

Influence of Attitudes and Strategies on English Acquisition by Japanese Women

■ This study examines the relationship between Japanese women's attitudes toward learning English and the improvement in their ability to judge grammaticality. Fourteen women temporarily living in the United States, who were neither working nor attending school full time, were interviewed regarding their English learning experiences. Data analysis reveals that attitudes toward American people correlate with improvement in ability to judge grammaticality. Tendencies to learn with others and to think actively about the learning process and its applications to daily activities also correlate with higher levels of improvement. The Johnson and Newport (1989) grammaticality judgment task served as the testing instrument, with pre- and posttests administered 11 weeks apart for each subject. Gardner's (1985) Attitude/Motivation Test Battery measured subjects' attitudes toward American culture and motivations for learning English. Oxford's (1990) Strategy Inventory for Language Learning and interviews conducted in Japanese were used to gather information on subjects' methods of, and preferences for, learning English.

Introduction

Purpose of Study

This study investigated the relationship between Japanese women's acquisition of English syntactical and morphological elements and factors such as motivation and language-learning activities. Subjects were neither working nor pursuing college degrees in the United States and had limited occasions to speak and listen to native English in daily, professional contexts. By examining the correlations between changes in their grammaticality judgment and their motivations and English-learning methods, the study identified attitudes and strategies connected to faster rate of recognition, acquisition, and use of basic English morphology.

Research Questions and Hypotheses

The study asked several questions about language learners who are temporary residents in a foreign country. First, what types of learning strategies facilitate English acquisition? Do certain strategies help acquisition more than do others? English classes give learners an environment in which to use the language and request constructive feedback, but how much of a difference does taking classes make? Second, how does the length of residence (LOR) in the US correlate with acquisition? Does the amount of time spent in the US contribute to language acquisition only for certain individuals? Third, how do attitude and motivation affect language learning? If certain types and levels of motivations correlate with higher rate of improvement in English skills, can such factors be emphasized in language teaching and learning?

Flege and Liu (2001) showed that while LOR correlated with higher English proficiency, the correlation was significant only among individuals who were taking English classes. Their study showed that taking classes helps individuals perform better on proficiency tests (in their case testing word-final stop recognition, grammaticality judgment, and sentence comprehension). The study also claimed that, when one does not have enough

exposure to English input and formal instruction, a longer LOR may not necessarily predict a higher English proficiency. Based on these findings I hypothesized that (a) taking English language classes improves the ability to judge grammaticality faster than not taking classes, but that (b) the amount of time spent in the US does not, on its own, correlate with grammaticality judgment ability.

Modified versions of the Attitude/Motivation Test Battery (AMTB; Gardner, 1985), Strategy Inventory for Language Learning (SILL; Oxford, 1990), and the Johnson and Newport grammaticality judgment task (Johnson & Newport, 1989) were used to investigate the second language acquisition (SLA) experiences of the subjects. Analyses of data from their language tests, questionnaires, and interviews helped establish several language-learning trends among the Japanese women who participated in the study.

Review of Relevant Literature

Orientation and the Acculturation Model

An incentive for acquiring a language emerges from the goal of using that language. Lambert (1972) calls this incentive *orientation* and defines it as the source and reason for an individual's language-learning attitudes and motivations. He distinguishes two types of orientation: An *integrative* orientation connotes incentives of individuals interested in the culture and society of the speakers of the target language, individuals who perhaps want to one day become a member of that group; an *instrumental* orientation suggests a more utilitarian goal of learning the language, such as speaking it for professional and career-oriented reasons, traveling to countries where the language is spoken, or fulfilling graduation requirements at an educational institution. Lambert claims that individuals with integrative orientations acquire the language faster and for longer periods in comparison to those with instrumental orientations. Studies since then (e.g., Oxford & Shearin, 1994) have claimed that, rather than the type of orientation, the strength of the

motivations that arise from the orientation and how those motivations are implemented determine how quickly and how well individuals learn a language.

Schumann's (1986) *acculturation model* includes three stances that adults take on when learning a language (L2 in a second language context): *assimilation* into the new language community by adopting the target culture, *preservation* of their first culture by rejecting the new culture, and *acculturation* by adapting to the new culture while maintaining their own culture. Such methods of coping with the social aspect of language learning can also affect SLA.

Maturational Constraints and the Critical Period Hypothesis

Studies show that the age at which learning begins often predicts achievable language proficiency (Stevens, 1999). Flege and Liu (2001) suggest that LOR in a country where the L2 is spoken correlates with linguistic performance, particularly if learners have access to a substantial amount of L2 input throughout their learning careers.

Johnson and Newport (1989) originally used their grammaticality judgment task to test the Critical Period Hypothesis (CPH) of SLA among Chinese and Korean English learners. CPH states that there is an optimal range of years for beginning language acquisition, generally said to end around adolescence. Johnson and Newport found that individuals who had begun learning English before age 15 performed considerably better on the task than those who had begun learning the language after age 17. Although attitude did not have noticeable effects on grammaticality judgment in their study, their findings support the existence of a critical period for L2 learning. A study with native Hungarian-speaking adults learning English replicated the findings: Individuals who began learning the language as children performed better on grammaticality judgment tasks than did those who began learning as adults (DeKeyser, 2000). Adults with high ver-

bal analytic ability performed as well as those who began studying the language at a young age, supporting the claim that explicit analysis of language forms and reflection on structure help adult L2 learners achieve nativelike proficiency.

Attitudes and Motivation

People's *attitudes* toward a language, independent of culture, influence its acquisition. Identity factors such as gender, age, and economic status also influence the way individuals think or feel about a language. Ladegaard (2000) found that males and females differed in their language attitudes toward Standard Danish and its vernaculars. In responses to the questionnaires he distributed, the two groups expressed a variety of opinions about the use of the standard and the vernaculars. If individuals feel positively toward a language and the culture of the people who speak that language, they have more incentive to learn it than individuals who have negative feelings toward the language. Especially for adults, who already have strong ties to their native language, attitudes toward the target language significantly influence the learning process.

Studies have shown that *motivation* and different orientations yield distinct outcomes in SLA (Gardner & Lambert, 1959). Gardner (1985) developed and used the AMTB to measure Canadian students' subjective views on the French language and culture, looking at how those opinions interacted with their learning process. The test included questions regarding instrumental and integrative motivation and people's attitudes toward the learning situation, the support they receive from their families, and how often they choose to use the target language. Greater willingness to use the target language can facilitate the learning process (MacIntyre, Baker, Clément, & Conrod, 2001), while anxiety about doing so can inhibit acquisition (MacIntyre & Gardner, 1989).

Language-Learning Strategies

The strategies people use to learn a lan-

guage influence how well and how quickly they progress in their acquisition. According to Oxford (1990), strategies include direct methods (reading, writing, listening, and speaking) as well as indirect methods that deal with emotions (affective), learning with others (social), and exercising various parts of mental processes (metacognitive). She developed the SILL to examine the different tactics students used, and it has been administered to speakers of a variety of L1s learning different target languages (e.g., Bremner, 1999; Kim, 2001; Park, 1997; Wharton, 2000).

Japanese Women and Their Language

Numerous studies have been conducted on language learning by Japanese people, and several studies have shown that students learning English are often interested in American culture. Kuramoto (2002, p. 51) found that her students rated activities about American holidays, such as Halloween, to be "very interesting." Furuhashi (1999) examined Japanese students' views on English-learning activities and found that they have concrete opinions on what worked for them and what they preferred as opposed to their being apathetic about the learning process.

Several studies have focused specifically on Japanese women. Kobayashi (2002) found that female high school students in Japan had more positive opinions about learning English than did their male counterparts, presumably because of the opportunities and respect that knowing English afforded them. Marriott (1980) found that wives of Japanese businessmen temporarily living and working in Australia increased the amount of contact they had with written Japanese material (e.g., newspapers and magazines), often forgoing the opportunity to learn and use English.

Methodology

The subjects took the AMTB along with pre- and posttests of English grammaticality judgment. The subjects were Japanese women who neither worked nor attended school in pursuit of a degree. They completed

their first test of English grammaticality judgment at the beginning of an 11-week period and the second at the end. They also completed questionnaires that examined their motivation to acquire English and their language-learning strategies. Their responses to the two questionnaires, and in an interview addressing their attitudes toward living in the US and learning English, were analyzed in relation to the changes in their grammaticality judgment scores.

Participants

Fourteen Japanese women volunteered as subjects for the study; 13 of them had moved to the US within a year and a half of the administration of the pretest. The 14th participant had come to the US 2 years and 8 months before her interview and first test administration. Because her stay in the US was significantly longer than that of the other subjects, statistical analyses did not include her data. The qualitative analysis in this study, however, includes data from her interview. All subjects were married to Japanese men who were graduate students at Stanford University in California, working on the Stanford campus, or working somewhere in the city of Palo Alto. None of the subjects themselves were university students or working in the US at the time of the study. Participants' ages ranged from 27 to 38 ($M = 31.7$). Within the subject pool, 8 participants were taking English classes while 5 were not. The 5 individuals not taking classes had one or more children; 1 of the subjects taking classes also had children. The Appendix includes detailed descriptions of each subject.

Procedure

Each subject received a pseudonym and a code, composed of two letters and two numbers, for anonymity. All instructions were given in Japanese, and the majority of the forms and tests were written in Japanese. Subjects had three separate meetings. At the first meeting, subjects completed a background questionnaire and the pretest of the

English grammaticality judgment task. Between the 1st week and the 11th week, subjects completed the AMTB and an unscripted, open-ended interview in Japanese discussing their experiences of and attitudes toward learning English. At the end of the 11-week period, the subjects had their final meeting, at which they completed the posttest of the grammaticality judgment task and the SILL.

Materials

Three instruments were used in this study. For the Johnson and Newport test of grammaticality judgment, subjects listened to a recording of sentences that they judged as either grammatical or ungrammatical. The original test contained 270 items that collectively covered 12 different grammar rules. Asha Smith in the Department of Psychology at Stanford University formed the shortened version of the Johnson and Newport task, selecting 135 pairs of grammatically correct and incorrect sentences from the original test and creating two tests that each contained 135 items. One version of each sentence appeared in either the pretest or the posttest (e.g., if the grammatical version of one sentence appeared in the pretest, then its ungrammatical counterpart appeared in the posttest). Table 1 contains a list of the rule types that the Johnson and Newport grammaticality judgment task tests (Johnson & Newport, 1989, p. 72). Although the original test examined judgment of 12 rules, the modified task covered only 11 of those rules and excluded the third-person singular rule. Each sentence manipulated a particular aspect of grammar to measure how well individuals recognized the grammaticality of a sentence based on that element of grammar. Example 1 is a sentence pair for Rule 1 (past tense):

- 1a. Yesterday the hunter shot a deer.
- 1b. *Yesterday the hunter shoots a deer.

Table 1
Rule Types Tested in the Original
Johnson and Newport (1989) Test

| | |
|---------------------------|----------------------|
| 1. Past tense | 7. Particle movement |
| 2. Plural | 8. Subcategorization |
| 3. Third person singular* | 9. Auxiliaries |
| 4. Present progressive | 10. Yes/no questions |
| 5. Determiners | 11. Wh- questions |
| 6. Pronominalization | 12. Word order |

Note. *Omitted for the current study.

The AMTB asked individuals to indicate how much they agreed or disagreed with statements about their language-learning experience on a 7-point Likert scale (1 = *Strongly disagree* to 7 = *Strongly agree*). The original AMTB was modified to apply to the current subjects. Items covering aspects such as their attitudes toward their language instructors and their opinions about their classes were eliminated, and some words were changed to appropriate counterparts, such as French to English and parents to family (e.g., 2 and 3):

2. Studying English can be important to me because it will allow me to be more at ease with Americans who are native speakers of English.
3. My family/spouse encourages me to practice my English as much as possible.

Table 2 lists the subsections of the modified AMTB used for this study.

Oxford's (1990) SILL investigates what students do to learn a foreign language. The SILL contains six sections that yield sub-scores and an aggregate score. Each section contains statements about language-learning strategies. Respondents indicate how well each statement describes them (1 = *Never or almost never true of me* to 5 = *Always or almost always true of me*), such as examples 4 and 5:

4. I remember a new English word by making a mental picture of a situation in which the word might be used.
5. If I can't think of an English word, I use a word or phrase that means the same thing.

Table 2
Number of Items and Total Possible Scores on Sections of the Modified AMTB

| <i>Section/index</i> | <i>Description</i> | <i>Number of items</i> | <i>Total possible</i> |
|----------------------|---|------------------------|-----------------------|
| AMTB A | Attitudes toward Americans | 6 | 42 |
| AMTB B | Interest in foreign languages | 10 | 70 |
| AMTB C1 | Attitudes toward learning English (positively worded) | 5 | 35 |
| AMTB C2 | Attitudes toward learning English (negatively worded) | 5 | 35 |
| AMTB D | Integrative orientation | 4 | 28 |
| AMTB E | Instrumental orientation | 4 | 28 |
| AMTB F | Family/spouse encouragement | 9 | 63 |
| AMTB G1 | Motivational intensity | 5 | 15 |
| AMTB G2 | Orientation index (1—Instrument or 2—Integrative) | 1 | 2 |
| Integrativeness | Sum of scores on AMTB sections A, B, and D | 20 | 140 |
| Motivation | Sum of scores on AMTB sections C1, C2, and G1 | 15 | 85 |
| AMI | Sum of Integrativeness, Motivation, and AMTB E | 39 | 253 |

Table 3
Possible Score for Each Section of the SILL for English Learners (Oxford, 1990)

| <i>Part</i> | <i>What strategies are covered</i> | <i>Total possible</i> |
|-------------|--|-----------------------|
| A | Remembering more effectively | 45 |
| B | Using all of one's mental processes | 70 |
| C | Compensating for missing knowledge | 30 |
| D | Organizing and evaluating one's learning process | 45 |
| E | Managing one's emotions | 30 |
| F | Learning with others | 30 |
| Whole SILL | All | 250 |

The version developed for speakers of other languages learning English was translated into Japanese and administered to the subjects. Table 3 lists the different parts of the SILL and their maximum possible score.

Subjects also participated in an open-ended interview. The interviews, conducted in Japanese, contained questions regarding the subjects' reasons for staying in the US (e.g., 6), their past language lessons (e.g., 7), and thoughts about their English-learning experience (e.g., 8):

6. Why did you come to the United States?
7. In what kinds of settings have you had past English training?
8. How do you feel about your own progress in learning English?

Results

Data collected from the study were analyzed using statistical tools in SPSS 12 for Windows and Microsoft Excel. Subjects' test scores were rounded to 2 decimal points and separated into two groups (*high* and *low*). If no particular value separated the scores into distinguishable groups, the mean was used to separate them.

Pre- and Posttest Scores

Eleven of the 13 subjects improved their Johnson and Newport score over 11 weeks. The average score on the pretest was 79.15 out of 135, with a range from 67 to 104. The average score on the posttest increased to 87.23

out of 135, with a range from 72 to 103. For 2 of the subjects, JY52 and RK53, posttest scores did not increase over pretest scores. A paired *t*-test, which either supports or rejects the null hypothesis that the means of two normally distributed samples are equal, was used to compare the pre- and posttest scores. The test yielded a significant difference between the mean of the two sets of scores ($t(12) = 3.979, p = 0.002$). Although the actual time that subjects spent in the US did not seem to correlate with the changes in scores, improvement over 11 weeks was significant for the group overall.

Classes

To examine the effect of English classes on the rate of improvement in grammaticality judgment, subjects were divided into two groups: those taking English classes ($N = 8$) and those not taking English classes ($N = 5$). The average of the pretest scores among the subjects taking classes was 76.5 while the average among subjects not taking classes was 83.4 (Table 4). The average posttest score was 85.1 for subjects taking classes and 91.0 for subjects not taking classes. The difference between the average *JN1* and average *JN2* in the group of subjects taking classes was 8.63, equivalent to a 6.39% change in the total test score (difference between *JN1* and *JN2* divided by 135, the maximum score possible). For the group of subjects not taking classes, the difference between the average *JN1* and average *JN2* was 7.2, equivalent to a 5.33% change

Table 4
Pre- and Posttests Scores Grouped by Whether Subjects Were Taking English Classes

| <i>Code</i> | <i>JN1</i> | <i>JN2</i> | <i>JN diff %</i> | <i>Classes?</i> |
|-------------------|------------|------------|------------------|-----------------|
| RK53 | 78 | 74 | -2.96 | Y |
| NN55 | 68 | 84 | 11.85 | Y |
| JY58 | 77 | 79 | 1.48 | Y |
| HM59 | 72 | 77 | 3.7 | Y |
| HY60 | 73 | 85 | 8.89 | Y |
| JA61 | 83 | 87 | 2.96 | Y |
| RA63 | 81 | 102 | 15.56 | Y |
| JA64 | 80 | 93 | 9.63 | Y |
| Average | 76.5 | 85.1 | 6.38875 | |
| Avg JN2 - Avg JN1 | | 8.63 | | |
| NM51 | 85 | 97 | 8.89 | N |
| JY52 | 104 | 103 | -0.74 | N |
| XT54 | 88 | 93 | 3.7 | N |
| MS56 | 67 | 72 | 3.7 | N |
| RK62 | 73 | 88 | 11.11 | N |
| Average | 83.4 | 91 | 5.332 | |
| Avg JN2 - Avg JN1 | | 7.2 | | |

in the total test score. There was no significant difference between the two groups of subjects (8.63 vs. 7.2) in the average rate of change.

In general, there was no statistically significant distinction between the two subgroups. We performed a 2-sample *t*-test with the change in grammaticality judgment test score as the dependent variable, which is the factor whose values are compared when measured in different conditions. The result showed no significant difference between groups ($t(11) = 0.33, p = 0.75$). While the factor of taking classes was significant when looked at in conjunction with other factors, it was not a significant predictor of improvement in grammaticality judgment on its own.

A nonparametric test does not assume that the differences between 2 samples are normally distributed, and it is useful when conducting statistical analyses of small data sets. It was conducted in this study to further support the null hypothesis and simultaneously to reject the hypothesis that taking classes contributes to faster improvement in

grammaticality judgment. The Wilcoxon-Mann-Whitney test, a nonparametric identity test, verified that there was no statistically significant difference between the change in test scores between those taking classes and those not taking classes ($p = 0.825$; in the Wilcoxon-Mann-Whitney test the samples in the data are arranged in rank order and then divided into two groups according to the test's independent variable [the factor that is manipulated to measure the effects of different conditions on a dependent variable]. The sums of the ranks held by the data in each group are compared, and significance is determined by the difference between the sums.)

Time Spent in the US

An initial hypothesis postulated that the amount of time spent in the US has no significant effect on subjects' performance on the Johnson and Newport test. We performed a regression, which is used to determine relationships between random variables, to test

this hypothesis. We used both the subjects' pre- and posttest scores as the dependent variables and the number of months they had been in the US at the time of the test as the independent variable. The regression showed that there was no correlation between the subjects' test scores and the number of months they had lived in the US, thus supporting the hypothesis. The model was a poor fit and the overall relationship was not significant ($F(1, 22) = 0.684, p = 0.41$).

Attitudes Toward English and American Culture

An ANOVA tests the significance of difference between the means of more than 2 samples. With scores on AMTB C1, C2, and G1 (sections dealing with motivation) as the independent variables, an ANOVA did not yield a significant model for predicting change in grammaticality judgment. A second ANOVA used scores of AMTB A, B, and D (sections dealing with integrativeness) as independent variables and yielded a significant model for predicting change in grammaticality judgment. In that model, the score on AMTB A was a significant predictor of change in Johnson and Newport scores ($F(1,12) = 12.333, p = 0.007$), while the scores on AMTB B and D were not.

Multiple post hoc one-way ANOVAs using just one independent variable indicated that scores on certain AMTB subsections significantly predict English grammaticality judgment. Scores on AMTB sections A, C1, and C, as well as the motivation index, all yielded significant or marginally significant predictors of improvement in grammaticality judgment when used as independent variables in one-way ANOVAs, while scores on other sections did not. The score on AMTB A was a significant predictor ($F(1,12) = 11.437, p = 0.006$), and scores on both AMTB C1 and C and the motivation index were marginally significant predictors ($F(1,12) = 4.557, p = 0.056$ for all three). AMTB A and C seem to be consistent predictors for the improvement in grammaticality judgment ability, and other

factors become significant when looked at in combination with those two factors.

Subjects' scores on the AMTB were analyzed as independent variables in the Wilcoxon-Mann-Whitney test. Only AMTB A had a significant effect on the percent change in their test scores over the 11 weeks ($p = 0.014$). Scores on the other AMTB sections did not have a significant effect on their Johnson and Newport scores.

Strategies of Language Learning

Responses to the SILL were converted into percentages for each section. Scores of all six subsections were used as independent variables in a multiple regression, with the percent change in the Johnson and Newport test as the dependent variable. The overall relationship of the regression was significant ($F(6, 6) = 7.356, p = 0.014$). Scores on SILL B (using mental processes), SILL D (organizing learning process), and SILL F (learning with others) correlated significantly with the change in test score ($t_6 = 4.626, p = 0.004$; $t_6 = 2.616, p = 0.040$; $t_6 = 3.764, p = 0.009$, respectively).

Qualitative Data From Interviews

Subjects participated in open-ended interviews in Japanese, discussing their English-learning experience. The comments included in this section have been translated into English. In the interviews, subjects expressed their sentiments on learning English in the US. Their opinions differed on whether they had enough time to devote to studying English. Often their responses depended on whether or not they had children. The responsibility of taking care of a child—the oldest of all subjects' children being in the early years of elementary school—left mothers with less time to spend on English lessons. All 7 subjects without children were taking English classes at the time of the study, while only 1 of the subjects with children, Maeko, was taking English classes. Most mothers expressed that they would take classes if there were a

day-care center to which they could entrust their children.

Yuriko, mother of a baby less than 1 year old, said, "If there were a facility that would watch the baby, I would take advantage of its services. Asking friends to baby-sit is OK, but if someone at a day-care center watched him [the baby], it would be so much better." Both Yuriko and Saeko stopped attending English classes when their children were born in the US. They commented that, since then, it has been more difficult to find time to work on their language studies. Many subjects with children described their maternal responsibilities as "difficult to work around" in terms of learning English.

When asked about specific language-learning methods they had used in the past, many subjects commented on the benefits of—and their desire to devote more time to—conversation practice. Most subjects preferred small English classes where the instructor interacted with each student individually and where they had time to practice speaking with others in class. Some mentioned the benefits of explicit error correction, which becomes difficult when the class is large. The subjects consistently preferred to devote more time to speaking and listening to English. Sachiko attributed her desire for more speaking and listening lessons to her integrative orientation: "It's more important to be able to speak and listen because I'm learning English to make friends. If I were going to school or looking for a job, then I would need to know how to write as well. But for the purposes of talking to people and traveling, I'd place more emphasis on speaking and listening."

Those taking classes found that they conversed most easily with other English learners. Asako and Chieko both commented on the ease with which they spoke with other learners. "We make the effort to understand each other," said Asako. Youko and Natsuko also thought that getting to know other students in a small class helped them build a comfortable environment in which to practice English. Youko said, "The time we spend

working together helps us be more willing to speak in class or to ask questions. I think a smaller class is better suited for me."

Subjects compared their experiences of using and studying English in Japan with what they have encountered in the US. Shouko studied English at her university, but she remembered that her curriculum was based more heavily on reading and writing. "Grammar and structure are much easier to work with when you can see it on paper and spend the time to think about it. Speaking is difficult for me because I feel that I haven't had nearly as much practice as reading novels and writing papers." Momoko discussed the comments of other Japanese people who assumed it would be easy to learn English while living in the US. "In reality, it isn't as easy as they think," she said. "It takes a long time to become accustomed to simply living here. Just talking to people and carrying out everyday activities in English doesn't make learning English instantaneous." Although English is used in work-related activities in Japan, most people do not feel comfortable using it for daily conversation. Ayako, who often encountered English in her work in Japan, found that speaking and listening required different sets of skills from what she had formerly used for work.

Regardless of how much time they had to spend on actively completing English lessons, all subjects expressed a desire to learn and use English. Many took classes and had conversation partners. Akiko took English classes in the morning and one-on-one tutoring lessons in the afternoon. Others, such as Michiko and Haruko, spent time getting used to the sound of English by having the television on while carrying out chores and looking through newspapers to become familiar with US news styles.

Discussion

Role of Classes

Statistical analyses did not significantly differentiate between those taking classes and those not taking classes. Both groups includ-

ed a wide range of change in test scores, most likely canceling out any significant difference in a comparison of means. Although in Flege and Liu's (2001) study the two groups differed when LOR was examined, in this study there was no such difference. The first hypothesis, that people taking classes improve their English skills faster than those not taking classes, was therefore rejected. This implies that people who are not taking classes have just as much potential to improve their grammaticality judgment ability as people who are taking classes.

Length of Residence

The number of months the subjects had lived in the US did not correlate with their performance on the grammaticality judgment test. We can conclude that people cannot expect improvement in their English skills simply by living in the US for a certain period of time. The validity of this analysis should be assessed, however, since finding a correlation with only 26 points (coming as pairs of points from 13 individuals) may not yield a reliably significant—or insignificant—relationship. At least in this study, we can accept the hypothesis that 11 weeks spent in the US do not, on their own, correlate with performance on the grammaticality judgment test. A comparison between pre- and posttest scores indicated, however, that each subject's performances on the two administrations of the test were significantly different. Although LOR was a significant factor for individuals taking classes in Flege and Liu's (2001) study, there was no correlation between LOR and English proficiency as measured by the Johnson and Newport test in this study.

Role of Attitude and Motivation

Attitudes toward Americans (AMTB A) and toward learning English (AMTB C) most consistently predicted change in the Johnson and Newport test scores. Past studies have shown a correlation between scores from other AMTB sections and language proficiency (e.g., Ushida, 2004), but for the current

study only scores from sections A and C had significant correlation. While other factors such as interest in foreign languages and encouragement from family and spouse also influence language acquisition, it is reasonable to claim that people's attitudes toward the target society and the actual learning process influence SLA. Especially since 12 out of 13 subjects responded as having an integrative rather than instrumental orientation, it makes sense that attitudes toward the people in the new community strongly predict how quickly they acquire English.

Role of Language-Learning Strategies

Regression on the SILL scores indicated that strategy types B, D, and F correlate with improvement in grammaticality judgment ability. Using various mental processes (e.g., using English in different ways, practicing different types of writing), organizing one's learning (e.g., having clear goals about learning English, finding multiple ways to use English), and learning with others (e.g., asking English speakers for explicit correction, learning about American culture from other speakers) all contribute to English acquisition. The current study echoes the findings of previous research, where cognitive, compensation, and metacognitive strategies were most used by subjects (Bremner, 1999; Kim, 2001). What is significant in this study's results is that types D and F both relate to taking classes, since organizing and evaluating one's English acquisition and working with others are common to the classroom environment.

Experience in the US

Many subjects emphasized their desire to learn to speak and improve their listening comprehension during their stay in the US. These goals often were motivated by their eagerness to meet and converse with native speakers, as well as their hope to carry out certain tasks such as dealing with emergencies or making business-related phone calls. Most described an ideal learning environ-

ment to be a small class in which the instructor has enough time to provide individual attention and explicit correction. Some requested lessons based on idioms, cultural knowledge, and current events. Subjects not taking classes also had strong opinions about their ideal learning situations, where they can spend a set amount of time each day practicing English and applying the lessons to real-life situations.

Conclusion

Summary of Results

Through statistical analysis we see that the rate of change in test scores does differ between the classes and no-classes groups, but that the difference is not statistically significant. This rejection of the first hypothesis means that, in a span of 11 weeks, there is no significant difference in English improvement based on taking or not taking classes. Analysis also shows that certain learning strategies common to the classroom (finding many ways to use English knowledge, actively thinking about one's learning habits and progress, and working with others) facilitate English learning, specifically grammaticality judgment. Many subjects experience frustration with not seeing any improvement in their English skills after living in the US. Analysis shows, however, that there is no correlation between the number of months spent in the US and test score improvement. In other words, as shown in Flege and Liu (2001), a longer LOR alone does not necessarily lead to English improvement. This finding supports the second hypothesis that the amount of time people spend in the US does not, on its own, correlate with performance on grammaticality judgment.

Positive attitudes toward American people correlate with larger improvements in test scores. While it is unnecessary to cultivate specific motivations solely for the purpose of learning a language, the desire to interact with members of the target community encourages individuals to learn a language. In addition, it is apparent from the interviews

that many subjects want to converse more freely with others in their surroundings and learn about American culture through such exchanges.

Although this study did not have a large sample of subjects and did not necessarily yield definitive results, several subjects commented that they became more aware of their own motivations and strategies for learning English. Their improved understanding of the language acquisition process was an additional benefit of completing the study.

For Future Study

A similar study with subjects who have been living in the US for the same amount of time, or subjects who are grouped according to the amount of time they have spent in the US, may yield interesting results regarding changes in the relationship between attitudes and language acquisition. In the future, comparisons between subjects' performance in the first and second halves of the Johnson and Newport test perhaps should be done by randomizing the order of the sentences in the test, since judgment of the items should be based on grammaticality perception rather than tiredness or attention paid during the long test. Modifications and extensions to the study may yield more results that contribute to the design of increasingly effective learning and teaching methods in this specific English-learning community.

Author

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Appendix

List and Description of Subjects

Akiko is a motivated student of English. She seeks out opportunities to converse with native English speakers and takes English classes during the weekdays.

Asako is interested in American culture and English. She takes advantage of her English classes to meet people and share knowledge about different cultures and backgrounds.

Ayako enjoyed her English conversation classes in Japan. The mother of a young baby, she does not take classes but works on her English through other means available to her.

Chieko values her interactions with native English speakers. She enjoys taking English classes and thinks it will be beneficial for better understanding American culture.

Haruko hopes to use her English in her career in the future. She enjoys her English classes and likes learning about different cultures by talking with other students.

Maeko is studying English and hopes to return to work in Japan and venture into different fields. She likes taking English classes and has also studied German.

Michiko sees her experiences in the US as beneficial to understanding life in a different country. She takes English classes during the weekdays.

Momoko thinks that being able to talk with others is the best thing about learning English. She has a young baby and does not take classes but practices speaking English with friends.

Natsuko enjoys learning foreign languages and values her experience of living in the US. She spends time practicing English with other students from her English class.

Sachiko enjoys talking and practicing English with her friends. Although she does not take classes, she hopes to spend more time working on conversation and listening comprehension.

Saeko enjoys learning foreign languages. She stopped taking English classes after her baby was born but hopes to take classes to learn more when she has time.

Shouko is very interested in English language and literature. A mother of two, she wants to learn English to continue living in the US. Shouko does not take English classes.

Youko is very interested in learning about other cultures. She is taking an English class on Stanford campus and enjoys meeting people from a variety of backgrounds.

Yuriko is interested in English and likes speaking to people from different cultures. She stopped taking classes when her baby was born, but she hopes to resume classes when her son is older.