

Motivation and Language Learning Achievement

: A Questionnaire

Martin B. Bonar

Introduction

Not so long ago a student of mine, very competent in English, was planning a sight-seeing trip to Austria. This coming event evidently provoked thoughts of multilingualism in her mind and, for one whose daily round is far removed from the world of language learning and teaching, she came up with a very perceptive question. Did I, she wanted to know, in some way experience an internal change when speaking in a foreign language? Did my Weltanschauung undergo a Teutonic twist? Did I suddenly become extra fond of garlic? Or 'natto' for that matter.

There is an instinctive perception that in order to become truly competent in a foreign tongue it is necessary to undergo some kind of psychological surgery, to sell off part of one's soul and beliefs. Some bilinguals suffering from genuine psychological damage have attributed it to their lack of a definite cultural identity and to their ambiguous position in their tribal group. Bilinguals usually have little choice in the matter of whether or no they acquire their second language. Most people can, however, make some kind of decision concerning foreign language acquisition, even if it is only one of attitude. Children in countries where the learning in school of a second language is mandatory can and often do, once the novelty has worn off, adopt a hostile attitude toward the experience. In other words they are negatively motivated. Learning a foreign language is perceived as a betrayal of self, particularly it seems among males, and even as a betrayal of country.

Degree of motivation, positive or negative, is a consideration peculiar only to the study of *second* language acquisition. And just how important it is in influencing progress in learning is very difficult to measure. This short paper reports the results of motivation related questionnaire and the degree to which they bear relation to the actual achievements of the subjects who answered it.

Hypothesis

That a relationship exists among Japanese students between certain attitudes to foreign languages and culture and degree of achievement in second language acquisition.

Method

A motivation questionnaire was constructed consisting of fifteen multiple choice items, the answers to which were graded on a sliding scale of 1 to 5. A score of 5, according to this author's

subjective assessment, was considered to represent an attitude that would contribute to more effective acquisition of a foreign language, in this case English. A score of 1, according to this author's judgement, represented a high degree of antipathy toward foreign languages and culture. An attempt was, of course, made, after the usual fashion of sociological surveys, to design multiple choice answers that would correspond to a range of feelings. No attempt was made, however, to pretest the reliability of the scale.

The subjects who responded to the test were 1st year university students in Japan. They were members of a university faculty which advertises language learning and culture absorption as its main feature. Two groups of students, Group 1 consisting, initially, of 50 subjects and Group 2 consisting of 35 subjects, were given the test, which was administered following the students' end of year final examination.

The motivation questionnaire (MQ), which is given below, was in Japanese. Ten minutes were allowed for its completion. It was explained that the test would have no effect on university grades, although for administrative reasons students were asked to write their names on the answer papers. They were also asked to mark whether they were male or female.

Achievement data for the purposes of comparative analysis were collected for Groups 1 and 2. The achievement data for Group 1 comprised the results of 20 short tests, consisting of one (seen) dictation item each and the results of two formal examinations consisting of two (seen) dictation items each. The short test scores were reduced to 50 points, and the examinations were assigned 25 points each, making a total of 100. The achievement data for Group 2 resembled those for Group 1, the difference being that a number of vocabulary items were included in the examinations and in some of the tests.

The Motivation Questionnaire

(The numbers in brackets show the number of points awarded for each answer, according to their supposed relevance to motivation. These numbers were, of course, not printed on the subjects' question papers, nor was any indication given that a marking system was in place.)

1. 外国語を学ぶことは
a) つまらない (2) b) 悪いことではない (3) c) まあまあ面白い (4)
d) 意味がない (1) e) 大好物だ (5)

2. 外国語の授業は
a) 寝る時間 (1) b) 生き残る時間 (3) c) 外国語を使える時間 (5)
d) 友達と話せる時間 (2) e) のんびりと勉強する時間 (4)

3. もし外国語の授業が何かの理由でキャンセルされたら…
a) 万歳! (1) b) どうってことない (2) c) 残念 (4)
d) 教師は無責任 (3) e) 自分で勉強できる (5)

4. 外国語を話したり書いたりする時、私は _____ 気がする
a) のろまのような (2) b) 人並みにやっている (3) c) 上達している (4)
d) 笑われている (1) e) 嬉しい (5)
5. 私が学んでいる外国文化は
a) 重要ではない (3) b) (に) 並の関心を持っている (4) c) とても面白い (5)
d) 自分と関係がない (2) e) 非常識である事が多い (1)
6. 私は日本人を _____ と思う。
a) 他のアジア民族より優れている (2) b) 他のアジア民族と同じである (4)
c) 白人より劣っている (3) d) どの民族よりも優れている (1)
e) 他の民族と特に違わない (5)
7. 私が知っている限りでは、父親は日本人を _____ と思っている。
(以下10まで6と同じ選択肢)
a) (2) b) (4) c) (3) d) (1) e) (5)
8. 私が知っている限りでは、母親は日本人を _____ と思っている。
a) (2) b) (4) c) (3) d) (1) e) (5)
9. 私が知っている限りでは、私の他の家族のメンバーは日本人を _____ と思っている。
a) (2) b) (4) c) (3) d) (1) e) (5)
10. 私が知っている限りでは、私の友人は日本人を _____ と思っている。
a) (2) b) (4) c) (3) d) (1) e) (5)
11. 茶道、書道、能楽は _____ と思う。
a) 馬鹿げている (5) b) つまらない (3) c) 老人の為のものだ (4)
d) 大変重要だ (1) e) 興味深いが必要ではない (2)
12. 21世紀になると茶道などは _____ と思う。
a) 無くなる (5) b) より一般的になる (2) c) 人気なくなる (4)
d) 殆どの人がたしなむようになっている (1) e) 興味深いが必要ではない (3)
13. もしあなたが5歳の子どもの母親で、電車に乗っていて、その子が外国人を見て叫び指さしたら
a) 静かにするようにいう。(4) b) 何も言わない。(2) c) 笑う。(1)
d) 外国人に謝る。(5) e) 日本人ではないということを小さな声でいう。(3)
- 14a. (女子のみ) もし若くハンサムなアメリカ人のビジネスマンと、若くハンサムな日本人の会社員が同時にあなたと付き合いたいと言ったらどうしますか

- a) アメリカ人を選ぶ (5) b) 日本人を選ぶ (1) c) どちらも選ばない (2)
 d) 考えさせてもらう (3) e) 両方と交際してみる (4)
- 14b. (男子のみ) もし若くきれいなアメリカ人の歌手と若くきれいな日本人の歌手が同時にあなたと付き合いたいと言ったらどうしますか
 a) アメリカ人を選ぶ (5) b) 日本人を選ぶ (1) c) どちらも選ばない (2)
 d) 考えさせてもらう (3) e) 両方と交際してみる (4)
15. もしあなたが刑務所の独房で本を読みながら一年を過ごすと、英語を完全にこなすことが出来ると勧められたら
 a) 刑務所に入る (5) b) 行く価値がないと判断する (2)
 c) 一ヶ月間試して見たいと頼む (4)
 d) 真剣に考える (3) e) 勧める人を笑う (1)
- (The appendix has an English translation of the test items)

The Questions

As will have been seen, the test items attempt to examine various attitudes that could be relevant to motivation, and cover areas of a personal and cultural nature. With the exception of Question 15 they are concerned with integrative motivation¹⁾.

The first five items are adaptations of a simple, published test for Canadian students²⁾. The premise on which they are based is the highly reasonable one that a student with a positive attitude is likely to do well in his or her learning. Question 4 is particularly interesting. It assumes that students who think they are making progress probably are doing so. As we shall see later, this question turned out to bear a reasonably strong correlation to actual results. This could imply that students' positive or negative feeling about their learning do have some relationship to achievement. On the other hand there is a distinct possibility that the apparent strength of this particular result, which is in any case only a Spearman rho rank correlation, could have been influenced by 'resultative' motivation³⁾, a concept which hypothesises that motivation can be enhanced by high achievement, or, in popular terminology, that 'success breeds success.'

Questions 6 to 10 endeavour to explore, if crudely, the vexed question of insular nationalism and racial pride. There is anecdotal evidence to suggest that the Japanese sense of homogeneity and uniqueness may be at the root of what is perceived to be a particularly strong unwillingness to learn foreign languages and a particularly low rate of achievement.

Questions 11 and 12 attempt to probe students' attitudes to the particularly Japanese attitudes of their own culture. The prizing of the tea ceremony and so on is hypothesised as carrying a negative motivational charge.

Question 13 asks about behaviour in a potential situation, one which can be met with everyday. To what extent is an outsider perceived as repulsively rather than interestingly alien.

Question 14 is intended to be a rather more hypothetical version of Question 13 and carries a hint of international marriage.

Question 15, judging by their comments, was found intriguing by the students. The question was, of course, in a rather facetious way, intended to question depth of motive. There was a full range of answers with b, c, and d being most favoured. These results, however, showed quite a large (0.26) negative correlation with achievement. This negative finding was corroborated by the fact that the achievement mean for those who scored highly on this question was 68%, as opposed to a mean of 77% for the remainder.

Achievement Data

As mentioned above, the testees were Japanese 1st year university students of English, and consisted of two groups one of 50 (Group 1) and one of 35 subjects (Group 2). The groups have been considered separately because, although the method of assessing their achievement level was largely the same, the English material taught to them was different and may have been of a somewhat different level of difficulty.

As mentioned above, the data consisted of dictation test scores deriving from 20 short tests and 2 examinations. While in both cases the dictations were given in recommended fashion i.e. at normal speed and with divisions into units of meaning, more repetitions were given in the case of the short tests. Both varieties were scored in the same way. The texts were divided into meaningful blocks and one whole point was deducted for any mistake, other than spelling, within each block. For Group 1 the shared variance (r^2) for examinations and short tests was 0.82. Shared variance for first semester and second semester examinations was 0.65. In the case of Group 2 there was a correlation of 0.85 between examinations and short tests, producing a shared variance of 0.72. Shared variance for first semester and second semester examinations was 0.61. While dictations are not easy to grade with 100 percent objectivity, it is felt that there is enough consistency here to consider them to be a sufficiently reliable measure of achievement.

The question remains 'measure of achievement of what?' The question of the validity of dictation items as a measure of overall language ability is beyond the scope of this paper. Suffice it to say that the results of a dictation test owe nothing to the effects of chance and that they provide a great deal of assessment data, data which has to be actively produced by the test subject. It is a measure of listening comprehension ability and of command of grammar. Since the dictation items used were all 'seen', that it is to say they were already familiar to the test subjects, they also reflected the degree to which subjects had made an effort to prepare themselves. It should be noted that the marking system used placed very little weight on accuracy of spelling. Thus the ability to write individual words was of rather little influence on scores.

Results

Let us now look at the statistical results. These should help to determine whether the items in the questionnaire are heading in the right direction, heading nowhere, or perhaps heading in a direction entirely opposite to the one anticipated.

The data in Table 1 consist of Pearson product-moment correlation coefficients. They show the

relationship between the achievement data and various combinations of the motivation questionnaire questions.

The data in Table II are Spearman rank correlation coefficients, corrected for ties. Table II shows relationships between individual motivation test questions and achievement data. The Spearman correlation was chosen in this case, despite its deficiencies⁴⁾, because of the small range (1-5) of motivation questionnaire data.

Four outlying scores were removed from the Total Achievement Data for Group 1, reducing it to a population of 46.

Table I (Pearson product-moment correlation coefficients)

	Group 1 (N = 46)	Group 2 (N = 35)	Group 1 Men (N = 25)	Group 1 Women (N = 21)	Group 2 Men (N = 29)	Group 2 Women (N = 6)
TS v MQs 1-15	0.35	0.03	0.34	0.43	-0.01	0.3
TS v MQs 1-5	0.42	0.36	0.3	0.67	0.34	0.52
TS v MQs 6-10	0.1	-0.02	0.11	0.14	-0.02	-0.05
TS v MQs 11-15	0.17	-0.3	0.17	0.19	-0.34	-0.17
TS v MQs 1-4	0.42	0.36	0.33	0.63	0.37	0.34
TS v MQs 1-5+ MQs 1-15	0.41	0.07	0.33	0.6	0.1	0.33
TS v MQs 1-6	0.46	0.36	0.34	0.66	0.34	0.51

※ TS = Total Sum of Achievement Data; MQ = Motivation Questionnaire.

Table II (Tie-corrected Spearman rank correlation coefficients)

	Group 1 (N = 46)	Group 2 (N = 35)	Group 1 Men (N = 25)	Group 1 Women (N = 21)	Group 2 Men (N = 29)	Group 2 Women (N = 6)
TS v MQ 1	0.26	0.23	0.2	0.29	0.26	0.09
TS v MQ 2	0.22	0.27	0.07	0.33	0.29	0.39
TS v MQ 3	0.3	0.17	0.25	0.45	0.13	0.52
TS v MQ 4	0.4	0.36	0.32	0.41	0.43	0
TS v MQ 5	0.33	0.04	0.1	0.35	-0.04	0.68
TS v MQ 6	0.21	0.04	0.13	0.07	0.04	-0.17
TS v MQ 7	0.02	-0.06	-0.08	0.02	0.01	-0.65
TS v MQ 8	0.01	0.05	0.1	0.07	-0.04	0.65
TS v MQ 9	0.2	-0.12	0.1	0.3	-0.04	-0.85
TS v MQ 10	0.19	-0.06	0.15	-0.04	-0.07	-0.17
TS v MQ 11	-3.67	-0.32	0.12	0.13	-0.41	0.65
TS v MQ 12	0.28	0.08	0.18	0.21	0.17	0.52
TS v MQ 13	0.07	0.15	0.12	0.15	0.06	0.83
TS v MQ 14	0.06	-0.18	0.13	-0.23	-0.06	0.46
TS v MQ 15	-0.22	-0.41	-0.2	-0.24	-0.48	-0.09

※ TS = Total Sum of Achievement Data; MQ = Motivation Questionnaire.

When we look at these results, four things immediately stand out.

The first is the disparity, with the exception of the Question 1-6 area, between the results for Group 1 and those for Group 2. While Group 1 achievement data show a not altogether weak correlation of 0.35 with the overall motivation test score, Group 2's achievement data show virtually no correlation at all. Since it seemed possible that this disparity might be accounted for by the presence of vocabulary items in the achievement tests administered to Group 2, this group's examination scores were recalculated with the vocabulary items excluded and re-correlated with the Motivation Questionnaire. The result was a negative 0.11, even worse than that in Table I, and left the difference between the two groups even more difficult to understand. An independent t-test of the MQ means for the two groups gave the result $t=1.1$, making it impossible at the $p=0.5$ level to reject the null hypotheses that the groups come from populations with the same mean.

Equally outstanding is the difference between male and female results, with the correlations for females in Group 1 being much higher, and, in fact, falling within a definitely meaningful range, giving hope for the validity of the MQ. Two possible less cheering explanations for the male/female difference come to mind. One is the fact that in Group 1 the overall level of female achievement was much higher than that for males (mean achievement score 81.1 as opposed to 71.1 for the men). A t-test of the Group 1 men's and women's achievement means produced a significant result at the 0.01 level, leading to the conclusion that the two populations are in some way different. (This was confirmed by the results of a t-test of the Group 1 men's and women's achievement means in a university administered multiple choice test of grammar and reading comprehension). It does not seem to be true, however, that the Motivation Questionnaire correlates well only with high level scores. Although, when the group was divided into two high and low scoring cohorts, the overall MQ v TS correlations of the high scoring cohort (0.32) and the low scoring one (-0.07) were quite different, the MQ 1-5 v TS comparison produced a correlation of only 0.18 for the high scoring cohort, a result much lower than that of the all female group.

Thirdly, Questions 6-10 were clearly of no value at all. If the answers to these items proved anything, they proved that the 'Nihonjinron' hypothesis is null and void. There is, however, a strong possibility that the strong bias in the Japanese education system toward producing politically correct answers skewed the results. Whatever the reason, the overwhelming number of 'e' answers in questions 6-10 (almost two thirds) made a proper correlational measurement meaningless. Five questions were posed in the hopes that a considered response would be invoked. The result, however, was a robotic response in which all the answers were the same. The questions need to be rewritten in a form that will not provoke this kind of response.

Fourthly, the area covering Questions 1-6 would have seem to have some potential as a test of motivation. Question 4 stands out for its consistently high value. The difficulty, as already mentioned, is that this may have been caused by achievement reinforced 'resultative' motivation.

When it comes to the behaviour of individual questions, not a great deal can be claimed, since the results are rank correlations only. Question 4 and Questions 6-10 have already been covered. In the case of questions 11 and 12, it would seem that as with 6-10 the politically correct or safe answer gained the day. The vast majority of students claimed that the Noh drama is of enormous importance, even though it is a safe bet to say that no more than five percent of them have ever

seen or wanted to see a Noh play. Not surprisingly perhaps this question correlated negatively with achievement. Answers to Question 12 on the other hand contradicted those to Question 11, showing some relationship to actual achievement. Answers c and e were dominant.

In the case of Question 13 options a and d took more than 90% of the vote with, to my mind anyway, option d being surprisingly well supported. The question produced, however, only a small suggestion of any correlation with achievement, but even if it had done so, in view of the lack of spread in the answers, any correlation would have been probably meaningless. The results for Question 14 similarly, showed no correlation with achievement. The answers were roughly divided between b, c and d with very few people plumping directly for the American.

Question 15 tried to find out just how badly students wanted to learn a foreign language. It was the only question that was related to instrumental motivation. One has the instinctive feeling that the results it produced, which were consistently strongly negative, can be trusted.

Conclusions

Correlation coefficients can only point to the existence of a relationship between one set of figures and another. Spearman rank correlation coefficients in particular are said to be used legitimately only for testing the hypothesis that two variables are independent of one another⁵⁾. Accordingly, this study may be said to show that there exists a relationship, confirmed across all groupings, between the first 5 questions of the motivation test and the level of the testees' actual language learning achievement. These questions deal with personal attitudes to language learning, however, and may be influenced by resultative motivation. The motivation test questions relating to cultural opinions showed no relation to achievement. Either the questions need to be put more subtly, to reduce the likelihood of educationally driven politically correct answers, or the 'Nihonjinron' hypothesis should probably be rejected. My student's apparent insight into the value for language acquisition of cultural flexibility would seem to be mistaken.

Results for the remaining questions, which try to look at cultural attitudes more concretely, also do not provide any basis for positing a relationship between those attitudes and achievement. That the first five questions show a relationship while the remaining ten do not would seem to be supported by the Spearman results for individual questions.

Finally, the difference in strength between men and women in the relationship shown for questions one to five is interesting and definitely needs further investigation. One possible explanation may lie in the nature of the achievement tests used for comparison. Correlations of the questionnaire scores with the university administered objective test, remained for men much the same as those for the dictation based tests. For women, however, they were lower to the point of insignificance, this despite the women's overall higher achievement in both cases.

Notes

- 1) Ellis R., *The Study of Second Language Acquisition*, Oxford, 1994, pp. 509-513.
- 2) Valette R.M. and Disick R.S., *Modern Language Performance Objectives and Individualisation*, Harcourt Brace Johanovitch, p. 134.

- 3) Ellis R., *op. cit.*, pp. 513-514.
- 4) Woods A., Fletcher P. and Hughes A., *Statistics in Language Studies*, Cambridge, 1986, pp. 171-173.
- 5) *Ibid.*, p. 173.

Appendix

The Motivation Questionnaire

(The numbers in brackets show the number of points awarded for each answer, according to their supposed relevance to motivation. These numbers were, of course, not printed on the subjects' question papers, nor was any indication given that a marking system was in place.)

1. Learning a foreign language is
 - a) uninteresting (2)
 - b) not so bad (3)
 - c) fairly interesting (4)
 - d) pointless (1)
 - e) great fun (5)

2. Foreign language lessons are
 - a) a time to sleep (1)
 - b) to be endured (3)
 - c) a chance to use a foreign language (5)
 - d) a time to chat with friends (2)
 - e) a time to learn without too much pressure (4)

3. If my language lesson was cancelled, I would
 - a) cheer (1)
 - b) not much care (2)
 - c) be sorry (4)
 - d) complain about the instructor (3)
 - e) study by myself (5)

4. When I am speaking or writing in a foreign language, I feel
 - a) dull (2)
 - b) as good as anyone else (3)
 - c) I am improving (4)
 - d) a fool (1)
 - e) pleased with myself (5)

5. The foreign way of life I am learning about is
 - a) not important (3)
 - b) fairly interesting to me (4)
 - c) fascinating (5)
 - d) irrelevant to me (2)
 - e) often silly (1)

6. I think that the Japanese are . . .
 - a) superior to other Asian peoples (2)
 - b) the same as other Asian people (4)
 - c) inferior to white peoples (3)
 - d) superior to all other peoples (1)
 - e) no different from other peoples (5)

7. As far as I know, my father thinks that . . .

(Choices from questions 7 to 10 are the same as for question 6)

 - a) (2)
 - b) (4)
 - c) (3)
 - d) (1)
 - e) (5)

8. As far as I know, my mother thinks that ...
a)(2) b)(4) c)(3) d)(1) e)(5)
9. As far as I know, my close relatives think that ...
a)(2) b)(4) c)(3) d)(1) e)(5)
10. As far as I know, my friends think that ...
a)(2) b)(4) c)(3) d)(1) e)(5)
11. I think that the tea ceremony, calligraphy, and the Noh theatre are
a) quite stupid(5) b) boring(3) c) for old people(4)
d) highly important(1) e) interesting but inessential(2)
12. I think that in the 21st century the tea ceremony and so on ...
a) will disappear(5) b) will become more widespread(2)
c) will become less popular(4) d) will be enjoyed by almost everyone(1)
e) will still be interesting but inessential(3)
13. Imagine you are the mother of a five year old. On the train your child spies a foreigner and starts pointing loudly. What would you do?
a) Tell the child to be quiet(4) b) Say nothing(2) c) Laugh(1)
d) Apologise to the foreign person(5)
e) Explain quietly that the person is not Japanese(3)
- 14a. (Women only) If a young handsome American businessman and a young handsome Japanese company employee both asked you to start dating, what would you do?
a) Say yes to the American(5) b) Say yes to the Japanese(1)
c) Say yes to neither of them(2) d) take time to think about it(3) e) date both of them(4)
- 14b. (Men only) If a pretty young American singer and a pretty young Japanese singer both asked you to start dating, what would you do?
Answers same as 14a
15. If someone told you that by going to prison and spending a year reading books in a prison cell you could gain a complete mastery of English, what would you do?
a) Go to prison(5) b) Decide that it was not worth it(2)
c) Ask to try it for a month(4) d) Think about it seriously(3)
e) Think it was a silly idea(1)

(1998年4月10日受理)