

The Relationship between Translation Tests and Reading Comprehension: A Case of Iranian University Students

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Abstract

The present study seeks to investigate the potentiality of the translation task as a testing method for measuring reading comprehension. To achieve this objective, two types of translation tests, open-ended and multiple-choice tests, and two types of reading comprehension tests, multiple-choice reading comprehension and open-ended cloze tests were developed in this study. The reliability of the tests was computed in order to estimate which translation test was more reliable and valid. Correlation coefficients were run in order to investigate whether translation tests worked as reliable and valid measures of reading comprehension, and to examine the relationship between proficiency in reading comprehension and proficiency in translation. The results indicate that the open-ended translation test is more reliable and valid than the multiple-choice one; translation has a high potentiality to work as a reliable and valid tool to assess reading comprehension; and there exists a high positive correlation between the participants' proficiency in reading comprehension and their proficiency in translation. The findings of this study might have pedagogical implications for instructors. They may be justified to highlight the role of translation tests and benefit from them in their reading comprehension classes.

Keywords: Translation Test, Assessment, Reading Comprehension, Reliability, Validity

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1. Introduction

Translation, as a testing method, and the reliability and validity of translation tests have attracted little research interest. This is even more so when translation from English to Persian or vice versa is concerned. Thus, the present study was an attempt to investigate the relationship between newly developed tests of translation and reading comprehension in an academic context.

The study, thus, followed the following aims: (1) Examining the reliability and validity of the open-ended translation test (OET); (2) Examining the reliability and validity of the multiple-choice translation test (MCT); (3) Comparing the reliability and validity of OET and MCT; (4) Investigating the potentiality of translation as a reliable and valid measure of reading comprehension; and (5) Investigating the relationship between proficiency in reading comprehension and proficiency in translation.

2. Review of the Literature

Because of its complex nature, translation has been less investigated to work as a measurement device in an academic context. But to open this line of research, a number of studies have been conducted in this respect. For instance, Núñez Piñeiro (2006) in his proposal for doctoral research entitled “Putting the Test to the Test: Is Translation a Valid and Reliable Language Assessment Tool?” investigated the reliability and validity of translation as a method of assessing proficiency in a foreign language. The purpose of his study was to make use of the data gathered from translation works to formulate a measure of effectiveness of translation skills as an indicator of L2 mastery and it was hoped

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that its findings would result in improvements in the assessment of translation in a language-learning context.

In one of his articles, “Two Types of Translation Tests: Their Reliability and Validity”, Ito (2004) examined the reliability and validity of translation tests as a reading comprehension measure through giving a number of tests, for example open-ended/OE and multiple-choice/MC translation/TRAN test, to a number of students at a high school in Japan. He found that there was a moderate correlation between the two translation tests, and the examinees' proficiency level affected the level of reliability and validity of the two translation tests as far as the values of correlation coefficients were concerned.

Brown and Yamashita (1995) stated that translation items in university entrance examinations were out of date because translation was abandoned years ago in ESL instruction. Likewise, Wakabayashi and Negishi (1994) reasoned that translation could not be a reliable and valid measure of English proficiency.

However, Malek Hosseini (1994) determined the role of objective translation test in assessing ESP students' general proficiency. The results indicated that: (1) There was a positive relationship between ESP students' performance on reading comprehension test and translation test, and that translation test was a valid and reliable device for assessing ESP students' performance on reading the comprehension test and translation test, and that translation test was a valid and reliable device for assessing ESP students' English proficiency in their own fields of study; (2) There was a positive relationship between ESP students' performance on translation test and their majors.

Āvand (1994) investigated the effect of using translation (contribution of the mother tongue) on reading comprehension of Iranian ESP learners.

Results of the study showed a significant relationship between using translation and reading comprehension. In short, the findings were indicative of the effective role of translation, and accordingly the necessity of emphasizing contribution of the mother tongue to the teaching of ESP materials.

In a paper, Ghonsooly (1993) performed certain procedures to achieve objectivity and scorability in translation testing methodology. The researcher hypothesized that in measuring the English proficiency of Iranian EST university learners, a translation test is as valid and reliable as a standardized objective test, and the results showed significant reliability for the new test.

El-Banna (1993) conducted a research project and presented various procedures for developing and validating a multiple-choice translation test to be utilized for assessing ESL learners proficiency level in translating literary texts form English into Arabic and vice versa. In conclusion, validity and reliability and also item analyses indicated that the test as a whole provided good measure for the assessment of ESL learners' translation skill.

Buck (1992) in his article conducted two studies the first of which was to examine the reliability and validity of a translation reading test and the second was to include two tests of translation in a multitrait-multimethod validation study. The results of both studies showed acceptable reliability and satisfactory criterion-related and construct validity. These results, Buck argued, could also be generalized to other translation tests in other situations, and could therefore reject the fallacy that translation might not be applied as a language testing measure.

On assessing reading comprehension, numerous research studies have been conducted and various techniques other than translation tests have been proposed.

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In a paper, Gunawardena (2008) discussed a new system developed to assist instructors to automatically measure reading activities and to assess the students' reading comprehension proficiency compared to that of an expert(s). The system consisted of Adaptive Book, an interactive software tool that allowed students to annotate and label the text, and an online markup analysis tool that used a heuristic rule-based algorithm to compare students' markups to that of an expert reader.

Fletcher (2006) in an article states that the complicated issues of measuring reading comprehension reflect the multidimensional nature of this trait. He adds that most contemporary approaches to the assessment of reading comprehension are uni-dimensional. Therefore, some tests rely almost exclusively on multiple-choice items, others on fill-in-the-blank (cloze), and others on retells. Further, he stresses developing diagnostic tests of reading comprehension since they are helpful in linking specific forms of instruction with the needs of individual readers.

MetaMetrics, Inc., Duke University, the University of North Carolina, the University of Chicago, and Stanford University developed a system called the Lexile Framework based on a research conducted over a 15-year period. It is an assessment system that enables educators to determine precisely a student's level of reading comprehension. In 1994, the Lexile Framework was made commercially available by MetaMetrics, Inc., an educational research and development firm based in Research Triangle Park, North Carolina.

Royer, Hastings and Hook (1979) introduced a new technique for measuring reading comprehension which they called Sentence Verification Technique (SVT). They conducted two studies to assess whether this technique was sensitive to reading difficulty of texts. They believe that SVT can have some possible applications in such areas as development of instructional

materials, reading diagnosis, and comprehension measurement in experimental research. It is usable with a wide variety of texts and has an advantage over other comprehension measurement techniques used on standardized tests (e.g. the questioning techniques and the cloze techniques) in that it is not influenced by inferential reasoning ability or general world knowledge.

However, again, few similar research studies on developing reading comprehension assessment tools have been conducted in Iran. Only some recent works generally related to measuring reading comprehension published by the Iranian researchers are mentioned here.

Amiri (1996) in his MA thesis, 'the Test Method and the Construct Validity of Reading Comprehension', investigated whether there was any relationship between different methods of testing reading comprehension and the test-takers' performance. He administered five different tests of reading comprehension, a sentence comprehension test, a short-context test, and three cloze tests in the forms of standard, multiple-choice, and elide to his participants. The results indicated that the test method significantly influenced the testees' performance. In addition, they showed that the sentence comprehension and standard cloze were more valid tests of reading ability than the other methods.

The findings of Mosallanejad (1994) in his MA thesis suggested that usage-reference questions were more efficient in testing reading comprehension ability of the examinees as compared with use-reference questions.

In his MA thesis, Tavakoli (1992) examined the effect of various methods, multiple-choice and open-ended questions, used for testing reading comprehension on the measurement of this trait. The results indicated that each of the testing methods produced different degrees of difficulty for the test-takers, and that each of the variables – method, text, and language – had a

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significant effect on the students' scores in reading comprehension. Recommendations were made with regard to multiple procedures for testing reading comprehension as well as to the need for further research towards finding the most valid method for testing this trait.

Employing an empirical approach toward investigating the reliability and validity of translation tests, the present study mainly sought to show that translation might be used as a valid testing method for reading comprehension and to compare the validity of two types of translation tests, the issue on which only limited empirical research has so far been conducted, particularly in Iran.

3. Research Questions

Specifically, the present study seeks to answer the following research questions:

1. How reliable and valid is OET as a measure of reading comprehension?
2. How reliable and valid is MCT as a measure of reading comprehension?
3. How do the reliability and validity of the OET compare with those of the MCT?
4. Does the translation test have the potential to act as a reliable and valid measure of reading comprehension?
5. What is the relationship between the proficiency in reading comprehension and the proficiency in translation?

4. Methodology

4.1. Participants

Participants of the study were 40 male and female sophomore students majoring in English Literature and Translation Studies in Isfahan University.

All participants were native speakers of Persian. The students of the English Literature and the Translation Studies at the universities of Iran have to pass three four-unit courses (12 units) including Reading Comprehension I, Reading Comprehension II and Reading Comprehension III in the course of their first two academic years. The participants of our research project had passed the first two of the above-mentioned courses, and at the time of the present study were taking the third course. The sample was homogeneous with regard to nationality, language background, educational level and age.

4.2. Instrumentation

As for the purposes of the study, four sets of tests were developed and prepared which are described below.

1. A *6-item open-ended translation test from English to Persian (OET)* which included six separate complete English sentences extracted from a passage in an open-ended format with two lines left blank under each sentence for its Persian translation.
2. A *6-item multiple-choice translation test from English to Persian (MCT)* which was actually a combination of a reading comprehension test and a translation test. Each item was an English multiple-choice reading comprehension question from the same passage with four Persian responses. The answer to each question was exactly one complete sentence in the passage and these four responses are four Persian translations of this one sentence. The participants were required to read the passage and find the sentence in the reading that provided the answer to each question (reading comprehension proficiency), and then to choose from among the four translations the best translation for that sentence (translation

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proficiency). This second test was developed in this way to examine whether the translation test worked as a valid measure of reading comprehension.

3. A *6-item multiple-choice reading comprehension test (MCRC.T)* which included six separate incomplete English sentences extracted from the passage and which were to be completed with the one best choice from the four choices given under each of them.
4. A *30-item open-ended cloze test (CLOZE.T)* which included a passage containing 316 words extracted from the main passage for the cloze test. This test, as a rational deletion cloze, was developed by deleting some content words and prepositions for a total of 30 blanks. Two sentences of the passage, the first and the last, were left intact to provide a complete context.

4.3. Text Selection

An English passage containing 524 words extracted from a reading in '*Book 10: A Course in English*', published in 1999 by Iran Language Institute (ILI), was selected for all the afore-mentioned tests. This reading was a rewriting from the original story entitled 'The Glove' by R. U. Joyce (1999). Its readability level, as measured by the formula for the Flesch-Kincaid Grade Level test, was 8.2; i.e., appropriate for the 8th graders.

4.4. Data Collection Procedures

The main purpose of the study and the tests was clarified and explained to the participants. The tests were ordered as follows: (1) the OET: the participants were allowed 20 minutes to complete the test during the 1st session; (2) the MCT: the participants were allowed 15 minutes to complete the test during the

2nd session; (3) the MCRC.T: the participants were allowed 15 minutes to complete the test during the 3rd session; (4) the CLOZE.T: the participants were allowed 20 minutes to complete the test during the 4th session.

The tests were administered to the same group of participants with a one-week interval between every two sessions; this was assumed to be long enough for the students to forget some of the story and thus to decrease the potential negative order effect. In addition, they were not informed of the dates of sessions. In each testing session, the same passage with one of the test papers was handed out to the participants and they were asked to follow the directions for each test. Table 1 represents the sequencing of the tests that have been administered to the students.

Table 1. Sequencing of Administration of the Tests

Participants N=40	1 st session/week	2 nd session/week	3 rd session/week	4 th session/week
All Participants	OETMCTMCRC.TCLOZE.T			

OET: open-ended translation test

MCT: multiple-choice translation test

MCRC.T: multiple-choice reading comprehension test

CLOZE.T: cloze test

4.5. Methods of Scoring

The four test papers were scored by the two researchers of the present study. In order to objectively score the translation tests used in this study, a benchmark was set. That is, in the open-ended translation test, three points were allocated to the translation of each of the six items. One point to take the lexical choice into account, one point to consider the grammar and complexity, and one point to account for the translation's being communicative and fluent. To each of the six items in the next two multiple-choice tests one point was allocated. In the

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cloze test, the exact word scoring method was used by the raters. They allocated one point to each of the thirty items of this test.

5. Results

Based on the research questions stated earlier in this paper, statistical analyses were performed. The first, second, third and fourth questions were treated through the estimation of reliability coefficients of the first two tests by Cronbach's alpha and the calculation of the correlation coefficients with other two tests (multiple-choice reading comprehension test and open-ended cloze test). And the fifth question was investigated by calculating the Pearson product-moment correlation coefficients between the translation tests and the reading tests.

Table 2 depicts the descriptive statistics of the four tests, including the total number of the participants, the minimum, maximum, mean values and standard deviation. The full score of all the four tests is 30.00. Mean score of the MCRC.T (19.50) is the highest. 18.92 for CLOZE.T, 18.81 for OET and 17.50 for MCT, as the lowest, are the mean values of the other three tests. Table 2 shows these statistics.

Table 2. Descriptive Statistics of Tests

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
OET	40	.00	25.83	18.8125	6.28405
MCT	40	.00	30.00	17.5000	9.60769
MCRC.T	40	.00	30.00	19.5000	9.45977
CLOZE.T	40	.00	28.00	18.9250	7.11945
Valid N (listwise)	40				

OET: open-ended translation test

MCT: multiple-choice translation test

MCRC.T: multiple-choice reading comprehension test

CLOZE.T: cloze test

Table 3a, 3b, 3c and 3d demonstrate the reliability coefficients (Cronbach's α) of the OET, MCT, MCRC.T, and CLOZE.T, measured by the degree of internal consistency, respectively.

Table 3a. Reliability Coefficient of the OET

Case Processing Summary				Reliability Statistics	
		N	%	Cronbach's Alpha	N of Items
Cases	Valid	40	100.0	.876	6
	Total	40	100.0		

Table 3b. Reliability Coefficient of the MCT

Case Processing Summary				Reliability Statistics	
		N	%	Cronbach's Alpha	N of Items
Cases	Valid	40	100.0	.797	6
	Total	40	100.0		

Table 3c. Reliability Coefficient of the MCRC.T

Case Processing Summary				Reliability Statistics	
		N	%	Cronbach's Alpha	N of Items
Cases	Valid	40	100.0	.734	6
	Total	40	100.0		

Table 3d. Reliability Coefficient of the CLOZE.T

Case Processing Summary				Reliability Statistics	
		N	%	Cronbach's Alpha	N of Items
Cases	Valid	40	100.0	.916	30
	Total	40	100.0		

The reliability coefficients of the OET ($\alpha=0.87$), MCT($\alpha=0.79$), MCRC.T ($\alpha= 0.73$), and CLOZE.T ($\alpha=0.91$) are all high.

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Table 4 describes the correlation coefficients among the four tests. Here, the Pearson product-moment coefficients have been calculated at the significance of 0.01 level. There were moderate correlations between OET and MCT ($r=0.69$), MCT and MCRC.T ($r=0.66$), MCT and CLOZE.T ($r= 0.65$), and MCRC.T and CLOZE.T ($r= 0.65$); and high correlations between OET and CLOZE.T ($r= 0.79$), and OET and MCRC.T ($r= 0.89$).

Table 4. Correlations among the Tests

		Correlations			
		OET	MCT	MCRC.T	CLOZE.T
OET	Pearson Correlation	1	.695**	.897**	.799**
	Sig. (2-tailed)		.000	.000	.000
	N	40	40	40	40
MCT	Pearson Correlation	.695**	1	.663**	.657**
	Sig. (2-tailed)	.000		.000	.000
	N	40	40	40	40
MCRC.T	Pearson Correlation	.897**	.663**	1	.656**
	Sig. (2-tailed)	.000	.000		.000
	N	40	40	40	40
CLOZE.T	Pearson Correlation	.799**	.657**	.656**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	40	40	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

6. Discussion

The present study tried to answer the following research questions:

1. How reliable and valid is OET as a measure of reading comprehension?

2. How reliable and valid is MCT as a measure of reading comprehension?
3. How do the reliability and validity of the OET.T compare with those of the MCT.T?
4. Does the translation have the potential to act as a reliable and valid measure of reading comprehension?
5. What is the relationship between the proficiency in reading comprehension and the proficiency in translation?

As a consequence of running a number of statistical tests, several interesting findings emerged which are discussed here.

The OET displays a high reliability coefficient ($\alpha = 0.87$) and moderate to high correlation coefficients with the other tests, i.e., the validity estimation of the OET, ($0.69 \leq r \leq 0.89$). This provides the answer to the first research question: High reliability and somewhat high validity.

Likewise, the MCT shows a high reliability coefficient ($\alpha = 0.79$) but moderate correlation coefficients with the translation and reading comprehension tests ($0.65 \leq r \leq 0.69$). The second question is, therefore, answered: High reliability and moderate validity.

According to the above answers to the first two research questions, the OET has shown a slightly higher reliability and slightly higher validity (correlation with other tests) in comparison with the MCT; hence; the answer to the third question.

Therefore, it is argued that the translation has generally a slightly high potentiality to act as a reliable and valid measure of reading comprehension. And this was for the fourth research question.

As it was shown earlier in the results section, there are high positive correlation between MCRC.T and OET ($r = 0.89$), moderate correlation

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between MCRC.T and MCT ($r=0.66$), high correlation between CLOZE.T and OET ($r=0.79$), and moderate correlation between CLOZE.T and MCT ($r=0.65$). More specifically, it is concluded that there exist high positive correlations between the performance in multiple-choice reading comprehension test and the performance in open-ended translation test, and between the performance in the open-ended cloze test and the performance in the open-ended translation test. From the latter high correlation, it can be concluded that the open-ended translation test could likely be regarded as an integrative test. This seems to be true since successful performance on translation test requires that the testee have a good knowledge of different subcomponents of language. However in general, regarding the correlation range ($0.65 \leq r \leq 0.89$), the answer to the fifth question is that there is a slightly high positive correlation between the reading comprehension performance and the translation performance.

Referring back to the previous researches mentioned in the introduction section, it is concluded that the findings of the research conducted by Ito (2004) support those of the present study. Also the results of the roughly similar studies of Malek Hosseini (1994), Āvand (1994), Ghonsooly (1993), El-Banna (1993), and Buck (1992) are in conformity with those of this study.

7. Conclusions

As a consequence of data analysis and discussion concerning the problem under investigation went above, a number of concluding remarks can be stated as follows:

1. With high reliability and high validity, the open-ended translation test (OET) could be used as a testing method for measuring reading comprehension.

2. With high reliability and moderate validity, the multiple-choice translation test (MCT) can be cautiously applied as a measure of reading comprehension as well.
3. In measuring reading comprehension, the OET was shown to have a relatively higher reliability and higher validity in comparison with the MCT.
4. Generally speaking, the translation has a slightly high potentiality to work as a reliable and valid measurement tool to assess the reading comprehension.
5. There is a slightly high correlation between the participants' proficiency in reading comprehension and their proficiency in translation.

Like many other studies conducted in the area of language testing, this study is suffering from a number of limitations which might, in some way or another, impede the generalization of its obtained findings to a larger population. These limitations are highlighted as follows:

1. The size of the sample (N= 40) is small.
2. There is a limited number of items (6 items) in the OET, MCT and MCRC.T.
3. The effect of the participants' gender on the results of the research has been ignored.
4. The interval between the testing sessions (one week) is relatively short.
5. No test has been taken to ensure the homogeneity of the language background and educational level of the participants.
6. Since all the four tests are newly-developed in the present study, their reliability and validity have not already been proved as standard tests. So, more investigations are required to confirm their criterion qualities.

All the above limitations might somehow influence the values of the reliability, validity and correlation coefficients of the tests, and the

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generalizability of the results of the research to other situations and participants.

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References

- Amiri, M. (1996). *The test method and the construct validity of reading comprehension*. Retrieved 2013, from IRANDOC: <http://idochp2.irandoc.ac.ir/FulltextManager/fulltext15/th/23/23828.pdf>
- Avand, A. (1994). *The effect of using translation on reading comprehension of esp learners*. Retrieved 2013, from IRANDOC: <http://idochp2.irandoc.ac.ir/FulltextManager/fulltext15/th/19/19842.pdf>
- Brown, J. D., & Yamashita, S. O. (1995). English language entrance examinations at Japanese universities: What do we know about them? *JALT Journal*, 17(1), 7-30.
- Buck, G. (1992). *Translation as a language testing procedure: Does it work?* Retrieved 2013, from Language Testing: <http://ltj.sagepub.com/content/9/2/123.abstract>
- El-Banna, A. I. (1993). *The development and validation of a multiple-choice translation test for ESL college freshmen*. Retrieved 2009, from ERIC: http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/13/58/78.pdf
- Fletcher, J. M. (2006). Measuring reading comprehension. *Scientific Studies of Reading*, 10 (3), 323–330.

- Ghonsooly, B. (1993). *Development and validation of a translation test*. Retrieved 2009, from ERIC:http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/13/09/ca.pdf
- Gunawardena, A. (2008). *Work in progress - measuring reading comprehension in technical courses*. Retrieved 2009, from <http://209.85.229.132/search?q=cache:2xrQU8a-OZYJ:fie-conference.org/fie2008/papers/1627.pdf+Work+in+Progress+Measuring+Reading+Comprehension+in+Technical+Courses&cd=2&hl=en&ct=clnk>
- Ito, A. (2004). *Two types of translation tests: Their reliability and validity*. Retrieved 2009, from ScienceDirect: http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6VCH-4CSG31X-1-1S&_cdi=5955&_user=1400092&_orig=search&_coverDate=09%2F30%2F2004&_sk=999679996&view=c&wchp=dGLbVzb-zSkzS&md5=af82c375fc9ff0d3441cdeee78a3cab1&ie=/sdarticle.pdf
- Joyce, R. U. (1999). The Glove. In ILI, *BOOK 10: A Course in English*. Tehran: Iran Language Institute.
- Malek Hosseini, M. (1994). *Developing and validating translation test in ESP*. Retrieved 2013, from IRANDOC: <http://idochp2.irandoc.ac.ir/FulltextManager/fulltext15/th/23/23340.pdf>
- Mosallanejad, P. (1994). *The efficiency of testing reading comprehension through use or usage-reference questions*. Retrieved 2013, from IRANDOC: <http://idochp2.irandoc.ac.ir/FulltextManager/fulltext15/th/18/18747.pdf>
- NúñezPiñero, O. (2006). *Putting the test to the test: is translation a valid and reliable language assessment tool?* Retrieved 2009, from [http://isg.urv.es/publicity/doctorate/tribunal_unic_2006/Research_Proposal_\(second_draft\)_revised_REVISED.doc](http://isg.urv.es/publicity/doctorate/tribunal_unic_2006/Research_Proposal_(second_draft)_revised_REVISED.doc)
- Royer, J. M., Hastings, C. N., & Hook, C. (1979). *A sentence verification technique for measuring reading comprehension*. Retrieved 2009, from ERIC –Education Resources Information Center:http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/31/aa/8d.pdf

The Relationship between Translation Tests and Reading...

- Stenner, A. J. (1998). *The lexile framework for reading*. Retrieved 2013, from Institute for Objective Measurement: <http://www.rasch.org/pm/pm1-09.pdf>
- Tavakoli, K. (1992). *The effect of testing method on measuring reading comprehension*. Retrieved 2013, from IRANDOC: <http://idochp2.irandoc.ac.ir/FulltextManager/fulltext15/th/23/23864.pdf>
- Wakabayashi, S. & Negishi, M. (1994). *Musekininna test gaochikoborewotsukuru (Irresponsibly made tests keep students behind)*. Tokyo: Taishukan Shoten.