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SUBJECTIVE VS. OBJECTIVE MEASURES OF ENGLISH PROFICIENY IN A SAMPLE OF TURKISH STUDENTS

Hakan Aydoğan, Azamat Akbarov

Abstract: The study aims to determine the magnitude of the correlation between subjective estimates and objective measures of English competence among Turkish students in an Agean Region State university. The sample includes 210 participants (100 females and 110 males), whose average age was 20.99. Subjective estimates included overall levels of English proficiency and self-reported vocabulary and grammar knowledge. Objective measures encompassed participants' grades at the last English exam and their total scores on short English vocabulary and grammar tests. The main result included strong positive correlations between subjective and objective measures of English competence. Findings revealed greater English vocabulary knowledge compared to English grammar knowledge, greater grammar knowledge in females than in males, and negative correlations between participants' age and the subjective/objective measures of English proficiency. The directions and recommendations for future studies of the same topic can be summarized as follows. First, researchers should compare participants' results on subjective and objective measures of their English speaking and writing skills (pronunciation, spelling, etc.). Next, other researchers can compare subjective estimates of English proficiency with its objective measures in a sample of high school and university students (in order to investigate the impact of educational level on English competence)

Key words: English as a foreign language (EFL), subjective, objective measures.

1. Introduction

English as a foreign language (EFL) is taught in almost all educational institutions worldwide. Actually, it is the basis of intercultural communication, social mobility and international relations.

Some of the main aspects of learning a language are vocabulary and grammar. Vocabulary does not make sense without the structural function of a language, which is its grammar. Hence, grammar needs to be taught explicitly, which requires a great deal of time (Zhang, 2009: 185). In fact, in learning a foreign language, grammar is regarded as an elementary mainstay (Aqel, 2013: 2470). Besides, grammar is an empty set of rules if we are not enough familiar with the vocabulary of a language. Learning vocabulary is probably a crucial prerequisite for successful communication in a particular language (Alqahtani, 2015: 22). Students who have problems with vocabulary acquisition are less capable of understanding written texts as well (August, Carlo, Dressler, & Snow, 2005: 50). Thus, an extensive vocabulary knowledge facilitates reading comprehension (Anjomshoa & Zamanian, 2014: 93), as does syntactic knowledge (Chen, 2014: 39). Hence, these two segments of a foreign language (such as English) occupy a special place in learning, rehearsing and using that foreign language. It seems that the amount of students' English vocabulary and grammar knowledge have a huge impact on their English writing skills (Saadian & Bagheri, 2014: 117).

Students' overall English proficiency, as well as their competencies in various aspects (segments) of this language (e.g. in vocabulary, grammar, spelling, pronunciation...), can be assessed by at least two types of tools. The first type includes objective measures, which are tests/exams. They are used to measure English ability and performance (Gonzáles, 1996: 18). Another way to assess English

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proficiency is letting students provide the estimates of their own English skills and knowledge. These are so-called self-report (self-assessment) measures. Some authors agree that self-assessment in EFL context gained a huge attention recently (e.g. Naeini, 2011: 1225). Of course, they are subjective and not always in accordance with students' scores at the appropriate (i.e. reliable and valid) objective measures. Apart from this notion, self-assessment can be beneficial for students' future performance, especially if they learn how to estimate their own skills in an appropriate way (Chen, 2008: 235). However, some authors noticed that students rarely have an opportunity to provide estimates of their own performance (Luoma & Tarnanen, 2003: 440).

Gender differences in a language proficiency were more highlighted before than today. A stereotypical view of females as more verbally competent than males is not supported by contemporary studies in this field of linguistics. For example, a Spanish study revealed statistically non-significant gender differences in learning English vocabulary (Llach & Gallego, 2012: 62). However, there are some exceptions. For instance, as per gender differences in grammar, research in sociolinguistics showed that females tend to utilize grammar rules more accurately compared to males (Jinyu, 2014: 95).

The research gap in previous studies was a lack of the comparison between subjective and objective measures of English proficiency (and its domains). Therefore, the main purpose of this study is to compare subjective (self-reported) estimates of English proficiency (knowledge and skills) and participants' scores on some objective measures of English competencies.

- Are participants' ages and the number of years spent in learning English in the statistically significant correlations with subjective and objective measures of English competence?
- Are subjective measures in statistically significant correlations with objective measures of students' English competence?
- Is there a statistically significant difference between students' English knowledge of vocabulary and grammar (on both subjective and objective measures)?
- Is there any statistically significant gender difference in subjective measures and objective measures of English competence?

2. Methodology

2.1. Participants

A total of 210 Turkish students participated in the present study. There were 100 females (47.62% of the total sample) and 110 males (i.e. 52.38%). Participants' mean age was $M = 20.99$ and the standard deviation of their ages was $SD = 2.03$. The youngest participant was 18 while the eldest one was 27 years old.

As seen in Figure 1, most of the respondents reported *B2* (upper intermediate) level of English proficiency ($N = 53$, i.e. 25.24% of the total sample), 50 of them reported *C1* (advanced) level (which was 23.81% of the sample), and 45 (21.43%) participants estimated their English competencies as to be at *B1* (intermediate) level. The smallest number of participants indicated *A1* (beginner's) level ($N = 15$, i.e. 7.14% of the total number of participants). There was also a tiny number of those who indicated *C2* level, the proficient use of English ($N = 18$, or 8.57%). Finally, 29 respondents (13.81%) indicated *A2* (elementary) English level.

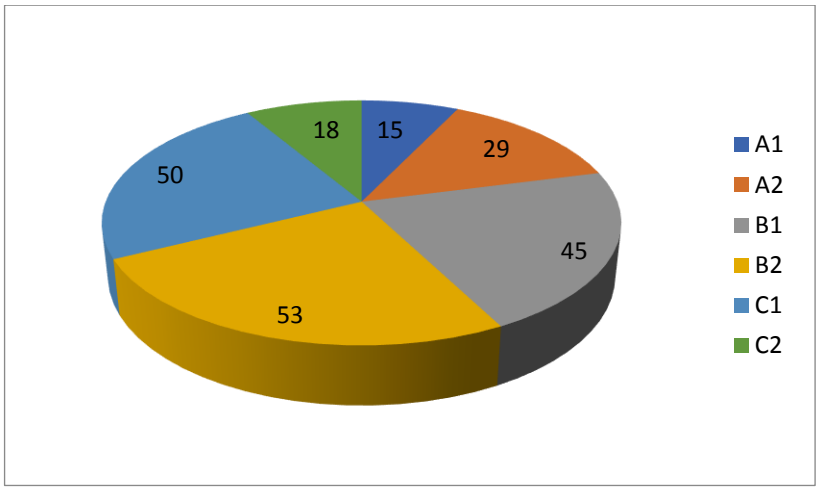

Figure 1. *The Structure of the Sample by English Proficiency Levels*

2.2. Instruments

The instrument created for the purpose of this study included three parts. The first includes questions on age, gender and the number of years students have been learning English. The second part encompasses subjective estimates of English competence. The first measure of this kind was the self-reported overall level of English proficiency: A1 (beginner), A2 (elementary), B1 (intermediate), B2 (upper intermediate), C1 (advanced), and C2 (proficient). Next, students were expected to estimate English vocabulary and grammar level (on a 7- point Likert's scale, where 1 indicated "poor" and 7 was "extraordinary").

As for objective measures of English competence, participants were asked to provide their grades on the last English exam (expressed in points ranging from 0 to 100). In addition, their knowledge of English vocabulary and grammar were tested by using 16 relevant questions for answering options belonging to each of them. An example of the vocabulary questions is: "The word *stiffness* has the same meaning as a) solidarity, *b) rigidity*, c) equality, and d) bestiality" (the correct answer was written in italic). An example of the grammar questions is: "I am looking forward _____ from you. Answering options: a) to hear, *b) to hearing*, c) hearing, and d) hear". Hence, there were eight questions assessing English vocabulary knowledge and the same number of questions used to assess English grammar knowledge of our students. Because some number of points was due to guessing of the correct answer, 0.25 points were subtracted for each incorrect answer (that is the correction for guessing based on the probability of 0.25 that a question can be correctly answered by pure chance). On the other hand, each correct answer was awarded by one point and the maximum sum of points was eight. However, if someone answers every question incorrectly, his/her points will be -0.25 x 8 = -2, which was the minimum possible total score.

2.3. Research procedure and data processing

Participants were explicitly told that their results on the mentioned short test will not impact their English grade and will only be used for scientific purposes. Next, it took them roughly 20-25 minutes to fill out the questionnaire. The researcher then entered data into SPSS for Windows (ver. 23.0) in order to create the database and conduct the relevant statistical procedures (calculating descriptive statistical values, conducting correlational analysis, and employing independent-samples and paired-samples *t*-test).

3. Results

Table 1. *Descriptive Statistical Values of the Variables*:

Variables	N	Min	Max	M	SD
Years spent in learning English	210	5	14	8.92	1.98
Self-reported level of English competence	210	1	6	3.70	1.38
Subjective estimate of English vocabulary knowledge	210	1	7	4.85	1.53
Subjective estimate of English grammar knowledge	210	1	7	4.65	1.35
Grades at the last English test	210	30	97	69.97	15.12
English vocabulary score (objective measure)	210	0.50	8	5.62	2.25
English grammar score (objective measure)	210	-0.75	6.75	3.99	1.90

Figures in Table 1 showed that, on average, participants have been learning English for 8.92 years (SD = 1.98). When English levels were expressed as a six-point scale, participants reported that their average level of English proficiency was $M = 3.70$ ($SD = 1.38$). Thus, somewhere between intermediate and upper intermediate level. They estimated their English vocabulary knowledge to be slightly above the average value of a seven-point scale (more precisely, $M = 4.85$) which was somewhat greater estimate compared to self-reported English grammar knowledge ($M = 4.65$).

The average number of points achieved at the last English exam was $M = 69.97$ ($SD = 15.12$). At the short test of the English vocabulary knowledge, participants scored (on average) $M = 5.62$, which is greater than the theoretical mean of points at this test (this value is three). The lowest average number of points was achieved at the English grammar test ($M = 3.99$); however, still above the theoretical average of points at this test.

To answer the first research question, coefficients of correlation were calculated (Table 2).

Table 2. *The Relationships of Participants' Ages and Years Spent In Learning English With Subjective And Objective Measures Of English Competence:*

	Age	Years spent in learning English
Self-reported level of English competence	-.173*	-.075
Subjective estimate of English vocabulary knowledge	-.211**	-.097
Subjective estimate of English grammar knowledge	-.204**	-.105
Grades at the last English test	-.195**	-084
English vocabulary score (objective measure)	-.172*	-.080
English grammar score (objective measure)	-.171*	-.066

** $p < .05$; ** $p < .01$*

As can be noticed in Table 2, years spent in learning English were **not** in statistically significant correlations with either subjective estimates or objective measures of English competence.

On the other hand (as displayed in Table 2), participants' age was in weak, negative, and statistically significant correlations with both subjective and objective measures of English knowledge and skills. The highest correlation of students' age was with subjective estimates of their English vocabulary knowledge ($r = -.211$, $p < .01$), whereas its lowest correlation was with participants' scores at the English grammar test ($r = -.171$, $p < .05$).

Table 3. *The Relationships between Subjective Estimates and Objective Measures of English Proficiency:*

	Grades at the last English test	English vocabulary score (objective measure)	English grammar score (objective measure)
Self-reported level of English competence	.940*	.839*	.739*
Subjective estimate of English vocabulary knowledge	.916*	.840*	.698*
Subjective estimate of English grammar knowledge	.940*	.857*	.787*

** $p < .001$*

All the coefficients displayed in Table 3 were high, positive and statistically significant. That is, subjective estimates of participants' English competence were in strong relationships with the objective measures of English proficiency. The correlation between self-reported levels of English competence and students' grades at the most recent English exam was $r(208) = .940$ ($p < .001$). The correlation between subjective estimates of English vocabulary knowledge and students' scores at the English vocabulary test was $r(208) = .840$, ($p < .001$). Lastly, the correlation between the results on subjective and objective measures of grammar knowledge was $r\ (208) = .787$ ($p < .001$).

The last two tables (4 & 5) comprised the examination of differences by the use of paired-samples and independent-samples *t*-test.

Table 4. *The Difference between Subjective/Objective Measures of English Vocabulary and Grammar Knowledge:*

Compared variables	M	SD	M_{diff}	t
Subjective estimate of English vocabulary knowledge	4.85	1.53	0.20	4.477*
Subjective estimate of English grammar knowledge	4.65	1.35		
English vocabulary score (objective measure)	5.62	2.25	1.63	14.442*
English grammar score (objective measure)	3.99	1.90		

** $p < .001$*

As was shown in Table 4, the average value of subjective estimates of students' English vocabulary knowledge was greater ($M = 4.85$) compared to the mean of subjective estimates of their English grammar knowledge ($M = 4.65$). This difference was statistically significant ($t(209) = 4.477$, $p < .001$).

Another finding was similar to the previous result. The average value of participants' scores at the English vocabulary test was higher ($M = 5.62$) than their mean score at the English grammar test ($M = 3.99$). Furthermore, the difference between these two means was statistically significant ($t(209) = 14.422$, $p < .001$). Therefore, participants estimated their vocabulary knowledge as greater than grammar knowledge, which was also confirmed with the help of the objective measures of their vocabulary and grammar knowledge.

Table 5. *Gender Differences in Subjective/Objective Measures of English (Overall, Vocabulary and Grammar) Proficiency*:

Variables	Gender	M	SD	M_{diff}	t
Self-reported level of English competence	Males	3.64	1.30	-0.14	-0.751
	Females	3.78	1.47		
Subjective estimate of English vocabulary knowledge	Males	4.80	1.46	-0.10	-0.471
	Females	4.90	1.62		

Subjective estimate of English grammar knowledge	Males Females	4.55 4.75	1.25 1.45	-0.20	-1.049
Grades on the last English test	Males Females	69.35 70.66	13.61 16.65	-1.31	-0.628
English vocabulary score (objective measure)	Males Females	5.47 5.80	2.32 2.17	-0.33	-1.075
English grammar score (objective measure)	Males Females	3.62 4.39	1.99 1.70	-0.77	-2.965*

** $p < .01$*

In five out of the six variables of our primary interest, gender differences were not statistically significant (Table 5). The only statistically significant difference was found for students' scores at the English grammar test used in this article. To be more specific, females outperformed males (M = 4.39 vs M = 3.62, respectively) and t-test for independent samples yielded the significant result ($t(208) = -2.965$, $p < .01$).

4. Discussion

Firstly, participants' from our sample estimated their overall English competence as being above the average. Similar results were obtained for English vocabulary and grammar knowledge. Moreover, their results on the objective measures of English performance/ proficiency were above the average as well.

It was interesting that years spent in learning English did not impact students' subjective estimates and scores on objective measures of their English competence. The correlations were weak and statistically insignificant. Therefore, it does not matter if someone has been learning English for many years. The thing that does matter is the quality of learning process and students' dedication, positive attitudes and motivation with regard to English learning and using it functionally in various social contexts (in school and out-of-school environment).

In contrast, there were statistically significant correlations obtained between participants' age and the results on subjective/objective measures of English proficiency. These correlations were negative, which means the following: as students get older, their estimates of English competence and their scores on objective measures drop. This can be the effect of generation differences because the younger generations have been exposed to English more, compared to the older generations. Similar results were reported by Brídová (2017: 4). Hence, the answer to the first research question was positive in terms of participants' age and their subjectively/objectively estimated English proficiency. The other part of the answer was negative because of statistically nonsignificant correlations between years spent in learning English and students' English competence (assessed by both types of measures).

The answer to the second research question was positive because the estimates from the subjective measures were in strong, positive and statistically significant correlations with students' scores on the objective measures of English competence. This is to say that participants' self-reports about overall English knowledge and skills, as well as its domain-specific competence (vocabulary and grammar) were similar to their real (objectively assessed) English ability and performance. Based on these findings, it is not surprising that self-report measures are interesting to contemporary researchers in the EFL environment (Naeini, 2011: 1215). In fact, self-assessment is a sort of self-evaluation technique and can be useful for learning which relies on self-regulation. This is in line with a similar notion of an author that has been already cited (Chen, 2008: 235).

Students estimated that their English vocabulary knowledge was greater than their grammar knowledge of this language. Their results on the objective measures (tests) showed the similar pattern. This is probably because they consider grammar as more difficult and related to school (and grades) compared to vocabulary. They probably pay more attention to vocabulary while watching American and British TV shows, listening to English music or interacting with Internet contents. This part of results allowed to conclude that the answer to the third research question was positive. This finding is in line with the

insights of other authors about the importance of vocabulary knowledge for successful communication (e.g. Alqahtani, 2015: 22; Anjomshoa & Zamanian, 2014: 93; August et al., 2005: 50).

Lastly, gender differences were not statistically significant except for objectively assessed English grammar knowledge. The statistically significant difference was in favor of females which was in line with the results obtained by Jinyu (2014: 95). Our study revealed statistically insignificant gender differences in vocabulary knowledge, which was in accordance with the findings from the study conducted by Llach and Gallego (2012: 62). Therefore, the answer to the fourth research question was negative (keeping in mind the aforementioned exception).

A limitation of this study was the issue of generalization because participants were from the same university and their estimates and scores did not necessarily reflect the subjective estimates and objective scores of students from other Turkish universities. The second shortcoming is related to the vocabulary and grammar tests used in our study. If different tests were used, there would be a possibility of getting somewhat different results.

The main practical implication of the present study included the notion that students' subjective estimates of their English proficiency levels could be trusted (that is, not only about their overall English competence but also about their English vocabulary and grammar knowledge). Another practical implication encompassed the need to improve students' English grammar knowledge (because they reported lower levels of English grammar knowledge compared to their English vocabulary knowledge).

5. Conclusion

Subjective measures (self-assessment tools) are usually regarded as less reliable, biased and less valid measures of one' performance, ability or competence. However, by this research, it was proved that they are very useful because conclusions derived from this kind of methodology were very similar to those drawn by the use of objective measures of performance.

Additionally, English teachers should be aware of students' issues they face while learning and using grammar (as assessed either subjectively or objectively). It seems that EFL students have more positive attitudes toward English vocabulary learning and they are really better at this domain of English. However, grammar is a "skeleton" of a language and it is not less important than vocabulary. Hence, teachers should design their instruction delivered to students in such a way that their students would be able to perceive the usefulness and necessity of learning grammar.

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Authors

Hakan Aydoğan, Independent Researcher, Malatya, Turkey, e-mail:aydoganh@hotmail.com

Azamat Akbarov, Kazakh National University, Almaty, Kazakhstan, e-mail:azamatakbar@yahoo.com