A Preliminary English Learning Motivation Survey for Japanese University Students in a CALL Environment

CALL 環境における日本人の大学生の英語学習意欲予備調査

Kibler, Ronald L.[1]

キブラー　ロナルド L.[2]

要 旨

　この予備的研究の目的は，英語を学習する大学生に焦点をあて，コンピュータを使用した言語学習(CALL)環境における 4 つの異なる視点（外的動機，内的動機，不安，個人的なアイデンティティー）間の関係を調査することである。このデータは，北海道の小さな大学の 3 つの異なる学科に属する 71 人の生徒に対して行われた調査に基づいている。この調査は，外国語教育に関する調査で有名なガーデナー氏の AMBT 手法 [Gardner, 1985, http://publish.uwo.ca/~gardner/docs/AMTBmanual.pdf]を基にして筆者によって作られた 19 の質問によって行われた。調査結果では，コンピューターを使用した言語学習(CALL)環境において，生徒は外的・内的両方の動機を持ち，内的動機が外的動機をやや上回る事がわかった。外的動機・内的動機と不安に関しては，多くの場合に有意な相関関係が認められた。しかし，個人的なアイデンティティーに関しては，上記の 3 つの視点と相関関係がほとんど認められなかった。本研究のような相関関係の調査が，生徒のニーズ分析やカリキュラム開発，学生の管理を行う場合に効果的に利用できることが明らかになった。

Abstract

　Focusing on Japanese college ESL students, the purpose of this preliminary study is to explore relationships between 4 different points of view: extrinsic motivation, intrinsic motivation, anxiety, and personal identity in a Computer Aided Language Learning (CALL) environment. The data was collected by taking a survey of 71 students in three different programs of study at a small private university in Hokkaido, Japan. The 19 item questionnaire, modeled on Gardener's AMBT [Gardner, 1985, http://publish.uwo.ca/~gardner/docs/AMTBmanual.pdf], was designed by the author. The results showed that the students felt both intrinsic and extrinsic motivation in a CALL setting, with the level of intrinsic motivation exceeding the level of extrinsic motivation. The correlation among extrinsic motivation, intrinsic motivation, and anxiety items were found to be significant in most cases. However, for the most part, no such results were shown among extrinsic motivation, intrinsic motivation, anxiety items and personal identity survey items. Studying such clusters of relationships could help instructors carry out needs analysis, curriculum development, and class management.

---

[1] Liberal Arts Education Center, Sapporo Campus, Tokai University, 5-1-1-1 Minamisawa, Minami-ku, Sapporo 005-8601, Japan; E-mail: ronkib(a)gmail.com
[2] 東海大学札幌教養教育センター，005-8601 札幌市南区南沢 5 条 1 丁目 1-1

1. Introduction

The search for a better understanding of language acquisition has a long, well documented past. Early pre-behaviorism theories, such as the Series Method or the Direct Method, were followed by the rise of Behaviorism, the Audio Lingual Method, and the Grammar Translation Method. These in turn gave way to the rise of more cognitive approaches, starting with Chomsky's Universal Grammar [Taber, 2011]. Since the 1980's the role of affective factors has been of great interest to language teachers and researchers. Stephen Krashen's Input Hypothesis and Robert Gardner's Socio-Educational Model are two modern language acquisition theories stressing the importance of cognition and affective learning factors in second language acquisition, The current study, strongly influenced by both of these theories, is an attempt to better understand the role and potential of Computer Assisted language Learning in a Japanese university setting.

The original survey used in is this study is similar to Gardener's famous survey of student motivation, the AMBT. But unlike the landmark studies carried out by MacIntyre and Gardener, which tended to focus on attitudes toward the learning of English by French Canadian speakers or the learning of French by English speaking Canadians, this survey was designed to focus specifically on how Japanese college students view computer based instruction in terms of the resulting levels of intrinsic motivation, extrinsic motivation, and anxiety. The notions of intrinsic motivation, extrinsic motivation and anxiety as they are used in this study were totally in keeping with the overall, orthodox meaning of these categories as set out in other studies of motivation. But in order to have a survey that would assess Japanese College students' perceptions of Computer Aided Language Learning it was necessary to draft suitable and original survey items. In designing the items for the survey, the meaning of these concepts and the distinctions between them were specifically based on the definitions set forth by Charles Kelly [Charles Kelly, 2011]. However, the application of those concepts to Japanese university CALL, was original and unique, with all survey items being written by the researcher. Finally, a forth category was added to the survey. This category, called 'Personal Identity' was intended to assess the degree to which a participant's concepts of self and subject are integrated. This is a facet of student learning that is neither popular nor orthodox. To the best of my knowledge it has never appeared in the literature. It can be thought of as being related to intrinsic motivation, but it is not goal orientated in the way motivation is. In this study, it is intended to represent a more subtle sense of how the student feels toward a subject on an individual level. It attempts to define the student's language learning nature in terms of his relation to the subject.

2. Method and procedure

Students in three different college English classes were asked to complete a nineteen question survey on different aspects of learning motivation. The nature of the sampling was convenience sampling. Upon having completed their class work and tests all the students in one specific teacher's classes were asked to complete the survey before being dismissed for the year.

The questions were divided into four specific categories; intrinsic motivation, extrinsic motivation [Charles Kelly, 2011], anxiety and personal identity. The survey items were scored on a Likert scale of 1-5, **with 1 corresponding to Strongly Disagree and 5 corresponding to Strongly Agree.** The survey items were written in both English and Japanese (see appendix 1).

After loading all the data into an Excel table, Spearman's Coefficient (r) was calculated, and then a test for significance (p-value) was carried out [Agresti, 2009, Glinger, 2009] The tables containing these calculations are presented in appendix 3.

3. Result

The average scores for the four survey clusters (intrinsic, extrinsic, anxiety, and personal) and the related survey items are show below in Table 1. The results for the individual questions are presented in bar graph form in appendix 2. Although the main point of the study was to look for positive correlations between clusters, an examination of the average response score for the clusters and specific survey items is also useful as it helps shed light on possible areas of interest.

It may be supposed that interest (in terms of affirmative responses) in the use of computers in a CALL setting would be indicative of extrinsic motivation rather than intrinsic motivation. However, the highest number of overall affirmative responses was recorded in the intrinsic cluster. It is interesting to note that the single, most affirmative survey item, with an average score of 3.7, was question six *(By studying English in the Computer lab I can broaden my understanding of the world.)* which came from the intrinsic cluster.

In spite of the fact that the participants showed strong intrinsic motivation for computer use in language learning, the level of personal identity with English was non-affirmative. Survey items thirteen, *(English is an important part of my identity.)* and fifteen, *(English is one of my favorite School subjects.)* had averages of 2.8 and 2.9 respectively.

Overall, the survey results showed positive correlations between the survey items in three of

the four areas of interest. The most noticeable items were those which either loaded on many other, or, conversely, noticeably fewer other items. The single most highly interrelated item was a question about extrinsic motivation, Item No. 10, *Studying in the Computer Lab is a very good way for me to prepare for entering the work force after I graduate.* (ラボで学ぶことは、卒業してから仕事をするにあたって、有効な学習法である.) This item correlated to 13 other survey items, and it correlated with at least one item in each of the four areas of interest. The item with the fewest correlations was a question on personal motivation, Item No. 17; *English study is not as fun as using English to communicate.* (英語を勉強する時は、英語でやりとりする 時より楽しくない。) This item correlated to only 3 other items, one in the area of extrinsic motivation and two in the area of personal motivation.

In terms of area-to-area correspondence, the most noticeable outcome was the large number of correlations among extrinsic survey items and anxiety survey items. As the perceived need to use English for career or academic advancement increases, the level of anxiety is seen to increase, while a decline in the perceived need for English skills as a means of advancement is accompanied by a decline in anxiety.

Table 1. Average Scores for Clusters and Specific Questions

Cluster		Questions			
Intrinsic	3.6	Q2-3.6	Q3-3.5	Q4-3.6	Q6-3.7
Extrinsic	3.4	Q1-3.2	Q5-3.2	Q10-3.6	Q11-2.8
Personal	3	Q8-3	Q13-2.8	Q15-2.9	Q17-3
Anxiety	3	Q7-2.8	Q9-2.9	Q12-2.8	Q12-3.3

4. Discussion

The strongly affirmative response to intrinsic cluster items was not expected. It may be that in giving this response participates are expressing interest in the computer as a communicative tool rather than a study tool. This would make sense in light of the fact that university students are likely to be Internet natives and therefore highly appreciative of the ease of access it allows, the popularity of trendy English websites, and the potential for social networking and information gathering.

 In terms of addressing student needs one must wonder if, 1) students who are highly focused on using English as a tool for future advancement need help dealing with anxiety issues and 2) if students who have low extrinsic motivation for the subject need help understanding the need for language skills.

 This sort of investigation is meaningful in terms of planning and designing classroom activities and curriculum. Along with pre-testing for language skills and levels of preparedness, the administration of a well designed and accurate motivation battery would make it possible

for teachers to predict student needs and expectations, and provide more suitable classroom management. Monitoring student motivation is one way teachers could perform a needs analysis of English language learners.

The use of English Learning Motivation Surveys for class management and curriculum and development makes sense in light of Stephen Kristen's Input Hypothesis. It can be said that such surveys could help teachers to anticipate and plan for the needs of students who have higher affective filters due to anxiety [Krashen, 1985]. If the teacher knew ahead of time to expect that the class would be made up of students with a more positive motivation for learning then she could go on to design a classroom agenda that takes into account the fact that there is a tendency for achievers to have higher anxiety when pursing extrinsic goals. This would call for specific strategies for lowering the filter. .

One shortcoming of the current report is the lack of independent attribute variables. This could be overcome by making use of various criteria. It would be desirable to include information related to gender, language experience, level of achievement as measured by standardized tests, classroom achievement, class-affiliation, or manner of admission to the university (*jyu-ken, suisen, AO,* etc.).

Another inevitable shortcoming of this survey was that the survey items were being used for the first time. Therefore, item validity is an issue. Conversely, some of the items in the current survey did not show any meaningful results. Is this a problem with the item, or the way it is presented, or perhaps the way the item is interpreted by the subjects? In order to come up with a more reliable and robust survey items, some re-writing and more field-testing is required.

5. Conclusion

This preliminary study shows that it is possible and meaningful to attempt to gage and predict student motivation and anxiety in a Japanese university CALL setting. The results showed that there is a correlation between extrinsic motivation and intrinsic motivation, and extrinsic motivation and anxiety. Conversely, personal identity did not have a very strong correlation to extrinsic motivation, intrinsic motivation, or anxiety.

References

Agresti, A., B. Finaly   (2009), *Statistical Methods for the Social Sciences*, Pearson, Prentice Hall, pp. 255-288

Gardner, R. C. (1985), "The Attitude/Motivation Test Battery: Technical Report," Accessed at: http://publish.uwo.ca/~gardner/docs/AMTBmanual.pdf, 2011

Glinger, J., G. Morgan, N. Leech (2009), *Research Methods in Applied Settings*, Routledge, pp. 144-146

Krashen, Stephen D. (1985), *The Input Hypothesis: Issues and Implications*, Laredo Publishing

Co., Torrance, CA, pp. 3-4

Kelly, C. (2011), "A Review of Traditional and Current Theories of Motivation in ESL,"
    Accessed at: www.osaka-gu.ac.jp/php/kelly/papers/motivation.html, 2011

Taber, J. (2008), "A Brief History of ESL Instruction: Theories, Methodologies, Upheavals,"
    Accessed at:
    http://papersbyjoantaber.blogspot.com/2006/05/brief-history-of-esl-instruction.html, 2011

Appendix 1 - Survey Questions

以下の各文について、「1.全くそう思わない」「2.あまりそう思わない」「3．どちらでもない」「4.ややそう思う」「5．非常にそう思う」のうち、該当する番号を 1つ選び〇で囲んでください。 ラボ ＝（コンピュータ ラボ）

1) The value of learning English in a Computer is that I will be able to do well on tests.

コンピュータで英語を学ぶことは試験のときに良い点が取れることである。

| 1 | 2 | 3 | 4 | 5 |

全くそう思わない   非常にそう思う

2) One reason to study in the computer lab is so that I will be able to enjoy using my language skills much more outside of the classroom.

教室外でもっともっと語学の能力を使う楽しみがあることが、ラボで学ぶ理由の一つである。

3) Studying in the Computer lab is a good way to prepare for making friends in a foreign language.

ラボでの学習は、外国語を話す友達を作るのには大変良い方法だ。

4) I want to study in the computer lab so that I can get the language skills I need in order to better understand other cultures.

他国の文化をより理解するために必要なスキルを得ることができるので、私はラボで勉強したい。

5) I feel good about studying in the Computer Lab because it will help me get better results in the classroom.

ラボで学習は、クラスで良い成績をとることができるので、私にとっては良い学習法である。

6) By studying English in the Computer lab I can broaden my understanding of the world (broaden my horizons).

ラボで英語を学ぶことによって、他の国を理解する視野を広げることができる。

7) I feel more relaxed when I study in the Computer Lab than when I study in a classroom with a teacher.

　教室で先生から教えて貰うより、ラボで学ぶ方がよりリラックスする。

8) Ten years from now I will probably be very active in my use of English.

　今から１０年後にも、私は積極的に英語を使っているだろう。

9) One nice thing about studying in the computer lab is that I do not have to talk in front of other people.

　ラボで学ぶことの素晴らしいことは、人前で話をしなくともよいことだ。

10) Studying in the Computer Lab is a very good way for me to prepare for entering the work force after I graduate.

　ラボで学ぶことは、卒業してから仕事をするにあたって、有効な学習法である。

11) I want to spend more time studying in the Computer Lab because it is the best way for me to learn English as a school subject.

ラボでの学習に多くの時間を使うことは英語の学習に一番いい方法である。

12) I feel more in control when I study in the Computer Lab than when I study in a classroom with a teacher.

　教室で先生から教えて貰うより、ラボでの学習はより管理されていると感じる。

13) English is an important part of my identity.

　英語は私の個性の重要な部分である。

14) College English is very competitive but studying the Computer Lab can give you an advantage.

　大学での英語の授業で良い成績を取ることは厳しいが、ラボでの学習はアドバンテージをあなたに与える。

15) English is one of my favorite School subjects.

　英語は学校の授業の中で好きな教科の一つである。

16) When I study in the computer I feel comfortable because I do not need to worry about having a dictionary.

　コンピュータで学ぶことは、辞書を持っていく心配をしなくともよいので、気楽な気分になる。

17) English study is not as fun as using English to communicate.
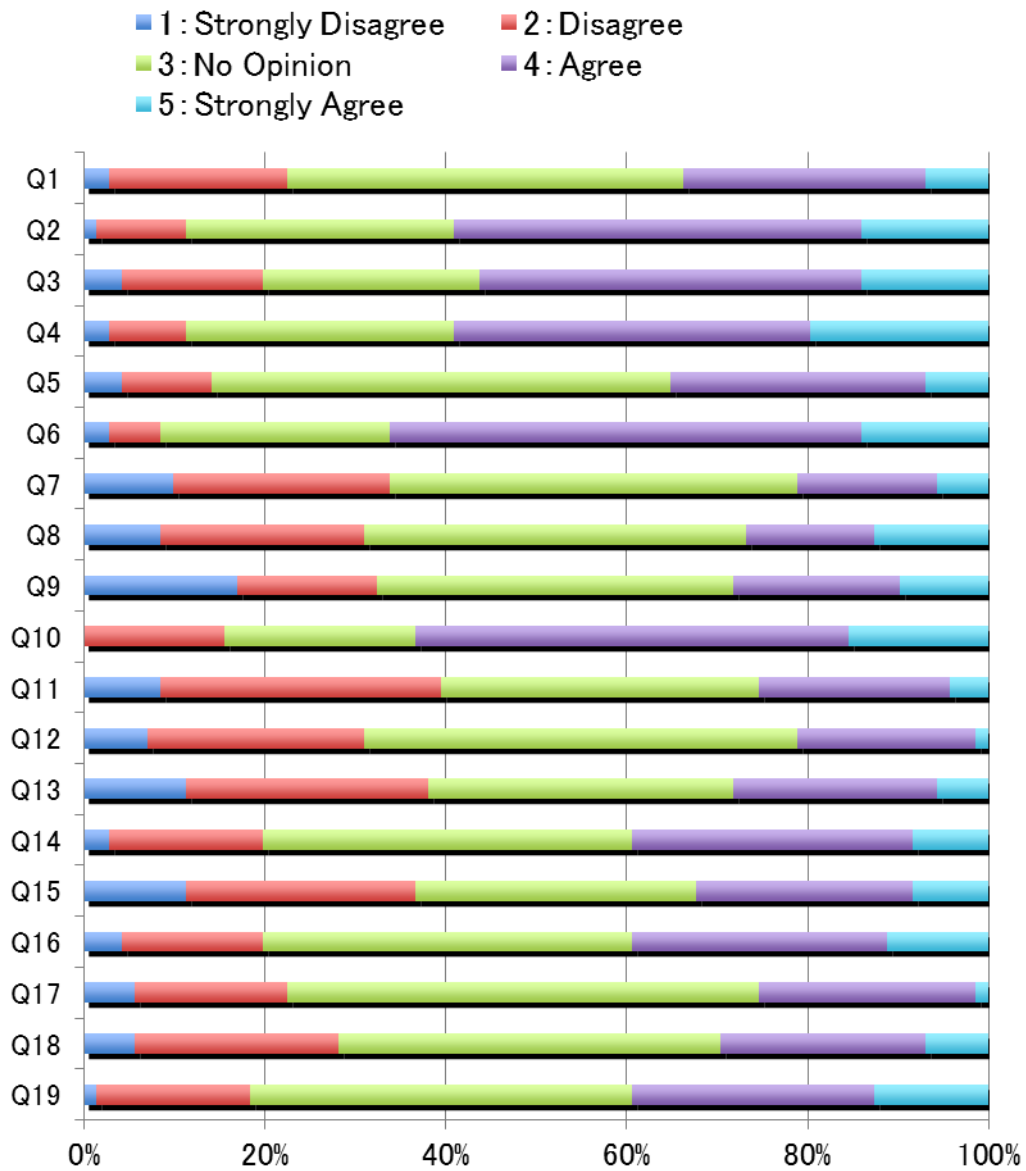
　英語を勉強する時は、英語でやりとりする時より楽しくない。

18) I always enjoy learning English regardless of the setting.

　私はいつも身の回りの雰囲気を気にすることもなく、英語の勉強。

19) I would rather spend time with other people who are very interested in English.

　英語に興味をもっている人とより多くの時間を共有したい。

Appendix 2 – Distribution of Results

Appendix 3 – Correlation Matrix

		intrinsic motivation				extrinsic motivation					personal identity						anxiety			
		Q2	Q3	Q4	Q6	Q1	Q5	Q10	Q11	Q14	Q8	Q13	Q15	Q17	Q18	Q19	Q7	Q9	Q12	Q16
intrinsic motivation	Q2		0.34	0.41	0.32	0.46	0.48	0.26	0.10	0.29	0.21	0.15	-0.10	0.13	0.12	0.09	0.29	0.38	0.03	0.05
	Q3			0.43	0.41	0.28	0.33	0.32	0.10	0.11	0.16	0.25	0.14	0.20	0.30	0.17	0.17	0.22	0.13	0.02
	Q4				0.26	0.49	0.47	0.24	0.33	0.14	0.04	0.27	0.02	0.18	0.22	0.03	0.18	0.15	0.13	0.16
	Q6					0.38	0.35	0.44	0.11	0.25	0.14	0.25	0.04	0.13	0.36	0.07	0.32	0.27	0.11	0.21
extrinsic motivation	Q1						0.53	0.35	0.35	0.39	0.23	0.12	0.04	0.10	0.18	0.15	0.32	0.25	0.17	0.20
	Q5							0.44	0.26	0.41	0.14	0.09	0.03	0.27	0.08	0.12	0.31	0.09	0.29	0.22
	Q10								0.43	0.54	0.34	0.23	0.20	0.17	0.18	0.29	0.26	0.12	0.28	0.26
	Q11									0.36	0.20	0.28	0.16	0.13	0.13	0.14	0.42	0.30	0.50	0.29
	Q14										0.16	0.24	0.10	0.05	0.12	0.18	0.33	0.27	0.43	0.32
personal identity	Q8											0.48	0.67	-0.11	0.21	0.61	0.15	0.02	0.08	-0.11
	Q13												0.51	-0.04	0.38	0.46	0.08	0.21	0.14	0.06
	Q15													-0.12	0.24	0.63	0.05	-0.01	0.07	-0.16
	Q17														0.16	-0.08	0.05	0.07	0.22	0.10
	Q18															0.28	0.04	0.37	-0.07	0.07
	Q19																0.18	0.00	0.03	-0.21
anxiety	Q7																	0.32	0.42	0.19
	Q9																		0.09	0.25
	Q12																			0.20
	Q16																			