre-test and almost every student was able to improve their TOEIC scores (approximately 91.1%).

That being said, the post-study abroad speaking test results from phase 3 suggest that the majority of students did not continue to improve their English ability. In fact, almost half (approximately 44.1%) of the participants obtained lower scores when compared to phase 2, and thus those participants can be said to have experienced foreign language attrition. It is these participants who are of particular interest in this study and bring us to the second research question.

In response to the second research question relating to the extent and possible factors affecting foreign language attrition after spending time in a student's home environment post-study abroad, there was a great deal of individual variation when it comes to levels of attrition. While some participants were seen to have experienced attrition, a not insignificant number of people maintained their English level, and some did indeed continue to improve. It is these individual differences that are of particular note.

The first factor to be discussed is that of language contact. The results showed that, consistent with previous research (Taguchi, 2008), the amount of contact with English during the study abroad program did not seem to significantly correlate with the test scores of the participants, but it was a different story when compared to their speaking test scores in phase 3. On the contrary, a moderate positive correlation was found between the two data sets in the final phase. This is most likely because during a student's time in the United States, they are in a fully immersive environment surrounded by English where they have little chance to use their native Japanese. On the contrary, they are in a way forced to use English whether they like it or not. The participants in this study also had native speaker roommates in their dormitory, so whether they left their room or not, they would come in contact with English often. Students thus will have a relatively high amount of English contact even if they have low levels of motivation or interest in studying. On the other hand, once the participants returned to Japan, they were once again in an environment surrounded by Japanese with little opportunities to interact with English. As contact with English became more of a scarce resource, it in turn became a more valuable resource, and the students who actively sought it came in contact with English.

The type of contact also changed significantly between phase 2 and phase 3. As reported in interviews, participants tended towards more in person direct contact with English while they were abroad and then relied on contact through the internet once they had returned to their home country. This represents making a transition from the actual

L2 community in the United States to an “imagined L2-related community” in Japan (Sasaki, 2011). While most students reported in the Language Contact Profile an increase in contact through the internet and SNS, through interviews, participants who obtained higher speaking test scores in phase 3 were also more likely to successfully create such an imagined community. This could be what led to the correlation between language contact and speaking test scores post-study abroad.

Previous research has identified students’ beliefs regarding language learning as something that has an effect on their progress during a study abroad program (Tanaka and Ellis, 2003), and beliefs were also similarly identified as a potential factor affecting post-study abroad language attrition. Results from the interviews of the participants in this study suggested that whether or not students believed that their study of English would be limited when continuing to study in their home environment may be a factor. Only a single participant who believed that they were limited was able to continue to improve after returning to Japan. On the other hand, while the majority of participants who reported that they did not feel limited did indeed improve, almost half did not, though only two were shown to experience foreign language attrition. Therefore, it could be postulated that while positive beliefs regarding post-study abroad language learning may not always lead to improvement, it does seem to be effective in staving off possible attrition to some extent. Whether or not a student perceives themselves as being limited could be a major factor affecting their motivation to study English. If a student believes that they cannot continue to progress, or simply that progression may be too difficult for them, they may unconsciously turn said belief into a self-fulfilling prophecy.

Another note of interest is that only two participants reported changed beliefs regarding their limitations between when they had just completed their study abroad program (phase 2) and when they had been back in their home environment for several months (phase 3). Of those two participants, one initially believed that they were limited and by the phase 3 interview attested that they did not feel limited while the other’s belief changed in the exact opposite way. That being said, both of these participants showed an

increase in their speaking test score between phase 2 and phase 3. In addition, the participant who changed from not feeling limited to feeling limited, was the only person in phase 3 that held that belief yet still improved. It is possible that if there was a fourth phase of data collection in this study, that participant's change in belief may have ended up leading to language attrition in the subsequent months.

Pedagogical Implications

This author's suggestions for possible ways to avert post-study abroad foreign language attrition lie mainly in aiming to recreate the target language environment in the L1 environment of the learner's home country. For example, in many study abroad programs, including the one examined in this study, students are assigned "conversation partners" while abroad for linguistic exchange, but in many cases this relationship ends once the learner returns to their home country. More active facilitation of communication with native speakers met abroad such as conversation partners or others could prove effective in maintaining a high level of language contact post-study abroad. Students who are successfully able to maintain an imagined L2 community post-study abroad will be less susceptible to foreign language attrition. Many of the students in this study were able to achieve this to some extent, but if facilitated by their schools more may be able to do so.

Since the Covid-19 pandemic began, there has been a rapid increase in the use of virtual classrooms in schools around the world, and these new technologies, if utilized well, can become a valuable asset in the language classroom in the future. At the moment, online classes are often used as a substitute for in-person classes, but they could also be used as a supplement. In many countries such as Japan, there is a relative lack of native speakers of English, so students often lack real opportunities to use what they have learned, but by using video conferencing software in-person classes can be supplemented through virtual contact with native speakers abroad. Be it formal, organized interactions or informal personal interactions, virtual contact with native speakers post-

study abroad could become a valuable tool for language learners to stave off foreign language attrition in the future.

Conclusion

In conclusion, this study sought to fill a gap in research related to foreign language attrition in students returning from a language focused study abroad program. Through a series of speaking tests, surveys, and interviews over the course of about two semesters where participants spent several months at a university in the United States studying English and several months at their own Japanese university, the participants' language gains and subsequent losses were investigated. This study was able to show that while the majority of participants were able to improve their English speaking abilities during their time studying abroad in the United States, after returning to their home country of Japan many also experienced foreign language attrition to some degree. At the same time, the extent of language attrition varied greatly between participants due to individual differences. Post-study abroad contact with English especially through interactions with native speakers over the internet was identified as a possible factor that could prevent foreign language attrition, and individual beliefs regarding the limitations of studying English in the learners' L1 environment was also identified as a possible factor that could either stave off foreign language attrition or lead to it depending on if said belief is positive or negative.

On a practical note, it would be beneficial to strive to provide students with opportunities for continued language contact with their target language outside of their regular classes. With more readily available opportunities to interact with and use English, hopefully students will not feel like they are limited in studying English even after they return to their home country. This will most likely lead to a lesser drop in motivation post-study abroad and prevention of some amount of foreign language attrition.

Suggestions for Future Research

One of the inspirations for this study in the first place was the fact that a large amount of studies relating to language acquisition through study abroad tend to finish once the participants have completed their time abroad, but this is not the end of the language learning process. As such future studies would be wise to continue to observe study abroad participants for a longer period of time. While, despite the time constraints inherent in this study, post-study abroad language attrition was able to be observed to some extent, future studies could benefit from observing participants over the course of several years.

This study also identified two main factors that seem to have an effect on language attrition, post-study abroad language contact and perceived limitations. Future research into post-study abroad language contact and how students stay in touch with native speaker friends made abroad could yield interesting results. In addition, the effect that perceived limitations, or lack thereof, have on motivation to learn a foreign language is also an area with many possibilities for continued study.

Finally, having identified possible factors that affect post-study abroad language attrition, what can teachers do to help their students avoid it? How can one recreate the study abroad experience in one's home country? Future research into what kind of classroom activities or campus events are effective in not only simply increasing the contact with English but also changing students' image of the opportunities afforded to them in their home environment could prove fruitful.

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