

International Journal of Psychology and Educational Studies



Investigating the Backwash Effect of Higher Education Exam (YGS) on University Students' Attitudes

Murat Polat¹

¹Anadolu University, Eskisehir, Turkey

ARTICLE INFO

Article History: Received 03.04.2020 Received in revised form 29.06.2020 Accepted 12.07.2020 Available online 12.09.2020

ABSTRACT

The application of high-stakes tests to choose students for higher education in Turkey has been considered as a reliable and effective way of assessment for so long. However, the application of a multiple-choice test in testing various skills could bring a number of side-effects with itself. This study aimed to investigate the backwash effect of the university exam on university students' attitudes. To be able to collect data from participants, it was first aimed to develop an attitude scale to examine the washback effect of Higher Education Exam (YGS). Considering the views of 5 academicians from educational sciences, ELT and testing disciplines, a preliminary version of the washback scale was developed. Next, the new scale was piloted in order to do its exploratory and confirmatory factor analyses. Third, the scale's internal reliability was measured and the scale which had 3 factors and 13 items was proven to be a valid and reliable tool to collect data including university students' views towards the washback effect of the university exam on their attitudes. Data of this study were collected from 5 state universities with the contribution of 1617 students from different grades and disciplines. The results showed that YGS had negative washback effects on university students in terms of test anxiety and study habits but considering its impact on students' time management skills, YGS was reported to have a positive impact on participants.

© 2020 IJPES. All rights reserved

Keywords:

High-stakes tests, scale development, university entrance exam, washback effect, YGS

1. Introduction

Among the numerous alternatives in assessment, mass-testing and particularly high-stakes tests can be considered as reliable, economic and quick ways of assessing tens of thousands of students at a time, on the same criteria, in the same conditions with minimum human interference and bias (Palmer, 1996; Wilson, 1991. From this perspective, the idea of utilizing high-stakes tests including multiple-choice items could be considered as the right path to ensure reliability and objectivity; however, if possible washback effects of such tests are taken into account, it is clear that, high-stakes tests have a number of backwash effects on learners' psychology along with their future learning habits and preferences, despite its numerous advantages (Aydın, 2009; Browen, 1999; Gardner, 1997; Green, 2007, Horwitz, 1986). In her book, Hammond (2014) criticizes the idea of high-stakes testing using multiple choice questions since students are not required to discover, appraise, synthesize, and use their background knowledge in necessary contexts, solve real problems, and produce their own research conclusions but directed to dependence on rote learning, repetitive tasks and a 'one kind fits all' philosophy of testing. On one hand, education reformists agree that no matter what grades or what schools are the students studying at, they have to be equipped with the 21 Century skills which can be listed as researching, creating, problem-solving, critical thinking, design making and communicating

e-mail: <u>mpolat@anadolu.edu.tr</u> http://dx.doi.org/10.17220/ijpes.2020.03.014

¹ Corresponding author's address: Anadolu University, SFL Telephone: +90 2223212350 Fax: +90 2223213549

(Brown, 2004; Hughes, 2003; Linn, 2000, Palmer, 1996). On the other hand, the anxiety of fairness and potential bias in testing creative skills encourage test makers to generate controlled, basic, single-dimensional but reliable and objective tests, which are criticised harshly in terms of their validity (Brown, 1998; Cimbricz, 2002; Smith, 1987; Şenel & Tütüniş, 2011; Wall, 1993).

1.1 Higher Education Exam in Turkey

Having a complex centralized educational testing system, Turkey adopts a nation-wide exam-oriented education approach. Therefore, most schools (either state or private) aim to prepare their students to these exams and such an idea creates a number of washback effects on students and their learning habits (Karabulut, 2007; Kelecioğlu, 2002; Külekçi, 2016; Özmen, 2011; Sevimli, 2007; Yavuzer & Göver, 2012)). Since mid-1970s, almost all university student admissions in Turkey have been done according to the scores students get from ÖSYM (Student Measuring, Selection and Placement Center, which is the authorized institution responsible for designing and organizing the university entrance examination and several other large-scale tests in Turkey) exams (Hafalir et.al., 2018). Higher Education Exam (YGS) is a criterion referenced test, in which about 180 questions are asked in two sessions and each time a 3-hour-time is given to students who are allowed to take this exam only at the end of Grade 12. Although various item discrimination techniques are used in the exam to choose the most eligible students, time management and test familiarity are other important qualities that test-takers have to present. More than 2 million students take this exam every year, and unfortunately only a half of them are placed into undergraduate programs based on their scores and the preferred faculties. Since almost half of the test takers fail in this exam, students are under a great pressure to be able to perform well in a limited time and make as fewer mistakes as they could to have higher points than the others (Kelecioğlu, 2002). Stobart (2003) stated that formal testing is not a natural process and it definitely has some consequences; therefore; it would be an optimistic view to think that students take this test at the end of the 12th grade at high school and after the test everything related to it would be forgotten. Thus, as Ekici (2005) and Kelecioğlu (2002) mentioned, YGS certainly has a number of positive and negative impacts on high school students and their academic lives at university.

Studies on test impact of YGS (which are quite few in number) in Turkey have mostly focused on how students feel before the exam, what strategies they have for motivation, how much the content of the exam and students' formal education correlates. Kutlu (2001) reported that high school students are anxious about a possible failure and the criticism they would take from their neighbourhood. It was also stated that the exam was considered as a remark of academic prestige, so families encourage children to have satisfying scores not only to be placed into better academic programs but also to have some kind of social privilege in the society. Moreover, the fear of missing the test in the exam morning or having a sickness that would reduce test-takers' performance were also reported as sources of anxiety that students fear about YGS (Baran, Şimşek; 2000).

The impact of YGS content on national curriculum was another subject which researchers in the field have focused on considering the backwash effects of the exam. First and Yaratan (2013) studied teachers' and students' attitudes towards YGS in terms of its content and to what extent it correlates with the existing high-school syllabus and their study showed that not only the teachers but also their students observe

inconsistencies between the questions of YGS and national curricula. Sağlam (2018) made a similar study and she reported that there were both negative and positive backwash effect of YGS on teaching techniques, preferred materials, and classroom practices in state high schools in Turkey. Considering students' skill and readiness, Baştürk (2011) conducted a study to investigate how studying YGS would affects learners' way of mathematics learning and he found that the preparing for YGS had left negative impacts on student learning in mathematics. He added that students' learning was mostly based only on recalling a memorized formula or a geometry rule and surprisingly the students' mistakes studied in that research were mathematically very poor.

Only two studies, which were carried out by Ekici (2005) and Kelecioğlu (2002), focused on the effect of YGS on students' way of studying, their preferences on educational contexts and personal feelings. First, Ekici (2005) reported that high school students have positive attitudes towards YGS exam and their views do not differ according to their genders or the types of high schools they study. Secondly, Kelecioğlu (2002) concluded that YGS was considered as the main purpose of studying for high school students, therefore, most of them apt to ignore or underestimate their subjects and regular exams at high schools, which could be considered as another backwash effect of the higher education exam.

Research findings revealed that most of the attention on washback effect of YGS was directed to high -school students (Çapulcuoğlu & Gündüz, 2013) and there are few studies which focused on how YGS affect students in their university years. Considering the fact that all the freshman students in Turkey start their academic careers after spending a lot of time and effort to pass YGS, it would be wise to investigate the effects of this exam during their university education and see if this affect is positive or negative on students' learning habits.

2. The Study

2.1. Objective of the study

The main purpose of this research was twofold. First, a reliable and valid scale was designed to collect data from university students on their attitudes towards the backwash effect of YGS and to check if these attitudes are positive or negative depending on some variables including participants' gender, faculty and their classes. Based on the aims mentioned above, the study tries to answer the following research questions:

- 1. What are the results of the exploratory & confirmatory factor analyses of Higher Education Exam Washback Effect Scale (HEWES)?
- 2. What are the attitudes of undergraduate students towards the backwash effect of YGS and do they differ according to students' gender, faculties and classes?

2.2. Methodology

The research model of this study, which was carried out in 2018-2019, was the general screening model and convenience sampling method was chosen to collect the maximum amount of data from voluntary participants living in 3 different cities in Turkey.

2.3. Participants

HEWES (Higher Education Exam Washback Effect Scale) was designed with the contribution of 342 voluntary students from 5 state universities in Eskişehir, Kütahya and Ankara. The 342 students were divided into two groups to explore and confirm the factor structure of HEWES. The first group's (177 students) data were used to identify HEWES' scale & factor reliability and Exploratory Factor Analysis' results. After defining HEWES' factor structure, the second group's (165 students) data were used to confirm HEWES' factor structure and its reliability. The data gathered form the scale development process of HEWES were not used in defining students' attitudes against washback effect of YGS. After the scale was developed, the survey forms were sent via e-mail to students attending 5 state universities in Ankara, Eskişehir and Kütahya and a total of 1654 responses were received. Of all the responses, 37 forms were excluded from the analysis because some of them did not provide personal data and the others did not complete some parts of the scale.

There was a homogeneous distribution among participants according to their genders (49.2.7% were males and 50.8% were females), classes (30% freshman, 27% sophomore, 23% junior and %20 senior) and faculties (%29 social sciences, 25.4% educational sciences 22,6% Master of Sciences and 23% other faculties (fine arts, aviation, sports sciences etc.).

2.4. Instruments

Development of HEWES was carried out by following some steps suggested by the experts in the field (Büyüköztürk, 2013; Kocaman & Cumaoğlu, 2014; Şeker & Gençdoğan, 2014, Vieira, 2011). First, the objectives, the participant group and the required time were defined. Before the item writing process, a group of 4 university students from different disciplines were interviewed by the researcher to gather some preliminary ideas about the possible backwash effects of YGS on students' academic lives in university. The effects of the test commonly mentioned by these students were determined and later used to gain some insights about students' feelings towards the university entrance test in item writing.

Secondly, the focus of the scale was finalized and the related items were written (initially 23 items were prepared). Thirdly, the draft was checked and revised by 5 experts in educational sciences (3 items were excluded after the expert-feedback). Next, the scale was piloted for exploratory & confirmatory factor analyses (7 items were excluded from HEWES because of overlapping in factor loads and 13 left in total) and finally, the newly developed scale HEWES with 3 separate factors and 13 items was approved as a valid, concise and reliable scale for data collection.

2.5. Data Collection & Analysis

After taking necessary official permissions from 16 faculties of 5 state universities in Ankara, Eskişehir and Kütahya, data of the study were collected from 1654 students (37 forms were excluded) via their emails by using google forms. All the responses were encoded and prepared for statistical analyses by the researcher. IBM-SPSS 22 and IBM-AMOS programs were used for data analysis purposes. Kolmogorov-Simirnov & Shapiro-Wilk and Homogeneity tests were preferred to identify the distribution (in terms of normality and homogeneity) of the data. Since it was found that the data collected from university students were not

homogeneous, non-parametric tests were used instead of parametric ones. To compare the variance of group means, Tamhane test was preferred to analyse the students' views towards the backwash effect of YGS.

3. Findings

3.1. Exploratory Factor Analysis of HEWES

The PCA (Principal Component Analysis) was used to check the construct validity of HEWES. Before the analysis, KMO (Kaiser–Meyer–Olkin) and Bartlett Sphericity Tests were conducted to identify whether the data were appropriate for factor analysis. Furthermore, to have a better view of the factor construction, varimax rotation was utilized on the data gathered from university students. KMO value was 0.763, and since it was higher than the limit 0.50 (Doğan & Doğan, 2014), the data set was proper for applying factor analysis. Moreover, the Bartlett Test result was 0,0001 [χ 2 = 614,570; df=176, p<0.01] and it also proved that factor analysis could be done using the data set. In the next stage, in principal component analysis items: 4, 10, 12,15 and 19 gained lower factor loads than 0.30, and the items 11 and 17 formed in a single factor, so all these items were excluded from HEWES since Özdamar (2013) suggested that there should be at least 3 or more items in a real factor and those items must have factor loads over 0.30.

Table 1. HEWES Initial Factor Loads and Item Correlation Results

Item	Initial Factor Loads	Item Correlation	Item	Initial Factor Loads	Item Correlation
<u></u>	0.759	0.677	I9	0.462	0.494
I2	0.642	0.624	I13	0.442	0.478
I3	0.811	0.383	I14	0.571	0.627
I5	0.581	0.549	I16	0.589	0.409
I6	0.337	0.361	I18	0.721	0.776
I7	0.513	0.451	I20	0.462	0.391
I8	0.503	0.448			

Variance (3 Factors explain) = 59.813%, Cronbach Alpha = 0.816

Table 1 shows that factor load values are between 0.337 - 0.811 and item total correlation amounts range between 0.361 and 0.776 (none was below 0.30). This 3-factor structure accounts for the views of participants towards backwash effect of YGS up to 59.813% in total and as for the reliability, the Cronbach Alpha was 0.816, which means that HEWES could be classified as a highly-reliable scale.

Next, the anti-image screening technique is used to check whether the factor loads contribute well to the factor structure over the critical limit 0.50 (Büyüköztürk, 2013).

Table 2. Anti-image Correlation Values of HEWES

Item	Anti-image	Item	Anti-image
I1	0.933	I9	0.831
I2	0.823	I13	0.742
I3	0.703	I14	0.911
I5	0.891	I16	0.816
I6	0.674	I18	0.909
I7	0.840	I20	0.812
I8	0.855		

Anti-image correlation values of all the items in Table 2 are over 0.50 (between 0.674 to 0.933), which means that the items of HEWES contribute well to the factor structure. The third step was to identify the theoretical sub-categories of the structure by using varimax rotation.

Table 3. HEWES Varimax Rotation

	1	2	3
I18	,816		
I16	,681		
I13	,670		
18	,592		
17	,586		
I1	,547		
I9		,815	
I6		,738	
I5		,683	
I2		,529	
I20			,809
I14			,689
<u>I3</u>			,597

Varimax Rotation revealed that there are 3 subcategories in HEWES. The first subcategory items 18,16,13,8,7,1 were all related to test anxiety; therefore, this factor was categorized as "Test Anxiety" and the listed items were re-coded as 1,4,7,10,12,13 respectively. The second subcategory items 9,6,5,2 were related to students' study habits, so this factor was named as "Study Habits" and the items were renamed as 2,5,8,11. The last factor's items 20,14,3 were related to students' time managements skills, so the third factor was labelled as "Time Management" and its items were re-coded as 3,6,9.

3.2. Confirmatory Factor Analysis of HEWES

The final stage of developing the scale was to check its factor structure with the responses of a new participant group and compare whether the factor structure found in exploratory analysis could be confirmed by confirmatory factor analysis. The projected model of "HEWES" was given in Figure 1.

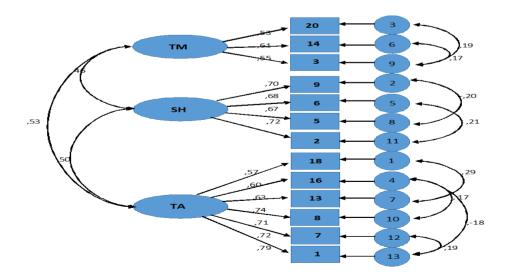


Figure 1. Confirmatory Factor Analysis Model of HEWES

(Figure 1 Abbreviations: **TM**: Time management, **SH**: Study Habits, **TA**: Test Anxiety) Confirmatory Factor Analysis (CFA) verified the factor loads of 3-factor HEWES and its corresponding items. The analysis revealed that the values gained from CPA were satisfactory ($\chi 2$ =290766, (df=164, p<.01), ($\chi 2$ /df=1.77)). It is known that (Kline, 2005 and Vieira, 2011) if $\chi 2$ /df < 3.0, there is a good match in structures. In Table 4, other critical values in confirmatory factor analysis were presented.

Table 4. CFA HEWES Goodness of Fit Values

χ2	Df	χ2/Df	RMSEA	AGFI	RMR	CFI
290.766	164	1.77	0.062	0.891	0.071	0.927

First, the most important value to check the goodness of fit in CFA was RMSEA and 0.062 meant a very good match because it was smaller than 0.08 (Cole, 1987; Kline, 2005; Vieira, 2011). Next, AGFI (0.891) was bigger than 0.080 and could be adequate for the match, also RMR (0.071) was lower than 0.10, CFI which must be over 0.90 was 0.927 and showed an indication of a successful match between HEWES' data set and the obtained structure (Jöreskog & Sörbom, 1993; Kline, 2005; Vieira, 2011). Finally, the reliability of the test was checked, and Cronbach Alpha was 0.806, which meant that HEWES could be considered as a reliable tool for data collection.

3.3. Findings Related to Backwash Effect of YGS

A total of 1617 students from 5 state universities voluntarily participated in this study between 2018 and 2019. The scale (HEWES), which was developed to collect data, was designed as a 5-point Likert scale having responses ranging from 1 (Strongly disagree) to 5 (Strongly agree). The scale had 3 sub-categories as *Test Anxiety, Studying Habits and Time Management* and students' views related to each factor were presented in this part under their factor names. University students' responses to the first section of HEWES, item means and item standard deviations were presented in Table 5.

Table 5. HEWES Factor 1 Test Anxiety Item Statistics

Item	Mean	Std. Dev.	N
1. YGS was a source of stress on me	4.32	.675	1617
4. Because of YGS I hate taking tests	3.95	.882	1617
7. YGS helped me to feel comfortable to take other tests	1.22	.573	1617
10. YGS test did not make me stressful	1.08	.321	1617
12. YGS changed my ideas about exams negatively	4.03	.651	1617
13. If necessary I would like to take YGS again	1.17	.382	1617

The first factor items of HEWES related to YGS effect in terms of test anxiety revealed that university students had negative attitudes towards YGS since the exam mostly demotivates students to take tests. It should be kept in mind that HEWES had response codes ranging from 1 (Strongly disagree) to 5 (Strongly agree) and when the students' views towards YGS were checked again it is clear that according to students' views, it

could be seen that participants did not want to take YGS even they had to since the test caused stress and anxiety on them. Next, the study aimed to check if students' answers differed according to their genders, faculties and classes. According to Tamhane test results, there was no significant difference among students' views in terms of gender (p>0.5). Nevertheless, when other independent variables like students' faculties and classes were analysed, there were significant differences among participants' views on backwash effect of YGS in terms of test anxiety (p<.05). Although they had mostly negative attitudes, students from aviation faculty (mean= 1.61) and fine arts (mean=1,83) were more neutral than the others towards the backwash effect of YGS in terms of anxiety. When the other variable (students' classes) was checked, it was seen that freshman (m=1,03) and sophomore (m=1,09) students had more negative attitudes towards the washback effect of YGS compared to junior (m=1,32) and senior (m=1,41) students, thus it was found that students' views tend to be more lenient towards YGS as they got older. Fine arts and aviation faculty students had distinctive responses to most of the items in this section. Compared to the views of other faculty students, aviation and fine arts' students gave more neutral responses related to the test anxiety effect of YGS. Moreover, the responses to Item 1 and Item 10 were striking because regardless of the participants' faculties, classes or genders, almost all reported that YGS was a remarkable source of stress for them. Thus, this amount of washback effect of a single exam is worth examining since we know that this is not the final high-stakes exam students have to take in their education lives.

The second sub-category of students' views towards YGS' washback effect was its effect on their studying habits. Items of this section were prepared to check if YGS had a significant effect on participants' studying habits at university.

Table 6. HEWES Factor 2 Study Habits Item Statistics

Item	Mean	Std. Dev.	N
2. YGS has changed my way of studying positively	1.21	.335	1617
5. YGS motivates learners to study hard	1.38	.485	1617
8. YGS positively contributes to students' learning	1.23	.403	1617
11. YGS helps students feel that learning is fun	1.07	.329	1617

The items in the second section of HEWES revealed that YGS had a negative effect on students' learning habits. When this effect was checked in terms of participants' genders, there was no significant difference between females' and males' views (p>0.5). However, results of the Tamhane analysis revealed that participants' responses changed significantly in terms of their classes and faculties (p<.05). As it was observed in Test Anxiety Factor results, aviation faculty (mean= 1.63) and fine art faculty students (mean=1,85) were found to be more neutral than the others towards the backwash effect of YGS on their studying habits. Participants' class variety was another independent variable that caused significant difference among university students' views. It was found that freshman (m=1,09) and sophomore (m=1,18) students had more negative attitudes towards the washback effect of YGS on their studying habits when compared to junior (m=1,43) and senior

(m=1,58) students. Item 11 in this section showed us a dramatic fact about YGS' primary impact on learners. Because of YGS, learning was considered as something compulsory and mandatory by young learners who indeed have a long way to go in education and can explore lots of new and exciting things to learn on their own instead of spending hours to develop test strategies. YGS in this sense might have demotivating effects on students self-learning and curiosity since they spend most of their study time solving multiple choice tests.

Table 7. HEWES Factor 3 Time Management Item Statistics

Item	Mean	Std. Dev.	N
3. Because of YGS I manage my time better in real life	3.36	.803	1617
6. YGS affects test takers positively in terms of planning their studies	3.68	.713	1617
9. YGS positively contributes to students' time management	3.79	.761	1617

Items of the last section of HEWES revealed that YGS had a positive effect on students' time management skills. When this effect was checked in terms of participants' genders, there was no significant difference between females' and males' views (p>0.5). However, Tamhane analysis' results showed that participants' responses changed significantly according to their classes and faculties (p<.05). Unlike the difference observed in the previous two factors, fine arts' students reported more negative views in terms of YGS' backwash effect on their time management skills (mean= 1.88). Also, in terms of participants' classes, junior (mean= 2.68) and senior students' (mean= 2.48) attitudes against the exam's effect on their time management skills were more negative than the other two groups (freshman mean scores = 4.12, sophomore mean scores = 3.98). However, when we consider the total responses and overall means, we can conclude that YGS had a positive effect on students' time management skills since it helped learners control their time wisely while doing practice for the test, plan their study schedules and act accordingly despite a limited amount of time.

4. Discussion & Conclusion

This study was carried out between 2018 and 2019 to investigate the possible washback effects of YGS on university students. 1617 students from 5 state universities in Turkey participated in the study, and their views towards the backwash effect of YGS were collected through HEWES (the newly developed scale), which was designed to collect data for the study. The findings of the study revealed that YGS had an important negative effect on university students in terms of test anxiety. An important proportion of the participants (92%) reported that YGS caused a long-lasting exam-fear and they wouldn't take this test again because of the stress they had experienced before and after taking the test. Cimbricz (2002) pointed out a similar peril and warned that the tests which make students worried, stressful and anxious could not be classified as good tests even if they provide reliable scores. The initial aim of assessment and evaluation is to measure students' achievement in the most normal and usual way which would enable learners feel comfortable and do their best. Brown (2004) pointed out the same issue and added that test anxiety could affect standardized tests' validity and reliability since students would not perform well if they are under pressure.

In terms of test anxiety, it was observed that the level of exam-fear and stress among the participants reduce as the participants grow older since the responses were significantly more negative among freshman and sophomore students when compared to juniors and seniors. Another interesting finding was that students from fine arts and aviation faculties differed significantly from the other faculty students in terms of YGS anxiety. The reason of this difference could be the multi-stage student admission systems of these faculties. Taking the necessary score from YGS is not enough to be a student in fine arts or aviation faculties in Turkey, so a student should take extra tests made by the faculty administrations to prove his/her required skills and this fact might reduce the importance of YGS in those students' minds. Therefore, those participants' views who were studying at aviation and fine arts faculties differed from the rest significantly about test anxiety. Ekici (2005) stated a similar finding in her study. She reported that the level of test anxiety might differ among students according to their goals, experience and academic disciplines. Readiness for the test is another concern and Ekici (2005) underlined the fact that the students who had private courses for the test feel less anxious than the others who did not. Moreover, exam burn-out is a critical psychological problem in academic life and students who contributed to this study showed the signs of this burn-out often through the answers they gave related to test anxiety. Hughes (2003) warned that too much testing could cause a significant amount of weariness on students and the findings of this study prove this fact. YGS is not the only and the last exam students take in their academic lives in Turkey, they will have far more exams. Thus, we should help them feel that exams are just a part of their educational measurement done not only for elimination but also for diagnosis and pace record keeping. Although they stated so, students shouldn't hate taking tests but findings of the study revealed that YGS has a rather unwanted backwash effect on them. What is more, 89% of the participants stated that YGS had a negative effect on their studying habits.

Considering the testing system in Turkey, from the early ages till their 20s, students have to prepare for high-stakes tests to study at a popular high school, university and at a promising department of that university to find a good job. Success in those exams is the mediating factor and the key issue, unfortunately the focus of all the schools in Turkey shifted to the statistics of how many of their students pass those high-stakes tests, what rankings they have in the state-wide qualifying from their initial objectives such as meaningful, real life and long-lasting learning. With their responses, students have shown that they are aware of this fact and not happy with what they have achieved so far regardless of their accomplishments in YGS. Almost all of the participants (98.2%) reported the fact that they did not study for YGS just because they wanted to but because they had to and it was understood from their views that this obligation changed the idea of studying in their minds and turned it into a task rather than a necessity. In such a case their learning habits in university years could transform into goal-oriented strategies in which they would study just to pass the classes and obtain necessary score means to take a diploma in the end and this would inevitably reduce the quality of the university graduates. Cimbricz (2002) mentioned about this washback effect and added that state-mandated tests could harm the genuine objective of education, learning the life skills. If students learn not to equip themselves with life-skills but to get ready for high-stakes tests, their learning would not be long-lasting and

meaningful. Furthermore, the testing style of YGS (including multiple-choice questions and penalizing the errors students make in the exam) could be another issue to discuss. Because of the test content, students are expected to find the correct choice to answer a question which could never be the same in real life. Nobody is given a set of choices (one is the correct option) when they encounter various problems in their lives, and this reality would be a great obstacle for students' researching, creating, problem-solving, critical thinking, design making and communicating skills which they could need a lot in their academic lives (Darling-Hammond, 2014). Seeing this fact, participants reflected their dissatisfaction through the habit they gained while studying for YGS.

The final conclusions of the study will be about the only reported positive backwash effect of YGS on university students, time management skills. Majority of the participants (79.6) stated that they improved their time management skills because of preparing for YGS. It should be remembered that all the participants of this study are university students and this means that they all passed this test since they had planned their study times, content and set up deadlines to get ready for the test. Doing these helped them systematize their studying practices and be better aware of the importance of time and be more responsible for the tasks they had to do. Since an important part of academic success lies within this kind of discipline and scheduling, YGS was considered to positively contributing and helpful in this sense.

References

- Aydın, S. (2009). Test Anxiety among Foreign Language Learners: A Review of Literature. *Journal of Language and Linguistic Studies*. 5/1.
- Baran, G., & Şimşek, Ş. (2000). Üniversite Giriş Sınavlarına Hazırlanan Gençler ve Kaygı. *Çağdaş Eğitim Dergisi*, 25 (265), 29–34.
- Baştürk, S. (2011). Üniversiteye Giriş Sınavına Hazırlanma Sürecinin Öğrencilerin Matematik Öğrenmeleri Üzerine Olumsuz Yansımaları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 40 (40), 69-79. Retrieved from https://dergipark.org.tr/en/pub/hunefd/issue/7796/102057
- Browen, C. B. (1999). A model of formative assessment in science education. *Assessment in Education*, 4/2,101-116.
- Brown, J. D. (1998). Testing in Language Programs. Upper Saddle River. NJ: Prentice Hall Regents.
- Brown, H.D. (2004). Language Assessment, Principles and Classroom Practices. USA: Longman.
- Büyüköztürk, Ş. (2013). Sosyal bilimler için veri analizi el kitabı. Ankara: Pegem.
- Cimbricz, S. (2002). State-mandated testing and teachers' beliefs and practice. *Education Policy Analysis Archives*, (3)1,1-22.
- Cole, D. A. (1987). Utility of confirmatory factor analysis in test validation research. *Journal of Consulting and Clinical Psychology*, 55, 1019-1031.
- Çapulcuoğlu, U., & Gündüz, B. (2013). Öğrenci Tükenmişliğini Yordamada Stresle Başaçıkma, Sınav Kaygısı, Akademik Yetkinlik ve Anne-Baba Tutumları. *Journal of Educational Sciences research*. 3/1.
- Darling-Hammond, L. (2014). *Next Generation Assessment*. Wiley. Retrieved from: http://www.ebrary.com Created from anadolu on 2016-06-13.
- Doğan, İ., & Doğan, N. (2014). Adım Adım Çözümlü Parametrik Olmayan İstatistiksel Yöntemler. Ankara: Detay Yayıncılık.
- Ekici, G. (2005). Lise öğrencilerinin öğrenci seçme sınavına (ÖSS) yönelik tutumlarının bazı değişkenler açısından incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 28: 82-90. Retrieved from https://dergipark.org.tr/en/pub/hunefd/issue/7808/102423
- Fırat, H.B., & Yaratan, H. (2013). Impact of external examinations on high school curricula: Perceptions of teachers and students. *Egitim Arastirmalari-Eurasian Journal of Educational Research*, 53/A, 1-18.

Gardner, P. D. (1991). Language anxiety: Its relation to other anxieties and to processing in native and second languages. London.

Green, A. (2007). IELTS washback in context: Preparation for academic writing in higher education. Retrieved in April, 2019 from: http://hosted.jalt.org/test/PDF/Dunklev2.pdf

Hafalir, I. E., Hakimov, R., Kübler, D., & Kurino, M. (2018). College admissions with entrance exams: Centralized versus decentralized. *Journal of Economic Theory*, Elsevier, Vol. 176(C), 886-934.

Horwitz, M. B. (1986). Foreign language classroom anxiety. *Modern Language Journal*, (5)1,125-132.

Hughes, A. (2003). Testing for language teachers. Cambridge: Cambridge University Press.

Jöreskog, K., & Sörbom, D. (1993). LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language. Lincolnwood, USA: Scientific Software International, Inc.

Karabulut, A. (2007). Micro Level Impacts of Foreign Language Test (University Entrance Examination) in Turkey: A Washback Study. (MA thesis). ProQuest Information and Learning Company. UMI: 1448691. Retrieved from http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=15883&context=rtd

Kelecioğlu, H. (2002). Ortaöğretim Öğrencilerinin Üniversiteye Giriş Sınavları ve Sınavın Öğrenimlerine Etkisi Hakkındaki Görüşleri. *Hacettepe Eğitim Fakültesi Dergisi*. 23:135-144.

Kline, R. B. (2005). Principles and practice of structural equation modelling. New York: The Guilford Press.

Kocaman, O., & Cumaoğlu, G. K. (2014). Developing a Scale for Vocabulary Learning Strategies in Foreign Languages. *Education and Science*. (39)176, 293-303.

Kutlu, Ö. (2001). Ergenlerin Üniversite Sınavına İlişkin Kaygıları. Eğitim ve Bilim. 26/101:12-23.

Külekçi, E. (2016). A concise analysis of the Foreign Language Examination (YDS) in Turkey and its possible washback effects. International Online Journal of Education and Teaching, 3(4), 303-315. Retrieved in March, 2019 from: http://iojet.org/index.php/IOJET/article/view/141/143

Linn, R. L. (2000). Assessments and accountability. Educational Researcher, 29, 4-16.

Özdamar, K. (2013). Paket programlar ile istatistiksel veri analizi. Eskişehir, 2013.

Özmen, K.S. (2011). Washback Effects of Inter University Foreign Language Examination on Foreign Language Competences of Candidate Academics. *Novitas Royal (Research on Youth and Language)*, 5(2), 215-228.

Palmer, L. F. (1996). Language testing in practice. New York: Oxford University Press.

Sağlam, G., A., L. (2018). Can exams change how and what learners teach? Investigating the washback effect of a university English language proficiency test in the Turkish context. *Eurasian Journal of Applied Linguistics*, 4(2), 155-176. doi: 10.32601/ejal.464094

Sevimli, S. E. (2007). The Washback Effects of Foreign Language Component of the University Entrance Examination on the Teaching and Learning Context of English Language Groups in Secondary Education: A Case Study (Master's thesis), Gaziantep University, Gaziantep. https://tez.yok.gov.tr/UlusalTezMerkezi/.

Smith, K. F. (1987). Effects of Testing on Teaching and Learning. James Cook University of North Queensland.

Stobart, G. (2013). The impact of assessment: Intended and unintended consequences. *Assessment in Education*. 16, 139-140.

Şeker, H., & Gençdoğan, B. (2014). Psikolojide ve eğitimde ölçme aracı geliştirme. Ankara: Nobel.

Şenel, E, & Tütüniş, B. (2011). The washback effect of testing on students' learning in EFL writing classes. *Dil Dergisi*, (153), 43-52. https://dergipark.org.tr/tr/pub/dilder/issue/47688/602335

Wall, J. C. (1993). Does washback exist? Applied Linguistics, (9)3, 115-129.

Wilson, H. D. (1991). Testing, reform and rebellion. Norwood.

Vieira, A. L. (2011). Preparation of the analysis. Interactive LISREL in practice. London: Springer.

Yavuzer, H., & Göver, D. H. (2012). Akademik personelin yabancı dil durumu ve yabancı dil sınavlarına bakısı: Nevsehir örneği. NEÜ Sosyal Bilimler Enstitüsü Dergisi, 1(2), 136-158.