The Roles of Anxiety and Motivation in Language Learner Task Performance

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Keywords: Performance assessment, instrumental motivation, integrative motivation, learner anxiety, presentation

Abstract

Presentations are increasingly being used for assessment purposes in many language learning classrooms in Japan, but little is known about the role which psychological factors can have on their outcome. This study focuses on the effects that anxiety and motivation have on the delivery aspects of student presentations. Students in two university classes were asked to make a presentation in English which was rated by both the instructor and their peers. Ratings related to presentation delivery were then statistically analyzed in conjunction with results from psychological survey given to students relating to their motivation and anxiety towards studying English. Findings from the analysis indicate that anxiety is the more significant variable contributing to presentation performance and also that higher levels of anxiety can override the role of factors such as instrumental and integrative motivation. The author concludes that presentations may be effective as learner tasks but that their role in course assessment should be limited.

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Introduction

Task-based Performance Assessment

Task-based language learning has come to prominence in today’s second and foreign language (L2) classrooms in large part due to an increase in the number of school curriculums which are communicatively-oriented. This has been especially true in Japan, where the development of such curriculums has been encouraged by the Ministry of Education as an alternative to traditional paper-and-pencil centered approaches to language learning (Koike & Tanaka, 1995). As courses which emphasize active skills have gained prominence, many instructors have had to develop new means of assessment which properly address output-related tasks. This has had particular impact on classes where L2 performance is a foundation of course content.

McNamara (1996) defines performance assessment as involving a rater or raters making a qualitative measure of learner performance through the employment of a rating scale. He explains that the use of pre-established scales brings a measure of control to rater variation which might otherwise be undermined by their subjectivity. It can also be a means of narrowing the complexity of the performance situation to a well-defined set of performance characteristics. Because performance tasks often attempt to approximate scenarios similar to those encountered outside of the classroom, one concern which has emerged is the issue of validity, that is, the extent to which a test or task is measuring what it purports to measure. Central to this concern is the inclusion of what Bachman and Palmer (1996) term authenticity, which they define as “the degree of correspondence of the characteristics of a given language task to the features of a Target Language Use (TLU) task” (p. 23). Norris, Brown, Hudson, and Yoshioka (1998) also define performance assessment in terms of tasks which are as authentic
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as possible. The challenge for the teacher of a communicative-oriented curriculum can thus be twofold: to find a means to assess students through tasks which can be evaluated with a rating scale, and which are as authentic as possible.

For courses which focus on oral production skills, practitioners who follow these guidelines for assessment often rely on a series of clearly defined tasks which involve spoken production. This has been particularly true in Japan, where in-class performance tasks may be the closest many students will come to experiencing Target Language Use that contains a degree of authenticity. Akiyama (2003) found that many teachers in Japan commonly employ activities such as interviews, role-plays, and speeches or presentations for grading of student performance. Several articles have been written about presentations in particular which focus on their use as a base for curriculum design or assessment (Anderson, 2000; Wakao & Nelson, 1997; Yamashiro & Johnson, 1998). Indications point to student presentations being widely utilized at tertiary education levels, most likely due to their being concrete tasks involving an easily graspable set of skills which can also serve as a straightforward means for teachers to assess students’ oral proficiency. While it can be argued that student presentations may lack a degree of authenticity (as defined by Bachman and Palmer (1996)) when compared to other oral production tasks such as interviews or role-plays, focus on interactivity with listeners and dynamic delivery skills, as well as organization and persuasiveness, can nonetheless be seen as components which might easily justify their inclusion into communicative and task-based curriculums.

Learner Motivation and Anxiety

The increased interest in performance assessment, both for curriculum development and for Second Language Acquisition (SLA) research, has come at a time when a number of language instructors and researchers
are also focusing on various psychological traits of language learners. Theoretical constructs such as anxiety towards foreign language learning and different types of motivation have come to be seen as important factors which can contribute to the success, or lack thereof, in gaining proficiency in a second or foreign language. Motivation in particular has a large and growing body of research investigating the role it can play in SLA, starting with Gardner and Lambert’s initial postulation (1959) of two distinct varieties: instrumental and integrative motivation. Subsequent research has examined the role played by each, with various studies focusing on one or the other type. In terms of instrumental motivation—the desire to improve language proficiency based on language-related goals such as gaining qualifications or job promotion—Gardner and MacIntyre (1991) indicated that this can be an effective stimulus in certain second language contexts. Dornyei (1990) views integrative motivation—the impetus by learners to improve their proficiency in order to assimilate themselves better into the culture of the target language—as a highly significant consideration in foreign language learner psychology, although he contended that dividing learner motivation into instrumental and integrative categories may be a false dichotomy. Gardner and Lambert (1972) have also argued that development of both motivation types is important for language learning tasks.

While motivation in its multiple forms can be seen as playing a key role in SLA, a more specific inquiry involves the effect it can have on engagement in language tasks. On the surface, the positive influence motivation may exert on development of language skills would seem to translate to success in the performance of language tasks, i.e. highly motivated students would be likely to spend more time preparing for and engaging in performance-based tasks such as role plays or presentations resulting in better assessment. However, there is evidence that another psychological construct—L2 anxiety—may also affect task performance.
MacIntyre and Gardner (1994) defined L2 anxiety as, “…the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning.” (p.284). Some studies have investigated the effect that anxiety has on communication strategies and performance. Ely (1986) found that learners with greater levels of anxiety took fewer risks in language classes. Spolsky (1989) determined that anxious learners write, speak, and participate less than relaxed learners in language classes. In his article examining the relationship between anxiety in Japanese learners and their performance in oral tasks, Cutrone (2003) focused on what he terms *reticence*—the reluctance of Japanese learners to stand out in front of their peers. He then hypothesized a number of potential causal factors for this condition including inexperience and inhibitions with Western educational models, interactional domains, and shyness. Cutrone concluded that Japanese learners can partially free themselves of cultural inhibitions if instructors create more “intimate” classroom environments which focus on students sharing information about their backgrounds and experiences in small groups.

The effects that motivation and anxiety can have on language learning have been well covered in research, although less examined is the relationship between these constructs. In several articles, Clement (Clément, Gardner, & Smythe, 1980; Clément & Kruidenier, 1985; Clément, Dörnyei, & Noels, 1994) has proposed his model of anxiety as a subordinate construct of *self-confidence*, an idea which includes both a lack of anxiety and positive self-ratings. The quality of contact with the culture and people of the language under study is crucial for determining learner motivation, according to Clement, and positive experiences can improve self-confidence (or decrease anxiety) leading to greater motivation to learn the target language (MacIntyre & Gardner, 1991).
Purpose Statement: Learner Psychology and Task Performance

While various psychological factors may undoubtedly have an effect on learners’ orientations and success in language learning, these can be challenging constructs for language educators to consider when designing courses, planning activities, and assessing student performance. Although using presentations as a means of measuring English students’ speaking ability may seem to be a sound method of assessment, it is difficult to determine the benefit such a performance task can bring to the learner who is being evaluated not only in front of the teacher but also her peers. One might argue that language performance is not the only thing being assessed in such a scenario. Performance-related stress (or lack thereof) determined by an underlying psychological factor such as anxiety may have an undue influence on student achievement during presentations. As anxiety and motivation have been shown to impact L2 acquisition, these traits would seem to be on pronounced display when the learner must perform alone in a situation that could have a significant impact on her final grade.

The purpose of this study is to examine the influence of learner motivation and anxiety on task performance, specifically related to oral presentations. Questions guiding the research include:

1. To what degree does L2 learner anxiety affect performance in an oral presentation?
2. What influences do instrumental and integrative motivation have on their performance, and can these help to overcome learner anxiety?
3. Considering the influence of all three of these factors, are student presentations appropriate tasks to evaluate learners in language courses?
Methodology

Participants
The participants in this study were 41 second-year students at a large, private university in Kyoto, Japan. Students were divided into two English classes, with approximately 20 students per class, and each group included majors from several different departments at the university, including economics, law, and engineering. All were native speakers of Japanese. Both classes were taught by the same instructor and were part of the students’ requirement for graduation, although they had freedom to choose the course and instructor. The focus of the courses was on improving the learners’ English speaking ability, and lessons initially concentrated on development of presentation skills. Classes met once a week for 90 minutes over the course of a 13-week semester.

No placement tests were given to stream students according to English proficiency, and those in this study represented a range of ability levels, although they had all had at least six years of English study as required by secondary schools in Japan, as well as a year of freshman English study at the university. Additionally, most students had passed the university’s entrance examination, a significant portion of which tests for skills in English grammar, reading, vocabulary and translation.

Instruments
Rating sheets were developed and used by both the teacher and the learners in order to evaluate student presentations (Appendix A). Except for participants who were absent from class, every student rated each of their peer’s presentations based on a number of criteria listed in the score sheet. Students were informed that results from the ratings would be used in conjunction with the teacher’s ratings to comprise a small (10%)
amount of each presenter’s grade. Rating sheets were developed from presentation aspects studied earlier in the course and were also influenced by criteria outlined by Yamashiro and Johnson (1998). For statistical analysis, only those facets of the presentations related to delivery skills (“voice,” “gestures,” “eye contact,” and “posture”) were used for analysis, as evaluation of the content of the presentations, while undoubtedly an important factor in assessment, was not considered primary to the scope of this research.

The survey used in the study (Appendix B) was adapted from one originally developed by Lee (2004) as a means of assessing Japanese university students’ attitudes towards their study of English. Three of the original six sections in the questionnaire were utilized, comprising 15 Likert-scale items asking about the participants’ motivation (integrative and instrumental) and anxiety in relation to using English as a foreign language. Students were asked to complete these surveys during class time near the end of the term, and results were made partially anonymous for reasons of privacy.

Procedure

The first seven weeks of the course were devoted to studying and making presentations in English. Using both a textbook (Harrington & LeBeau, 1998) as well as instructor-created handouts, fundamental presentation skills were studied and rehearsed by the learners and modeled by the instructor. Students were given multiple opportunities to practice the skills they were learning as well as to work together and evaluate their peers on various aspects of their presentations. Most of the skills which received focus fell into one of two categories: organization and delivery. The latter in particular received much attention, as many of the learners had little awareness of the need to consider such aspects as body language, eye contact, and voice intonation and stress in order to maintain audience interest during
presentations.

After several weeks of study and practice, the learners were then asked to develop presentations in groups of three or four which would ultimately be performed and evaluated in front of the class. Each student was required to speak for 3-5 minutes about a topic of the group’s choosing while paying close attention to the elements necessary for an interesting delivery. During these presentations, both the teacher and listening students evaluated each speaker separately on a number of criteria related to the structure and physical delivery of the speeches. Ultimately, each of these evaluation sheets was given back to the original presenters in order that they might better understand their performance score.

Later in the school term, students in both classes were given a questionnaire which included items relating to their attitude towards the study of English. In order to partially anonymize the survey, participants were asked to identify themselves only by writing the last four digits of their student numbers on the survey. Additionally, students were given the opportunity to opt out of completing the survey (none did) and were assured that their results would remain private and unrelated to their grade.

Results

Factor Analysis

The first data analysis procedure undertaken involved subjecting the 15 items in the English attitudinal survey to factor analysis (FA). Factor analysis is a commonly-used method of determining the validity of surveys which test for more than one factor. In this case, the survey instrument, adapted from Lee (2004), included items relating to three factors: integrative motivation, instrumental motivation, and anxiety towards the L2. Prior to performing FA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed many coefficients of .3 and
above. The Kaiser-Meyer-Oklin value was .61, slightly exceeding the recommended value of .60 (Tabachnick & Fidell, 2007), and the Bartlett’s Test of Sphericity (1954) reached statistical significance, supporting the factorability of the correlation matrix. In other words, a check of the assumptions confirmed the existence of multiple distinct factors in the survey data.

Four components with eigenvalues greater than 1 were detected in factor analysis, accounting for 29.3%, 14.1%, 11.7%, and 8.9% of the variance respectively. As the survey was created with a three-factor model in mind, only the first three components were retained for further analysis.

For interpretation of the three factors, Varimax rotation was performed. Results from this (Table 1) exhibited a number of strong loadings on all three components. Stevens (1992) recommends interpreting only loading values greater than .4, and according to this criterion, all items in the survey loaded onto only one factor. Most item loadings correlated with the intended three factors written into the questionnaire (‘integrative motivation’, ‘instrumental motivation’, and ‘anxiety towards the L2’), although two of the items—3 and 14—did not correspond with these. Item 3 in particular proved problematic as it negatively loaded on an unintended factor and also exhibited a fairly strong secondary loading. For these reasons, this item was removed during regression analysis. All other items were retained.

Multiple Regression Analysis

Following the administration of the factor analysis, a multiple regression analysis was performed based on the raw score averages of items factored according to results from the FA procedure. Multiple regression is a type of correlational analysis in which the causal effect of several hypothesized variables, or predictors, on a dependent variable is examined. In this case, the relative impact of three factors—‘integrative motivation,’ ‘instrumental motivation,’ and ‘L2 anxiety’—on presentation delivery was of interest.
Scores for the dependent variable—‘presentation delivery performance’—were based upon the average of four evaluative items on the rating sheet—‘eye contact,’ ‘gestures,’ ‘voice,’ and ‘posture’—used by both the instructor and peers during student presentations. The instructor’s average scores were weighted 70% to the learners’ averages of 30%. Inter-rater analysis was performed with the Pearson product-moment correlation coefficient using the teacher’s ratings and the averages of the students’ ratings, and this resulted in a statistically significant inter-rater reliability of .74, a moderately high correlation.
Results from the multicollinearity analysis (Table 2) show a statistically significant relationship between all three independent variables and the dependent variable ‘presentation delivery,’ with ‘L2 anxiety’ exhibiting a negative correlation while also having the strongest relationship of the three predictors. This result helped to inform the research question relating to the effect of anxiety on presentation delivery—there appears to be an inverse relationship with higher anxiety leading to less effective presentation delivery (as rated by the listeners).

Two of the three correlational analyses between the predictors also resulted in significant relationships, with the strongest being between integrative and instrumental motivation. This is not entirely surprising as these two constructs can be considered to be relatively close in nature. Despite this statistic, however, their correlation does not come close to the .7 level, which Tabachnick and Fidell (2007) note is a value at which correlation may become problematic for the model.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Presentation Delivery</td>
<td>3.95</td>
<td>0.51</td>
<td>0.31*</td>
<td>0.42*</td>
<td>-0.43*</td>
</tr>
<tr>
<td>Predictor variable</td>
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<tr>
<td>1. Integrative motivation</td>
<td>3.82</td>
<td>0.75</td>
<td>–</td>
<td>0.44*</td>
<td>-0.22</td>
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<tr>
<td>2. Instrumental motivation</td>
<td>4.30</td>
<td>0.60</td>
<td>–</td>
<td>–</td>
<td>-0.26*</td>
</tr>
<tr>
<td>3. Anxiety towards L2 use</td>
<td>3.63</td>
<td>0.89</td>
<td>–</td>
<td>–</td>
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*p < .05.

Upon completion of the collinearity diagnostics, a multiple regression analysis was performed using standard entry of all of the variables. Results from the procedure (Table 3) indicate that the overall model accounted for a
significant amount (30%) of the variance in the oral delivery scores. Of the three predictors, ‘L2 anxiety’ resulted in the highest, and only statistically significant, beta score, thus indicating its impact on the presentation scores regardless of motivational factors. A further hierarchical regression analysis was also performed in order to determine the effect of L2 anxiety while controlling for both motivation types. The change in $R^2$ under the new model indicates that anxiety alone accounts for 19% of the overall variance.

Table 3

Regression Analysis Summary for Motivation and Anxiety Variables Predicting Presentation Delivery Scores

<table>
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<th>Variable</th>
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<tbody>
<tr>
<td>Integrative motivation</td>
<td>0.08</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>Instrumental motivation</td>
<td>0.24</td>
<td>0.13</td>
<td>0.29</td>
</tr>
<tr>
<td>Anxiety towards L2 use</td>
<td>-0.19</td>
<td>0.08</td>
<td>-0.33*</td>
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Note. $R^2 = .30$ ($N = 41$, $p < .05$).

$^*p < .05$

**Discussion and Conclusion**

One issue which must be considered by the conscientious language teacher is how reliably any test of student performance reflects learner proficiency and/or understanding of criterion-related language goals. In terms of presentation as assessment, the merits would seem to outweigh doubts as to the efficacy of its use as a performance test. Students being asked to use the language in a meaningful way that should be both interesting and logical would seem to be legitimate requirements for a means of judging oral proficiency. However, certain tasks may also encompass a psychological dimension which can affect students’ ability to successfully perform them. Guiora (1972) has argued that language
learning itself is “a profoundly unsettling psychological proposition” because it directly threatens an individual’s self-concept and worldview. Cutrone (2003) discussed a number of factors such as shyness, interactional domains, and inexperience with Western educational practices, which can bring about reticence and anxiety in Japanese learners. Moreover, it is well known that public speaking can be a stressful activity for many people, regardless of the subject matter, audience, or native language of the presenter. From this perspective, non-Western learners studying in a foreign language environment may be more prone to experiencing anxiety than learners in other contexts. Teaching students to perform presentations in a way that is acceptable for Western listeners, but different from presentation norms in their own culture, and then grading them from this perspective is not a curriculum decision which should be taken lightly.

Results from the analyses in this study indicate that even when instrumental or integrative motivations play a role in students’ attitudes towards language learning, these are not necessarily enough to significantly overcome any psychological anxiety which may exist towards the L2—a variable which does appear to have a measurable impact on oral performance. While this does not mean that presentations are not a valid component of language learning curriculums in Japan, it is important for educators to be aware of learner concerns and consider their assessment accordingly. It is inadvisable, therefore, for a single presentation to determine a large proportion of students’ final grades in secondary and tertiary English education. Rather, presentations, if used for assessment purposes, should comprise a small part of a varied curriculum which incorporates several other evaluation methods that are less likely to be influenced by underlying psychological factors present in the language learner.

As this study was a preliminary look at the relationship between the psychological and performance testing, there were certain limitations which
should be addressed in future iterations of similarly-oriented research. Of particular note was the small sample size (41), which can at times be problematic when conducting complex procedures such as factor analysis and multiple regression. However, statistical results in this study were fairly strong and consistent, despite the sample size. Additionally, this study limited its scope to one popular type of performance task—student presentations. Future iterations of research in this area could also investigate other types of performance assessment, such as role plays or student interviews, or the effect of additional psychological factors like extraversion and Willingness to Communicate.

References


Appendix A

Presentation Evaluation Sheet

Presenter

Topic

As you listen, please rate each presenter on these points.

**Content/Structure**

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<td>Body - Transitions</td>
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<td>Conclusion</td>
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<td>Voice</td>
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<td>Gestures</td>
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<td>Eye Contact</td>
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<td>Posture</td>
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Appendix B

1. 英語で外国人と話しがしたい。
I would like to communicate with foreigners in English.
2. 英語習得は自分の教養を高めるのに必要だ。
English is essential for personal development.
3. 日本語でも自分がうまく表現できない。
I am not good at expressing myself even in Japanese.
4. 外国の音楽と文化に興味がある。
I am interested in foreign music and culture.
5. 英語は社会で活躍するのに必要だ。
English is essential to be active in society.
6. 難しいトピックに関しても、自分の意見が言える。
I can express my own opinions even about difficult topics.
7. 多くの外国人の友人を作りたい。
I would like to make as many foreign friends as possible.
8. 英語は自分の将来の可能性を広げる。
English broadens possibilities in my future.
9. 人の前で話すと緊張してしまいがちである。
I tend to be nervous when speaking in front of people.
10. 多くの外国を訪問したい。
I would like to visit as many foreign countries as possible.
11. 英語はよい仕事をみつける上で大切だ。
English is necessary to get a good job.
12. 教室で英語を話すとき緊張する。
I tend to be nervous when speaking English in the classroom.
13. 他国の価値観と考えを理解したい。
I would like to understand other countries’ values and thought.
14. 英語の資格をとりたい。
I would like to acquire some sorts of qualification or certificate in English.
15. 外国人と話すとなると緊張と思う。
I would be nervous if I spoke to foreigners.

*Students received questions in Japanese with each item including a 5-point Likert scale. Items 1,4,7,10,13 were written with an intended focus on Integrative Motivation.
Items 2,5,8,11,14 were written with an intended focus on Instrumental Motivation.
Items 3,6,9,12,15 were written with an intended focus on L2 anxiety.

日本国内の言語教育における評価手法として、プレゼンテーションが採用されることが増えてきているが、心理的要因がプレゼンテーションパフォーマンスに影響することはあまり知られていない。本論は、発表への不安あるいは学習意欲が、学生のプレゼンテーションの出来映えにどのように影響するかについて焦点をあてたものである。

大学の2つのクラスにおいて、学生が英語でプレゼンテーションを実施し、教員および学生同士が評価を行った。評価は心理的要因を調査するアンケートの結果とともに統計学的に分析され、学生の意欲と不安が英語学習にどのように関連しているかが考察された。

その結果、発表への不安はより顕著に可変的にプレゼンテーションパフォーマンスに影響を及ぼし、その不安が大きい場合には、手段的あるいは総括的な学習意欲が及ぼす影響にも勝るものであった。

著者は、プレゼンテーションは学習者への課題としては効果的であるが、評価手法としては限定されるべきものであると結論付ける。