

RESEARCH ARTICLE/ ARAŞTIRMA MAKALESİ

THE MEASUREMENT OF THE STUDENTS' ATTITUDES REGARDING TAX
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ABSTRACT

Tax consciousness means to follow the changes in tax legislation and obtain adequate information regarding tax practices. It is not possible to mention tax compliance without having sufficient tax consciousness. Therefore, efforts to increase tax consciousness are important. If attempts start at an early age, it can be beneficial. In this context, this study aims to reveal tax consciousness levels for university students regarding the impact components of tax consciousness. The data was obtained from 385 students who study at the Faculty of Economics and Administrative Sciences at Hitit University through questionnaires. The collected data were analyzed by using the Statistical Package for Social Science (SPSS) version 19. The result of this study demonstrated that 67% of students who participated in the survey believe that education in the family has a substantial role in the improvement of tax consciousness.

Keywords: Tax Consciousness, Tax Compliance, Tax EducationÖĞRENCİLERİN VERGİ BİLİNCİNE İLİŞKİN TUTUMLARININ ÖLÇÜLMESİ:
BİR VAKA ÇALIŞMASI

ÖZET

Vergi bilinci, vergi mevzuatındaki değişiklikleri takip edebilmek ve vergi uygulamaları hakkında yeterli bilgiye sahip olmakla ilişkili bir kavramdır. Vergi bilincine sahip olmadan vergi uyumundan bahsetmek mümkün

1 This study was presented as an oral presentation at the International Strategic Research Congress held between 03-05 May 2018 and its summary was published in the congress proceedings abstract book. This study is the completed version of the paper titled "Analysis of Awareness related to the Factors that Influence Tax Consciousness and Influenced by Tax Consciousness: The Case of Hitit University Faculty of Economics and Administrative Sciences"

değildir. Bu nedenle, vergi bilincini artırma çabaları önemlidir. Bu bağlamda, bu çalışma vergi bilincinin etki bileşenleri kapsamında üniversite öğrencilerinin vergi bilinci düzeylerini öğrenmeyi amaçlamaktadır. Veriler, Hitit Üniversitesi İktisadi ve İdari Bilimler Fakültesi'nde ankete katılan 385 öğrenciden elde edilmiştir. Elde edilen veriler Sosyal Bilimler İstatistik Paketi (SPSS) 19 versiyonu ile analiz edilmiştir. Bu çalışmanın sonucu, ankete katılan öğrencilerin% 67'sinin ailede eğitimin vergi bilincinin geliştirilmesinde önemli bir role sahip olduğuna inandığını göstermiştir.

Anahtar Kelimeler: Vergi Bilinci, Vergi Uyumu, Vergi Eğitimi

1. INTRODUCTION

Voluntary compliance for tax regulations is essential in terms of the prevention of informal economy and tax evasion. Tax evasion is one of the fundamental macroeconomic problems that many developing countries face. The raising public awareness of tax is the most common solution proposed regarding improving voluntary compliance for tax regulations (Çiçek and Bitlisli, 2017: 262-263). This suggestion is based on the causality relationship between the low or high tax consciousness and weak or strong informal economy (Güner, 2008: 5). In this context, the efforts to raise tax consciousness become important in the fight against tax evasion and informal economy. It will be useful to briefly outline the concept of "tax consciousness" which is a key factor in the prevention of tax losses and evasion.

The concept of consciousness is linked to all experiences related to individuals (Graziano, 2013: 13). These experiences may be concrete or abstract (Sparks, 2011: 3-4). Meanwhile, an individual's awareness of his/ her own thoughts, feelings, perceptions and surroundings is directly associated with the concept of consciousness. In addition, it is known that physical, social, cultural, and psychological factors may create impact on an individual's consciousness (Cherry, 2018). In this context, it is possible to say that not only experience, but also awareness of thoughts, feelings, perceptions and surroundings are linked to the concept of consciousness.

A connection may be established between the concept of consciousness and the phenomenon of tax consciousness based on this information. Tax obligations that an individual is required to meet may be linked to that individual's tax consciousness. Nonetheless, an individual who does not have tax consciousness may also have sentiments and thoughts regarding tax. Such sentiments and thoughts may directly be associated with the individual's tax consciousness. Thus, it is possible to say that individuals who have no tax obligation may have tax consciousness. In this context, Dornstein (1987) has defined tax consciousness as tax awareness.

In the light of all these explanations, tax consciousness is defined as a positive change that may occur as a result of an individual's perception of taxes and familiarization with regulations or legislations (Güner, 2008: 28). In other words, tax consciousness means that an individual has necessary knowledge regarding tax practices and monitors modifications to tax regulations or legislations (Taytak, 2010: 497-498).

According to these definitions of tax consciousness, it is possible to say that knowledge that an individual may have concerning tax practices can be linked to that person's level of tax consciousness. Meanwhile,

some assessments can be made regarding tax consciousness of societies if the individuals represent the foundation of a society. Tax consciousness depends partly on the specifics of the tax system. Although developing and maintaining tax consciousness is complex, it is closely related to tax education and tax awareness (Buehler, 1940:237). In particular, tax consciousness is directly associated with tax awareness (Lestari and Wicaksono, 2017: 13). The basis of the relationship here is the ability of tax education to change the attitudes of the taxpayers (Wang, 1993:109). In addition to all these, tax education is also considered as a factor that increases loyalty to the country (Said, 2012: 3).

In this context, a performance program was issued by the Revenue Department in 2018, in Turkey. This program reveals that the tax education focusing on the raising of tax consciousness will be implemented in primary and middle schools as part of the determined targets (GIB², 2018).

The consideration related to raising tax awareness by the Revenue Administration has been included in the performance program. Therefore, transferring of this topic for different academic fields has generated a source of motivation for this study. In this respect, knowing the level of tax consciousness among university students, who will start their professional careers, would contribute to the target set by the Revenue Administration. The main point that distinguishes this study from other studies in the literature is that it is based on factors that tax consciousness affects or are affected. Thus, the aim for this study is to have further proposals for more efficient application regarding the extension of tax consciousness.

Raising tax awareness in the society serves to increase tax income as well as economic growth and fair distribution of income³. In communities with a low tax consciousness, for example, public tax revenues may be affected negatively, and the provision of public services may become a problematic area (Organ and Yeğen, 2013: 244). So, it is possible to say that tax consciousness can affect tax revenues of countries. At this point, it is important to know other factors affecting and affected by tax consciousness. Informal economy and individuals' tendency to evade payment of taxes are among the factors influenced by tax consciousness. It is also known that there are the several factors that affect tax consciousness including level of education (Palil and Akir, 2013:119) and income (Buyrukoğlu and Erasa, 2012: 123). It is possible to sort them as follows: tax amnesty (Edizdoğan and Gümüş, 2013: 106), complexity of the tax system (Yurdakul, 213: 79), tax justice (Ağcakaya and Yıldırım, 2015: 94), tax audit (Teyyare and Kumbaşlı, 2016:4), religious beliefs and perception of government (Korlu et al. 2016: 450).

In light of these facts, this study aims at demonstrating the level of tax consciousness among the students of the Faculty of Economic and Administrative Sciences of Hitit University. Attitude items directed to the students before conducting this study were prepared by considering factors that affect or are affected by tax consciousness. Here, firstly, the academic studies conducted in Turkey regarding tax consciousness are outlined. Then, the details of the survey, the outcome of frequency analysis, and non-parametric test results will be mentioned.

² Revenue Administration

³ <https://www.bir.gov.ph/index.php/legal-matters/guide-to-philippines-tax-law-research.html>

2. RELATED LITERATURE

There are several studies conducted in Turkey in different categories concerning tax consciousness. A substantial part of these studies intended to analyze the level of tax consciousness, especially among university students and other academic institutions. There are studies that aimed to determine the level of tax consciousness among accounting professionals, taxpayers and farmers. In addition, there are some other studies that aimed at measuring the level of tax consciousness, as part of technological advances.

Firstly, we focus on existing studies intended to reveal the level of tax consciousness among accounting professionals, taxpayers and farmers. Secondly, we review the studies that aimed at showing how technological advances may affect the level of tax consciousness. We finally highlight the studies conducted to explain the level of tax consciousness among students attending universities and other academic institutions.

A survey conducted by Ömürbek et al (2007), which focused on the tax consciousness of students of the Economic and Administrative Sciences Faculty of Süleyman Demirel University showed that tax consciousness among these students was average. The outcome of this survey also indicated that male students perceive that paying taxes is a civic duty more than female students. In his survey which was conducted by Taytak (2010) announced results of the survey regarding tax consciousness among students of primary schools in Uşak. Family has a key role in the perception of the term "tax", according to the results of the survey. Also, according to the outcome of this study, the students expressed that they needed to be informed by the tax office and the school regarding tax. The survey results also revealed that the students of primary education established a satisfactory link between public services and tax.

A further survey conducted by Organ and Yeğen (2013) focused on the revealing of accountants' behaviors regarding tax consciousness and tax ethics in the central region of Adana. According to the outcome of this study, most accounting professionals had tax payment consciousness. They did not also endorse tax evasion. Unlike other studies, Birinci (2010) conducted a survey focusing on farmers' behavior regarding tax consciousness in the central region of Tekirdağ. Results of this study showed that there was a strong positive relationship between tax consciousness and the frequency of tax audits. For example, 41.9 % of the producers regarded that high tax rates to be one of the fundamental reasons prompting people to evade taxation. In addition to these results, the survey data revealed that 93 % of the farmers believed that unpaid taxes would cause future generations to assume a burden. However, 49 % of the farmers expressed that they had insufficient information about agricultural taxes.

Ay et al (2010) conducted a survey to examine the relationship between taxpayers in Karaman, Turkey and the tax office. According to results of this survey, 58.2 % of the respondents believed that the government informs citizens sufficiently. Çiçek and Bitlisli (2017) conducted a survey on tax consciousness among 414 students of Mehmet Akif Ersoy University. According to results of the assessment of items regarding factors affecting creation and enhancing tax consciousness and averages of responses, tax consciousness of students receiving training on taxes might be higher than those who do not.

Mert (2009) conducted a study focusing on Turkey to examine if computer and Internet technology affected tax audits. The results of this study indicated that an autonomous tax organization could establish trust in the government and hence tax consciousness may increase accordingly. According to this study, lack of tax consciousness is viewed as one of the factors undermining the efficiency and effectiveness of tax audit. Biniş carried out a survey in Izmir, Turkey to reveal behavior of the accountants and the employees of the tax office in 2012. This study showed that 42 % of accounting professionals who took part in the survey and 38 % of the employees of the tax office regarded improvement of tax consciousness as a key factor for the reduction of tax implementation errors.

In 2013, Sağlam conducted a survey, which aimed at analyzing the tax compliance of students of Economic and Administrative Sciences Faculty of Hitit University. In this context, the study aimed to reveal tax consciousness and tax perceptions of students. According to the results of this survey, the university students believed that increased levels of education and culture, concept of transparent government and sanctions to be imposed on tax evaders could be influential on enhanced tax consciousness.

Cansız (2006) carried out a study in Afyonkarahisar, Turkey, which focused on taxpayers' perception of taxes. This study also reveals taxpayers' opinions regarding tax consciousness. Interviews were conducted with 816 people as part of this study. More than half of the respondents (57.4%) said that tax consciousness was not high in society. Demir and Ciğerci conducted a survey targeting the students of primary schools in Afyonkarahisar, Turkey in 2016 to verify the role of education in the development of tax consciousness. The findings of this study indicated that public service announcements could be influential on students' mind for generating a correct perception regarding tax phenomenon and tax consciousness.

Yeşilyurt (2015) conducted a survey on tax consciousness and tax ethics among students of departments of the finance and theology of Bülent Ecevit University in Zonguldak, Turkey. The study aimed at comparing the opinions expressed by the students of the related departments regarding tax consciousness and tax ethics. According to the findings of this survey, compared to the students of the finance department, the students of the theology faculty had more a supportive attitude that the paying of taxes is an ethical situation and they feel more responsible themselves towards society. Also, this study revealed that compared to students in the department of finance, students of the department of theology supported more that knowledge about areas where taxes would be spent could create a positive effect on the enhancement of tax consciousness.

A study conducted by Egeli and Diril in 2014 in Izmir, Turkey intended to analyze the importance of technology for tax consciousness. A total of 322 independent accountants and financial advisers were interviewed as part of the survey. According to findings of the study, 82% of the respondents shared the opinion that tax consciousness would be raised if the tax administration announces potential changes through social media in advance. Most of the independent accountants and financial advisers stated that without requiring the payment of a fee, appointment of a tax consultant by the government had a positive effect on tax consciousness.

Teyyare and Kumbaşlı (2016) conducted a survey comparing students' attitudes of the first and fourth years of the finance department of Bülent Ecevit University, Eskişehir Osmangazi University and Abant

İzzet Baysal University which are located in Turkey. The students in the fourth year were more supportive of the attitudes toward tax consciousness as compared to those in the first years. Akkara and Gencil (2016) conducted a survey revealing the students' attitudes of Çanakkale Onsekiz Mart University in the context of assessing tax perception. Its findings showed that training and education could make an increasing in tax consciousness.

The results of a study based on an econometric model conducted by Kucherova et al (2019) regarding tax consciousness reveal that the most crucial elements of determination of tax consciousness are reliability of taxation system, re-trainability, and socio-economic role concerning taxation. Lestari and Wicaksono (2017) conducted a survey study for the taxpayers registered in Boyolali, Indonesia. The conclusions of this study demonstrated that tax consciousness has a decisive role in explaining attitudes regarding tax compliance. The survey conducted about tax awareness⁴ in Malaysia by Palil and Akir (2013) showed that if undergraduate and graduate students receive tax education, it will contribute to tax compliance by increasing their potential for tax understanding. The results of the study conducted by Nguyen et al. (2020) within the scope of structural equation modeling about tax compliance on taxpayers in Vietnam revealed that tax-related educations to be included into the educational programs will contribute to tax consciousness of taxpayers.

3. METHODOLOGY OF THE RESEARCH

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This survey was conducted involving in students who were studying in the Faculty of Economics and Administrative Sciences at Hitit University in April of 2018. The population of this research comprised of 1857 students who were receiving daytime education at this Faculty. The data was obtained from 385 of 1857 students through questionnaires. The collected data were analyzed by using the Statistical Package for Social Science (SPSS) version 19. The confidence interval concerning the study was determined as 95%. Acceptance and reject hypotheses were separately shown in each result tables. The survey form includes 28 Attitude items and 7 demographic and other questions. These questions and items were prepared by being taken into consideration a survey study conducted by Gergerlioğlu and McGee (2017).

3.1 The Cronbach's Alpha Value

The Cronbach's Alpha coefficient regarding 28 attitude items is 0.845. This coefficient is high for the survey studies conducting in social science (İslamoğlu and Alnıaçık, 2014: 283).

3.2 The Margin of Sampling Error and The Percentage of Confidence Level

The population size is 1857 and the sample size is 385. Based on these data and in the 95% of confidence level, the margin of sampling error for this survey is 4.31%. This margin of sampling error in the 95% of confidence level for the sample size of 385 is enough (Dantzker and Hunter, 2012: 118).

⁴ It is closely related to tax consciousness (Buehler, 1940:237).

3.3. Sampling Quota

The sampling of this study was selected according to stratified random sampling quota. The data of gender and faculty departments were determined by means of stratified random sampling quota technique. Detailed information regarding this approach is shown in (Table 1) below. If a population regarding the research is split into subgroups, it is possible to mention stratified random sampling phenomenon. After subgroups are specified, sampling is randomly chosen from these subgroups (Fink, 2003: 11). Because this sampling type makes representation ability within the sample, it is more effective in comparison to simple random sampling method (Schutt, 2006: 146). Within the scope of this literature, stratified random sampling was implemented for the data regarding faculty departments and gender. Firstly, the percentage rates within total population of the variables were determined. Then, stratified random sampling quota (Table 1) was prepared according to this system.

Department	Total Student Number	Percentage Rate Of Total Student Number	Quota	Female	Male	Total
Department of Public Finance	450	24,2	93	56	37	93
Department of Political Science And Publcc Administration	481	25,9	100	52	48	100
Department of Economics	447	24,1	93	51	42	93
Department of Business	479	25,8	99	48	51	99
Final Total	1857	100,0%	385	207	178	385

Table 1. Stratified Random Sampling Quota

Source: Prepared by the authors

3.4. The Demographic and Other Data

As shown in Table 2, when data of the gender and the department are reviewed, it is seen that these data are close to the quota figures in Table 1. Unfortunately, due to the sampling inadequacy, some data including (Married, over 25 aged, over 10.001TL) of marital status, age status and household income status within Table 2 were not able to take into consideration.

3.5. The Data Regarding Frequency Analysis

Results of frequency analysis related to attitude items are shown in two different tables. The percentage proportions of frequency analysis regarding 14 attitude items within the scope of factors, which influence tax consciousness, are demonstrated in Table 3. The percentage proportions of frequency analysis concerning 10 attitude items for the factors which are influenced by tax consciousness are indicated in Table 4.

DEMOGRAPHIC DATA	FREQUENCY	VALID PERCENTAGE
Gender		
Male	184	47,8
Female	201	52,2
Marital Status		
Married	2	,5
Single	373	96,9
Engaged	10	2,6
Household Income Status		
1.000TL and Below	48	12,5
1.001-3.000TL	213	55,3
3.001-5.000TL	90	23,4
5.000-10.000TL	33	8,6
Over 10.001TL	1	,3
Working Status		
Part Time	34	8,8
Full Time	6	1,6
Student does not work	345	89,6
Department		
Public Finance	103	26,8
Economics	98	25,5
Business	84	21,8
Political Science and Public Administration	100	26,0
Year of the Study		
First	81	21,0
Second	98	25,5
Third	98	25,5
Fourth	108	28,1
Age Status		
17-20 age range	133	34,5
21-25 age range	248	64,4
Over 25 age	4	1,0
Has the student taken any scholarship until now?		
Yes	286	74,3
No	99	25,7

DEMOGRAPHIC DATA	FREQUENCY	VALID PERCENTAGE
OTHER DATA		
Has the student ever heard concept of tax consciousness until now?		
Student has heard it first time	60	15,6
Student has heard it before	325	84,4
Has the student ever taken lesson concerning tax until now?		
Yes	148	38,4
No	237	61,6
How does the student evaluate his/her tax consciousness?		
Low	49	12,7
Middle	240	62,3
High	96	24,9

Table 2. Demographic and Other Data Regarding the Students

Source: Prepared by the authors

Attitude Statements within the scope of Factors which Influence on Tax Consciousness	Percentage of Frequency Analysis
If the tax system is not understandable, tax consciousness in society may weaken	78,2
I believe that tax injustice can weaken tax consciousness	76,1
Negative approaches of the tax administration can weaken tax consciousness	73,0
I think that education in the family has an important role in the development of tax consciousness	67,0
I believe that "tax consciousness development training" initiated by the state will increase tax consciousness in the society	66,5
The frequency of tax audits can increase tax consciousness	65,5
Increased informal economy can reduce tax consciousness in society	64,4
I predict that as the level of education rises, tax consciousness will increase	63,6
The frequency of tax amnesty can reduce tax consciousness	57,4
High tax rates can weaken tax consciousness	56,6
Low tax penalties can reduce tax consciousness	51,2
I estimate that the consciousness of the poor people is lower	33,5
Individuals with strong religious beliefs may have more tax consciousness	32,2
As individuals' financial incomes rise, I believe that tax consciousness will fall	24,2

Table 3. Percentage Figures of Frequency Analysis Regarding Attitude Items within the Scope of Factors Which Influence on Tax Consciousness

Source: Prepared by the authors

According to Table 3, many students who responded to the questionnaire believe that if the present tax system is complex, unfair, and the tax administration has negative attitude, the tax consciousness is likely to weaken. On the other hand, the same table showed that few students thought that strong religious beliefs may influence the tax consciousness. According to Table 4, more than 60% of students who participated in the survey believed that tax consciousness may likely have a positive influential on social welfare and tax compliance.

Attitude Statements within the context of Factors which Influenced by Tax Consciousness	Percentage of Frequency Analysis
I believe that individuals with low tax consciousness may not be willing to pay taxes	69,6
As the tax consciousness increases, I think that the tax evasion tendencies will decrease	69,1
I believe that individuals with high tax consciousness will regularly fulfill their tax obligations	67,8
I believe that societies with improved in tax consciousness have a high welfare level	67,3
With the increase of tax consciousness, the tax revenues of the state may increase	66,5
If tax consciousness increases in our society, I can get better health care	64,2
If our society had higher tax consciousness, I could get better education	61,6
I believe that the individual with a high tax consciousness is a good citizen	50,9
I think that countries with low tax consciousness are undeveloped countries	45,2
I think that individuals with high tax consciousness love their country more	43,6

Table 4. Percentage of Frequency Analysis of Attitudes Within the context of factors That Influenced by Tax Consciousness

Source: Prepared by the authors

4. THE RESULTS OF NON-PARAMETRIC TEST

Data, which has nominal and ordinal characteristic, should be analyzed by way of Non-Parametric Tests (Craig, 2009: 109). Likert scales show ordinal characteristic (Gibbons, 1993: 1). On the other hand, data, which have nominal characteristic like gender variable in demographic structure, are analyzed within the context of Non-Parametric tests (Suter, 2012: 401). It is known that there are a large number of non-parametric tests. It is possible to rank Non-Parametric Tests as Kruskal-Wallis, Mann-Whitney U, Friedman, Wilcoxon (MacKenzie, 2013: 225). Within the scope of Non-Parametric Tests, Chi-Square Test is also used (Urdu, 2005: 161). Accordingly, the Non-Parametric Tests were used to analyze the relations among attitude items, demographic data, and other data in this study.

Since the structure of questionnaire regarding this study is based on Likert scale, we benefited from Non-Parametric Tests. But, significant results in terms of statistical concerning these tests were taken into consideration. Within the scope of Non-Parametric Tests, Kruskal-Wallis H and Mann-Whitney U Tests were only used. Due to the risk of inadequate sampling number, we were not able use Chi-Square Test. In this context, firstly, the results of non-parametric tests for attitude items regarding factors influencing tax consciousness are assessed. After that, the results of non-parametric tests for attitude items within the context of factors, which are influenced by tax consciousness, are dealt.

4.1. Results of Non-Parametric Test regarding Attitude Items Within The Scope of Factors which Influence Tax Consciousness

The results of the testing of relationships among different variables (gender, university student's department, student's own tax consciousness) and attitude items concerning factors influencing tax consciousness are shown below.

The Attitude Item	Gender	Sample	Mean Rank	Sum of Ranks
I think that individuals with high tax consciousness love their country more	Male	184	206,51	37997,00
	Female	201	180,64	36308,00
	Total	385		
Mann-Whitney U Significance P Value: ,020				

Table 6. Testing of Relation between the Gender and Related Attitude Item Variable

Source: Prepared by the authors

Table 6 shows that male students are more likely to support the attitude item of “I think that individuals with high tax consciousness love their country more” than female students. This conclusion is compatible to the result of research, which was conducted by Gergerlioğlu and McGee (2017), within the scope of Faculty of Economics at Istanbul University. Also, this result partially coincides with the outcomes of research which were conducted by (Ayyıldız et al, 2014: 55) and (Ömürbek et al, 2007: 118).

The Attitude Item	University Student’s Department	Sample	Mean Rank
I believe that individuals with high tax consciousness will regularly fulfill their tax obligations	Department of Public Finance	103	217,78
	Department of Economics	98	196,27
	Department of Business	84	175,88
	Political Science and Public Administration	100	178,66
	Total	385	
Kruskal-Wallis H Significance P Value: ,020			

Table 7. Testing of Relationship between the University Student’s Department and Related Attitude Item Variable

Source: Prepared by the authors

According to Table 7, among all department students who study at Faculty of Economics and Administrative Science of Hitit University, the students of the Department of Public Finance support the attitude item of “I believe that individuals with high tax consciousness will regularly fulfill their tax obligation” the most. Gergerlioğlu and McGee (2017) have revealed that the students of the Department of Public Finance support to activities regarding increasing of tax consciousness more compared to students who study in other departments in Faculty of Economics at Istanbul University. As it is seen, results of this study show consistency with outcome of the relevant research which was conducted before.

The Attitude Item	Own Tax Consciousness Assessment Status	Sample	Mean Rank
I believe that the individual with a high tax consciousness is a good citizen	Low	49	165,07
	Middle	240	191,25
	High	96	211,62
	Total	385	
Kruskal-Wallis H Significance P Value: ,045			

Table 8. Relationship between The University Student’s Self Tax Consciousnesses Assessment Status and Related the Attitude Item Variable

Source: Prepared by the authors

According to table 8, students who evaluate own tax consciousness as high, are more likely to support the attitude item of “I believe that the individual with a high tax consciousness is a good citizen” than students who evaluate own tax consciousness as low and middle. This conclusion is consistent with the result of a research, which was conducted by (Gergerlioğlu and McGee, 2017: 403).

4.2. Results of Non-Parametric Test and Attitude Items of Factor Influenced by Tax Consciousness

Conclusions of the testing of relation among different variables (gender, university students’ department, students’ own tax consciousness) and attitude items within the context of factors, which are influenced by tax consciousness, are demonstrated below.

The Attitude Item	Working Status	Sample	Mean Rank
Negative approaches of the tax administration can weaken tax consciousness	I work part-time	34	162,24
	I work full time	6	286,67
	I don't work	345	194,40
	Total	385	
Kruskal-Wallis H Significance P Value: ,020			

Table 9. Testing of Relation between the University Students’ Working Status and Related Attitude Item Variable
 Source: Prepared by the authors

Table 9 shows that students who work full time are more likely to support the attitude item of “Negative approaches of the tax administration can weaken tax consciousness” than students who do not work and students who work part-time. The conclusion of a previous research, which was conducted by Gergerlioğlu and McGee (2017), has revealed that compare to students who do not work and students who work part-time, the students who work full time are more likely to support the attitude item of “I think that countries with low tax consciousness are undeveloped countries”. When these results are assessed together, it can be said that students who work full time are more likely to know the importance of tax consciousness than students who do not work and students who work part-time.

The Attitude Item	Self Tax Consciousness Assessment Status	Sample	Mean Rank
I think that education in the family has an important role in the development of tax consciousness	Low	49	154,79
	Middle	241	192,15
	High	95	214,88
	Total	385	
Kruskal-Wallis H Significance P Value: ,005			

Table 10. Testing of Relation between the University Students’ Self Tax Consciousness Assessment Status and Related Attitude Item Variable
 Source: Prepared by the authors

Table 10 demonstrates that students who assess own tax consciousness as high, are more likely to corroborate the attitude item of “I think that education in the family has an important role in the development of tax consciousness” than students who assess own tax consciousness as low and middle. This conclusion is consistent with the result of research, which was conducted by (Gergerlioğlu and McGee, 2017: 403).

The Attitude Item	Gender	Sample	Mean Rank	Sum of Ranks
Individuals with strong religious beliefs may have more tax consciousness	Male	184	208,88	38433,50
	Female	201	178,47	35871,50
	Total	385		
Mann-Whitney U Significance P Value: ,006				

Table 11. Testing of Relation between Gender and Related Attitude Item Variable

Source: Prepared by the authors

Table 11 indicates that compare to female students, male students have more supportive attitude regarding item of "Individuals with strong religious beliefs may have more tax consciousness". This result is in harmony with the conclusion of survey, which was conducted by Gergerlioğlu and McGee (2017), in the Faculty of Economics at Istanbul University. In this context, McGee and Benk (2011) reveal that men are more sensitive than women regarding tax evasion. This result has parallels with outcome of testing of relation between gender and related attitude item variable.

4.3. Results of Non-Parametric Test Concerning Attitude Items within the context of Independent Factors Connected with Tax Consciousness

Three different items were used to test the attitude items regarding tax consciousness in this study. These are sorted in the form of "I believe that the training on tax consciousness should start from primary education", "I believe that 'tax consciousness development training' initiated by the state will increase tax consciousness in the society" and, "I would like the conference of "How can my tax consciousness increase?" to be held at my school". The non-parametric test results for these attitude items are as the following. However, the second attitude items among these did not show statistically significant results. Therefore, the test results for this are not considered here.

The Attitude Item	University Student's Department	Sample	Mean Rank
I would like the conference "How can my tax consciousness increase?" to be held at my school.	Department of Public Finance	103	217,33
	Department of Economics	98	208,52
	Department of Business	84	175,61
	Political Science and Public Administration	100	167,34
	Total	385	
Kruskal-Wallis H Significance P Value: ,001			

Table 12. Testing of Relation between the University Students' Department and Related Attitude Item Variable

Source: Prepared by the authors

The Attitude Item	University Student's Department	Sample	Mean Rank
I would like to have an elective course related to tax consciousness in our curriculum.	Department of Public Finance	103	229,84
	Department of Economics	98	182,09
	Department of Business	84	188,19
	Political Science and Public Administration	100	169,79
	Total	385	
Kruskal-Wallis H Significance P Value: ,000			

Table 13. Testing of Relation between the University Students' Department and Related Attitude Item Variable
 Source: Prepared by the authors

Table 12 shows that among all students studying in Faculty of Economics and Administrative Science at Hitit University, the students of the Department of Public Finance promoted the attitude item of "I would like the conference 'How can my tax consciousness increase?' to be held at my school" the most. On the other hand, Table 13 demonstrates that among all students studying in Faculty of Administrative and Economics Science at Hitit University, the students of the Department of Public Finance promoted the attitude item of "I would like to have an elective course related to tax consciousness in our curriculum" the most. These Results show consistency with outcome of the relevant research, which was earlier conducted by Gergerlioğlu and McGee (2017).

5. HYPOTHESES REGARDING NON-PARAMETRIC TESTS

The Attitude Item	The Test Type	The Result of Test	H ₀	H ₁	The Position of Hypothesis
The Attitude Item In Table 6 (<i>I think that individuals with high tax consciousness love their country more</i>)	Mann-Whitney U	.020	There is no meaningful variation between the interested attitude item and gender variable	There is a meaningful variation between the interested attitude item and gender variable	H₁ (Accept)
The Attitude Item In Table 7 (<i>I believe that individuals with high tax consciousness will regularly fulfill their tax obligations</i>)	Kruskal-Wallis H	.020	There is no meaningful variation between the interested attitude item and University Student's Department variable	There is a meaningful variation between the interested attitude item and University Student's Department variable	H₁ (Accept)
The Attitude Item In Table 8 (<i>I believe that the individual with a high tax consciousness is a good citizen</i>)	Kruskal-Wallis H	.045	There is no meaningful variation between the interested attitude item and University Student's Self Tax Consciousness Assessment Status variable	There is a meaningful variation between the interested attitude item and University Student's Self Tax Consciousness Assessment Status variable	H₁ (Accept)

The Attitude Item	The Test Type	The Result of Test	H ₀	H ₁	The Position of Hypothesis
The Attitude Item In Table 9 (<i>Negative approaches of the tax administration can weaken tax consciousness</i>)	Kruskal-Wallis H	.020	There is no meaningful variation between the interested attitude item and University Student's Working Status variable	There is a meaningful variation between the interested attitude item and University Student's Working Status variable	H₁ (Accept)
The Attitude Item In Table 10 (<i>I think that education in the family has an important role in the development of tax consciousness</i>)	Kruskal-Wallis H	.005	There is no meaningful variation between the interested attitude item and University Student's Self Tax Consciousness Assessment Status variable	There is a meaningful variation between the interested attitude item and University Student's Self Tax Consciousness Assessment Status variable	H₁ (Accept)
The Attitude Item In Table 11 (<i>Individuals with strong religious beliefs may have more tax consciousness</i>)	Mann-Whitney U	.006	There is no meaningful variation between the interested attitude item and gender variable	There is a meaningful variation between the interested attitude item and gender variable	H₁ (Accept)
The Attitude Item In Table 12 (<i>I would like the conference "How can my tax consciousness increase?" to be held at my school</i>)	Kruskal-Wallis H	.001	There is no meaningful variation between the interested attitude item and University Student's Department variable	There is a meaningful variation between the interested attitude item and University Student's Department variable	H₁ (Accept)
The Attitude Item In Table 13 (<i>I would like to have an elective course related to tax consciousness in our curriculum</i>)	Kruskal-Wallis H	.0007	There is no s meaningful variation between the interested attitude item and University Student's Department variable	There is a meaningful variation between the interested attitude item and University Student's Department variable	H₁ (Accept)

Table 14. Hypotheses Related to Non-Parametric Tests within the Context of Attitudes and Demographic Variables

Source: Prepared by the authors

Table 14 shows the hypotheses relevant to non-parametric tests within the context of attitudes and demographic variables. In this respect, the Table presents the non-parametric test types used in the study and their significance values separately. Within the scope of the test results, values below the .050 level of significance were taken into consideration. Also, in Table 14, there are H0 and H1 hypotheses, which are prepared in terms of attitude items and demographic variables.

6. CONCLUSION AND RECOMMENDATION

Tax consciousness and voluntary compliance regarding paying of taxes are important factors for increasing tax revenues, which constitute the main source of public revenues. Tax consciousness means that individuals should follow changes made in tax legislation and have essential information about tax practices. In this context, the tax consciousness acquired by today's university students as taxpayers of the near future may affect tomorrow's voluntary tax compliance behavior. In this study, a conclusion confirming the said interaction has been reached, and it has been determined that tax consciousness is relatively higher in the departments where public finance courses are included in the curriculum.

In conclusion of this study, we revealed that the students of the Department of Public Finance who study in the Faculty of Economics and Administrative Sciences at Hitit University supported tax-based education more than the students of other departments of the same faculty. The conclusions of the research conducted by (Çiçek and Bitlisli, 2017: 275) and (Akkara and Gencel, 2016: 44) are consistent with this result for the students of Public Finance. In regard to the study of Çiçek and Bitlisli (2017), education related to tax may have a positive effect on tax consciousness. This result is consistent with the survey study conducted by Palil and Akir (2013) and Nguyen et al. (2020). Also, Akkara and Gencel (2016) revealed that university students believed in the power of education on tax consciousness. This finding regarding the study supports the proposal to add public finance courses to the curriculum in higher education and at all stages of education for a society with high tax awareness.

This research revealed that most of students who study in Faculty of Economics and Administrative Sciences at Hitit University do not support the idea of "individuals with strong religious beliefs may have more tax consciousness". This outcome is consistent with the results of the study conducted by Gergerlioğlu and McGee (2017). In addition to this, a study done by Said (2018) showed that religious education can positively impact on tax consciousness. Therefore, this study also supports the results of our research. However, it is not consistent with the conclusion of the research conducted by Yeşilyurt (2005).

With reference to this study, 67% of students who participate in the survey believed that education in the family has a substantial role in the improvement of tax consciousness. In addition to this, 63.6% of the students who participate in the survey thought that as the level of education increases, tax consciousness will go up.

In this framework, the study, which was conducted by Sağlam (2013) regarding tax consciousness and tax perception in the Faculty of Economics and Administrative Sciences at Hitit University, is important in terms of comparison. The survey which was conducted by Sağlam (2013) included two items based on education and family phenomenon with the scope of tax consciousness. Furthermore, 51.2% of students

who participated in the survey thought that family is an important factor in the sense of increasing of tax consciousness. 59.4% of students who participate to related survey believed when the level of education of individual goes up, tax consciousness will increase. When two studies are considered in the context of common items, in comparison to old term students, which were studied in Faculty of Economics and Administrative Sciences at Hitit University, new term students have more supportive attitudes regarding important of family and education on the tax consciousness.

When all these results are considered together, it is thought that it may be beneficial to provide relevant educational courses on raising awareness of tax in both family and school. In this context, more comprehensive tax consciousness activities can be realized for families and schools. On the other hand, in further and future studies on tax consciousness, a related item can be added to the questionnaire forms in order to reveal a clearer picture regarding whether religious beliefs will affect tax consciousness. Finally, it may be useful to conduct surveys at different periods in the same university in order to see possible difference in the tax consciousness.

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