

The Predominance Of Integrative Tests Over Discrete Point Tests In Evaluating The Medical Students' General English Knowledge

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Abstract

Background and purpose: Multiple choice tests are the most common type of tests used in evaluating the general English knowledge of the students in most medical universities, however the efficacy of these tests are not examined precisely. We compare and examine the integrative tests and discrete point tests as measures of the English language knowledge of medical students.

Methods: Three tests were given to 60 undergraduate physiotherapy and Audiology students in their second year of study (after passing their general English course). They were divided into 2 groups. The first test for both groups was an integrative test, writing. The second test was a multiple-choice test of prepositions for group one and a multiple-choice test of tenses for group two. The same items which were most frequently used wrongly in the first test were used in the items of the second test. A third test, a TOEFL, was given to the subjects in order to estimate the correlation between this test and tests one and two.

Results: The students performed better in the second test, discrete point test rather than the first which was an integrative test. The same grammatical mistakes in the composition were used correctly in the multiple choice tests by the students.

Conclusion: Our findings show that student perform better in non-productive rather than productive test. Since being competent English language user is an expected outcome of university language courses it seems warranted to switch to integrative tests as a measure of English language competency.

Keywords: INTEGRATIVE TESTS, ENGLISH LANGUAGE FOR MEDICINE, ACADEMIC ENGLISH

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Introduction

Testing is an important part of every teaching and learning experience. There could be no science without measurement (1). Language testing is one form of measurement. We test, for example, the listening or reading comprehension of students in order to find out to what degree these abilities have been learned by them (2-5-7). The validity of a test should be

a main focus (10). A test in order to be useful must contain reliable and valid measurements for a variety of purposes (4). Of different classifications of tests, one is the contrasting category of discrete-point tests versus integrative tests. In discrete-point exams, each item, tests something specific such as a preposition or a vocabulary item (1-3). These kinds of tests measure the knowledge or performance in very restricted areas of the target language. They are usually in the form of multiple-choice items and one of the most common types of language tests in the world (11).

On the other hand, integrative tests combine different language subskills just the same way as real life communication does. They measure

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a greater variety of language abilities (8). Integrative tests developed from cognitive-oriented theories which tended to treat language as a dynamic information processing system. Cloze tests, reading comprehension tests, compositions, oral interviews and listening comprehension tests are some types of discrete point tests.

Materials and Methods

60 students (30 Physiotherapy and 30 Audiology) students as a whole were randomly selected. They were between 20 to 26 years of age. There were 26 girls and 34 boys in the two groups. All of them had already passed their general English in their first year of study, so they had all covered their grammar and writing courses and the materials studied and the instructor in the course were the same. So they were supposed to be more or less familiar with the grammatical points and writing procedure. The subjects were kept the same all through the study in order to reduce the effect of extraneous variables.

The main instrument of this study was the three tests given to each group. The first test which was the same for both groups was a test of composition, the students were asked to write an essay about a general topic so that the students did not have to write about a specific field of study which needed a special knowledge.

The second test for the two groups was different. The first group were given a test of preposition in the form of multiple – choice which included 30 discrete-point items.

The second group were given a test of tenses in the form of a multiple – choice recognition test which included 30 discrete point items.

The third test for both groups was a subpart of TOEFL, which included items on different prepositions for group one and different tenses for group two. The correlation between TOEFL and the first and second tests were estimated.

Procedure

After the first test, the first group's compositions were studied carefully and analyzed. Ten of the

prepositions which were most frequently used wrongly were singled out. To reach ultimate objectivity in the test, fifteen of the prepositions from the beginning of each composition (in group one) were counted. Then the number of all the above mentioned prepositions was found. The next step was to count the number of the correct prepositions used and to calculate the mean (\bar{X}) of them. The last step was to estimate the proportion of prepositions correctly used to the total number of prepositions.

For the second group, four of the tenses which were most frequently used were selected. Again to reach ultimate objectivity in the test, twenty lines from the beginning of each composition (second group) were counted and analyzed, then the number of all tenses used by group two was found. After counting the number of the correct uses of tenses, the proportion of tenses correctly used to the total number of tenses was calculated.

The second test administered one week after the first one was made by implementing the ten prepositions (for group one) and the four tenses (for group two) extracted from the first test which included 30 items. Attempt was made to use, more or less the same sentences with nearly the same meaning and content that subjects had used in their compositions. Then the proportion of correct answers to the total number of prepositions (for the first group) and tenses (for the second group) was estimated.

The third test, TOEFL (Test of English as a Foreign Language) was given one week after the second one.

Results

Table 1 and 2 indicate the comparison between the results of the first and second test of group 1 and 2 respectfully and the percentage of correctly used points:

According to the information in tables 1 and 2 we see that the students in both groups had a better performance in the second test than in the first.

The last step was to estimate the correlation – coefficient of TOEFL with the first and second

tests for both groups. In order to do so, the "Pearson Product Moment Correlation" formula was applied. As a result the "P" value obtained for the first tests)tests of composition(and the third test)TOEFL(which is a standard test is equal to 0.41.The "P" value) $P > 0.05$ (indicates that there isn't a significant difference between composition which is a productive test and TOEFL.But on the other hand, the statistical analysis showed a significant difference) $P < 0.001$ (between the second tests)multiple choice(and TOEFL.

The results of this study indicated that the same grammatical mistakes in the composition were used correctly in the multiple choice tests by the students. This shows that the students performed better in the second test, discrete – point test which is quiet objective but non – productive rather than the first one, integrative test which is productive. Comparing the results of the tests we come to the conclusion that a productive test evaluates the English knowledge of the students more precisely than a multiple choice test.

Table 1: the results of the first and second tests for the first group

Test	The total use of prepositions	The total correct use of prepositions	The percentage of the correct use of prepositions
Test No. 1 composition	450	183	40%
Test No. 2 multiple -choice	900	692	76%

Table 2: the results of the first and second tests for the second group

Test	The total use of tenses	The total correct use of tenses	The percentage of the correct use of tenses
Test No. 1 composition	120	74	60%
Test No. 2 multiple – choice	900	797	82%

Chart 1: Mean scores)X(of the students in group one in the 3 tests

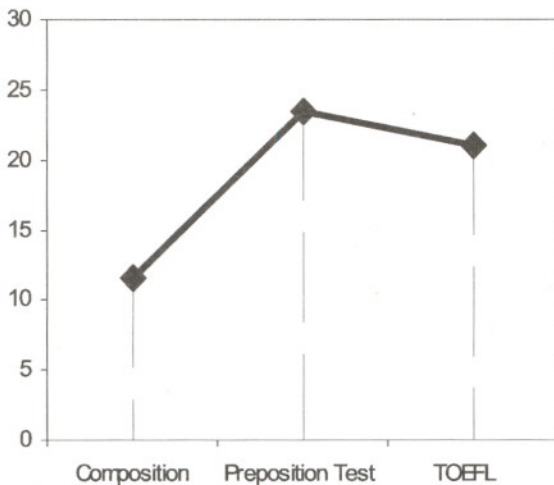
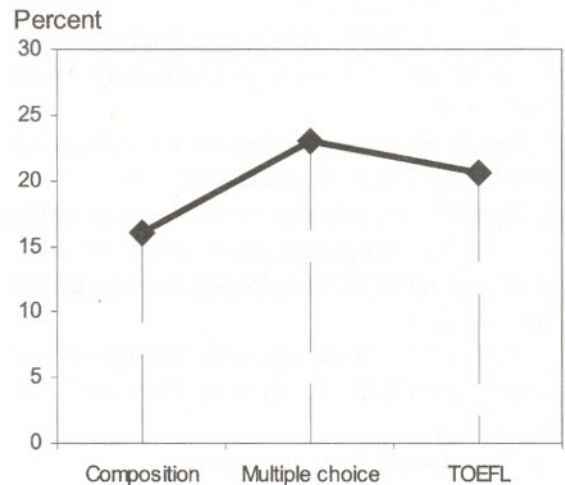


Chart 2: Mean scores)X(of the students in group two in the three tests



Discussion

The present study and its results revealed the importance and effectiveness of integrative tests in comparison to the multiple – choice discrete point tests.

Discrete point tests are the most common type of tests used in evaluating the general English knowledge of the students in medical universities. Most English teachers and their students prefer multiple – choice discrete point tests rather than integrative tests. Since usually the teachers' main goal is to help students learn productive skills of language, they have to test the productivity of the students through integrative tests such as cloze test, writing, reading comprehension, listening comprehension, etc.

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