



| Research Article / Araştırma Makalesi |

An Examination of University Students' Level of Assertiveness According to Self Construal and Five-Factor Personality Traits¹

Üniversite Öğrencilerinin Güvengenlik Düzeylerinin Benlik Kurgusu ve Beş Faktör Kişilik Özelliklerine Göre İncelenmesi

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Keywords

Assertiveness
Five-factor personality traits
Self-construal
Personality
University students

Anahtar Kelimeler

Güvengenlik
Beş faktör kişilik özellikleri
Benlik kurgusu
Kişilik
Üniversite öğrencileri

Received/Başvuru Tarihi

11.04.2020

Accepted / Kabul Tarihi

21.05.2020

Abstract

This study aimed to examine undergraduate students' level of assertiveness with regard to gender, class level, self-construal, and five-factor personality traits. The participants consisted of 507 (194 male, 313 female) undergraduate students receiving education at a state university in Ankara. The study data were collected via Voltan-Acar Assertiveness Inventory, Adjective Based Personality Test, Relational-Individual-Collective Self Construal Scale, and Personal Information Form. The multiple regression analysis was used to identify the predictive power of five-factor personality traits and self-construals predictive power on the participants' level of assertiveness. Independent samples t-test was used to determine whether there was a statistically significant difference between university students' level of assertiveness according to gender. One-way ANOVA was used to compare university students' level of assertiveness in accordance with class level. SPSS 21.0 package was used for statistical analysis. The current findings showed that the personality traits of extraversion, neuroticism, agreeableness, and openness to experience, as well as individual and collective self-construals, predict undergraduate students' level of assertiveness at a statistically significant level. Also, undergraduate students' level of assertiveness did not differ at a statistically significant level according to their gender and class level. The findings were discussed in the light of the related literature, and some recommendations were made.

Öz

Bu araştırmanın amacı üniversite öğrencilerinin güvengenlik düzeylerini beş faktör kişilik özellikleri, benlik kurgusu, cinsiyet ve sınıf düzeyine göre incelemektir. Araştırmanın çalışma grubunu Ankara'da bir devlet üniversitesinde öğrenimlerine devam eden 507 (194 erkek, 313 kadın) lisans öğrencisi oluşturmaktadır. Araştırmada veri toplamak amacıyla Voltan Acar Kendini Belirleme (Güvengenlik) Envanteri, Sıfatlara Dayalı Kişilik Testi, Toplulukçu-İlişkisel-Bireyci Benlik Kurgusu Ölçeği ve Kişisel Bilgi Formu kullanılmıştır. Beş faktör kişilik özellikleri ile benlik kurgusu boyutlarının üniversite öğrencilerinin güvengenlik düzeylerini yordama gücünü belirlemede çoklu doğrusal regresyon analizinden yararlanılmıştır. Öğrencilerin güvengenlik düzeylerinin cinsiyete göre anlamlı farklılık gösterip göstermediğini belirlemek için bağımsız örneklem t testi kullanılmıştır. Sınıf düzeyine göre lisans öğrencilerinin güvengenlik düzeylerini karşılaştırmada ise tek yönlü varyans analizinden yararlanılmıştır. Verilerin istatistiksel analizinde SPSS 21.00 paket programı kullanılmıştır. Araştırma bulgularına göre dışa dönüklük, nevrozizm / duygusal denge, yumuşak başlılık ve deneyime açıklık kişilik özellikleri ile bireyci ve toplulukçu benlik kurgusu özellikleri üniversite öğrencilerinin güvengenlik düzeylerini anlamlı bir şekilde yordamaktadır. Ayrıca lisans öğrencilerinin güvengenlik düzeylerinin cinsiyete ve sınıf düzeyine göre anlamlı bir farklılık göstermediği sonucuna ulaşılmıştır. İlgili bulgular alanyazın ışığında tartışılmış ve önerilerde bulunulmuştur.

¹ This article is produced from the master's thesis titled "An Examination of University Students' Level of Assertiveness According to Self-Construal and Five Factor Personality Traits" supervised by Assoc. Prof. Meliha Tuzgöl Dost.

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INTRODUCTION

University years constitute a period when individuals start to step into young adulthood. Those who are in university years neither possess all the characteristics of the adolescence period nor have the actual features of young adulthood. This period, which is called emerging adulthood and includes individuals between the ages of 18 and 25, is a relatively more independent stage in terms of social roles and society's expectations (Arnett, 2000). This period has its own characteristics. It is a period when individuals go through identity seek; it comprises changefulness; it includes focusing on oneself; it represents a transition between adolescence and adulthood. The identity seek during adolescence gets more apparent as of this period (Atak & Çok, 2010).

During the years of university, when individuals move away from their parents and start to undertake more responsibilities on their own, it gets more important for them to express themselves (Güven, 2016). Throughout this period, teenagers need to acquire the skill of assertive behaviours more than ever. Individuals display three patterns of behaviours while expressing their feelings and thoughts. These three patterns are passiveness, which denotes shying away from conflict or expressing oneself by behaving acceptably; aggressiveness, in which one sees others as unworthy without giving them any choice; and assertiveness, which is a way of expressing oneself directly without hurting others while voicing one's demands (Alberti & Emmons, 1998; Uz-Baş, 2014; Voltan-Acar, 2013). Individuals' personal qualities affect the way of expressing themselves. Different theoreticians have tried to explain the nature of personality, defined by Cervone and Pervin (2016) as psychological qualities supporting one's continuous and distinctive emotions, thoughts, and behaviours. The distinctive features model is one of the theories that focus on concrete and conscious points rather than abstract concepts to explain personality. In this model, the concept of feature refers to emotions, thoughts, or behavioural patterns which are resistant to change in time and which people tend to display on different occasions and under different conditions (Cervone & Pervin, 2016). Studies carried out by theoreticians with a great number of individuals have revealed that personality traits can be divided into five factors: Openness to experiences, conscientiousness, extraversion, agreeableness, and neuroticism (Costa & McCrae, 1992).

The model of five-factor personality, which is addressed under the approach of distinctive features, was fundamentally developed as a hypothesis based upon linguistics (Bacanli, İlhan & Aslan, 2009). Known as the big quintet, the personality traits of openness to experiences, conscientiousness, extraversion, agreeableness, and neuroticism can be described as follow: Neuroticism is associated with being anxious and pessimist as well as not trusting people around. Emotional stability and flexibility are not apparent in this dimension of personality (Holland & Roisman, 2008). Extraversion refers to being outgoing and active, thinking positively, treating others in a friendly way, and being sociable (Burger, 2006). Those who possess aesthetics sensitivity have a depth of emotions and need variety to represent the openness to experience (McCrae & Costa, 1989). The dimension of agreeableness refers to people who are well-mannered, forgiving, helpful, and trustful to others (Cervone & Pervin, 2016). Conscientiousness defines people who are responsible, decisive, organized, consistent, and temperate (Doğan, 2013). This dimension of personality refers to people who are goal-oriented and face up to work hard until they achieve success (Soto, 2018).

Individuals' personality traits, as well as their sense of self that represent their perceptions and evaluations about themselves, influence their behaviours. Although ideas regarding the self-first dimension developed around individual and collective self, a third dimension has recently been added as relational self (Ercan, 2011). While those who possess the traits of an individual self are expected to behave considering their own needs, those possessing the traits of a collective self are expected to behave considering the good of society rather than their own wishes and needs. However, the motive of behaviours might be different for those who have a relational self and, accordingly, exhibit traits of autonomic self while paying attention to relations with people around them at the same time. Whereas such people are likely to prioritize their own demands and interests, they also tend to give particular importance to the wishes and needs of those around them. Establishing harmony and cooperation rather than conflict in interpersonal relations is closely associated with building a relationship based on confidence. As the reservoir of assertive behaviours improves, individuals, know how to behave, and decide on their reactions accordingly (Alberti & Emmons, 2017).

Self, which is a concept referring to people's perceptions about themselves, cannot be addressed in itself independently from the current cultural context (Ercan, 2011). Individualism-collectivism, which tries to explain cultural differences at the cultural level, plays an important role as it attributes meaning to differences in the world (Kağıtçıbaşı, 2010). The impact of different cultures on individuals naturally differs (Tutar, 2016). Individualism has always been associated with modern values such as gender equality in society, freedom, and human rights, which are all accepted to indicate modernity. On the other hand, collectivism has been associated with traditionalism (Kağıtçıbaşı, 2010). As self-construals that include individual self (autonomous) and collective self (dependent) were far from meeting the needs, a third self-construal was required. In this respect, relational self-construal refers that individuals prioritize others' goals and interests when they go into action, attach importance to both their own success and others' success, act in cooperation, and consider the wishes of people around them into consideration (Başay, 2015).

In the light of this, it seemed necessary to investigate which factors of personality traits and self-construals predict university students' level of assertiveness. Literature review on assertiveness shows that assertiveness does not exhibit a statistically significant difference according to age (Dinçyürek, Çağlar, & Birol, 2010; Şahin, 2007). There is no statistically significant difference between the scores of assertiveness according to gender (Çelik, 2016; Pourjali & Zarnaghash, 2010; Şenol, Akyol, & Can-Yaşar, 2018; Voltan-Acar, Arıcıoğlu, Gültekin, & Gençtanırım, 2008; Zengin, 2017). Self-respect is positively associated with assertiveness

at a statistically significant medium level (Dinçer, 2008). On the other hand, there are also studies in the literature that have revealed a statistically significant difference in the level of assertiveness according to gender (Arı, 1989; Güneş, 2018; Kimble, Marsh, & Kiska, 1984; Metin, 2014). Furthermore, some study findings indicated that a democratic parenting attitude creates a statistically significant difference in the level of assertiveness (Voltan-Acar et al., 2008). The level of assertiveness increases as class level increases (Deltsidou, 2009). There is a statistically significant positive relation between assertiveness and being sociable, whereas there is a statistically significant negative relation between neuroticism and assertiveness (Tripathi, Nongmaithem, Mitkovic, Ristic, & Zdravkovic, 2010).

Investigating university students' level of assertiveness according to self-construals and personality traits is thought to be important to understand the factors that affect behaving with assertiveness. Behaving with assertiveness turns out to be a necessary skill to be acquired for college students who move away from their parents and start to undertake individual responsibilities. Identifying the personality traits and self-construals that predict assertiveness will contribute to have a better understanding of the quality of these behaviours and skills. In this line, the two questions for which an answer is sought in the current study are "Do self-construal, and five-factor personality traits predict university students' level of assertiveness?" and "Do university students' level of assertiveness differ at a statistically significant level according to gender and level of class?"

METHOD

This study investigated the relationship between university students' level of assertiveness and some variables such as self-construal, five-factor personality traits, gender, and class level. A quantitative research design has been adopted in the study. The study is based on a correlational model, which is a research model in which the relation between at least two variables are investigated without any intervention by the researcher(s) (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz, & Demirel, 2016).

Participants

The study group comprises undergraduate students attending a public university in Ankara in the spring term of the 2018-2019 academic year. The analysis was conducted with data gathered from 507 students. 38.3% of the participants were male (n=194), while 61.7% of them were female (n=313). The participants' ages varied between 18 and 32, where most of them were between the ages of 20 and 21. 45.65% of the participants were in that age group. 168 of the participants (33.1%) were attending either school of foreign languages or in their first year at the department, 108 of them (21.3%) were second-year students; 120 of them (23.7%) were third-year students, and 111 of them (21.9%) were in their fourth year. As the number of students attending the school of foreign languages was only 25, the data gathered from them were presented combined with the first-year students.

Data Collection Tools

Voltan-Acar Assertiveness Scale

The scale was developed by Voltan Acar & Öğretmen (2007) to identify individuals' levels of assertiveness. The scale is composed of twenty-eight items and two sub-factors. The sub-factors of the scale are passiveness and assertiveness. It is a 6-point Likert-type scale, and the responses to the scale items can vary between 'not at all descriptive of me' (1) and 'very descriptive of me' (6). The lowest score to be obtained in the scale is 28, whereas the highest score can be 168 (Voltan-Acar & Öğretmen, 2007). Construct validity of the scale was tested through confirmatory factor analysis (CFA). According to the results of fit indices regarding the confirmatory factor analysis, the ratio of χ^2/sd was 1.55, GFI=0.95, AGFI=0.94, RMSEA value was 0.05. These values approve the two sub-factors of the scale and prove that Assertiveness Inventory has a valid structure. The internal consistency reliability coefficient as to the sub-factor of passiveness was 0.83 (17 items), while the internal consistency reliability coefficient as to the sub-factor of assertiveness was 0.78 (11 items). On the other hand, the reliability coefficient as to all 28 items was 0.87. Factor loads of items as to the sub-factor of passiveness (17 items) varied between 0.32 and 0.65, whereas factor loads of items as to the sub-factor of assertiveness (11 items) varied between 0.36 and 0.74 (Voltan-Acar & Öğretmen, 2007). On the other hand, the internal consistency reliability coefficient of the scale was found to be .88 in the current study.

Adjective-Based Personality Test (ABPT)

The scale was developed by Bacanlı, İlhan, & Aslan (2009) to identify five-factor personality traits. ABPT, which is composed of forty pairs of adjectives, is a 7-point Likert-type scale. Five factors of the scale are as below: Emotional stability/neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Construct validity of the scale was tested via principal components factor analysis. At the end of the analysis, five factors accounted for 52.63% of the variance as to ABPT. The sub-factors of extraversion and agreeableness each had nine items, while the sub-factors of conscientiousness and neuroticism each had seven items. There are eight items that measure the sub-factor of openness to experience. According to the test conducted to reveal the reliability of adjective-based personality test, the internal consistency coefficient of ABPT varied between 0.73 and 0.89, the highest value of internal consistency was found to belong to extraversion (0.89). On the other hand, the lowest internal consistency coefficient belongs to the sub-factor of emotional stability/neuroticism (0.73) (Bacanlı, İlhan, & Aslan, 2009). Reliability coefficients of the sub-factors of ABPT vary between .69 and .88 in the current study. The highest coefficient of internal

consistency belongs to extraversion (.88), whereas the lowest coefficient of internal consistency belongs to the sub-factor of neuroticism (.69).

Relational-Collective-Individual Self Aspects Scale

This scale was developed by Kashima & Hardie (2000), and it was adapted into Turkish culture by Ercan (2011). The scale is composed of twenty-seven items and three sub-dimensions. It is a 7-point Likert-type scale, which is scored between “not at all descriptive of me” 1 and “very descriptive of me” 7. Cronbach's alpha reliability coefficient was found to be .73 for the subscale of the individual self, .68 for the subscale of the relational self, .77 for collective self, and .86 for the whole scale. Construct validity of the scale was tested through confirmatory factor analysis.

Fit indices values of the scale were calculated to be 2.66 for χ^2/sd ratio, GFI = .85, AGFI= .82, RMSEA= 0.07 (Ercan, 2011). The reliability coefficient of the scale was found to be .85 in the current study. The scale proved to be reliable with this value ($.60 \leq \alpha < .90$) (Yıldız & Uzunsakal, 2018). Cronbach's alpha reliability coefficient was found to be .75 for the individual self, .71 for relational self, and .74 for the collective self in the current study.

Personal Information Form

A personal information form was developed by the researchers to get demographic information from the participants. The personal information form consisted of questions about the participants' gender, age, and class level.

Data Collection Process

The necessary permissions were received via e-mail from the researchers who developed and/or adapted Voltan Acar Assertiveness Scale, Relational-Collective-Individual Self-Construal Scale, and Adjective-Based Personality Test. Then an application was submitted to Hacettepe University Ethical Commission. After receiving legal permission from the ethical commission (decree dated 20.05.2019 and numbered 35853172-300), the data collection process was started. Instructors lecturing at different departments were asked for permission to come into their class, and the students were asked to fill in the scales. The participants, first of all, read the voluntary participation form and gave their consent. Then they filled in personal information form, adjective-based personality test, Voltan Acar assertiveness scale, and relational-collective-individual self-construal scale, respectively. It took about 15 minutes for the participants to give a response to the items in the scales.

Data Analysis

The normality distribution of the data set was examined to carry out statistical analyses regarding the sub-problems of the study. In this direction, normality distribution of the variables, which are assertiveness, five-factor personality traits, self-construal, were tested via histogram graph as well as calculating values of skewness and kurtosis. Then it was identified whether the distribution was normal or not. The statistical analyses revealed that histogram graphs had a normal distribution, whereas mean, median, and peak values were close to each other. Moreover, values of kurtosis and skewness related to the variables varied between -1.96 and +1.96. When the confidence level is set according to 0.05 in SPSS, the interval between -1.96 and +1.96 was found to be normal (Field, 2009). According to the test results regarding the homogeneity of variances, the p confidence level between dependent and independent variables was calculated to be higher than 0.05. The condition of equality of variance was met as the assumption that there is no statistically significant difference in terms of the homogeneity of variances accepted in the current study (Taşpınar, 2017).

Considering the results mentioned above, it was concluded that the variances had a normal distribution, and it was suitable to carry out statistical analysis with parametric tests. Cohen's *d* effect size was examined to see the impact of independent variables on the dependent variable. According to the results, independent variables have a low and medium level effect on assertiveness, which is the dependent variable of the current study. The first sub-problem of the current study was examined via multiple regression analysis, a method of analysis in which the dependent variable is predicted based on at least two predictors (independent) variables. Multiple connectedness is one of the problems faced in multiple regression analysis (Büyüköztürk, 2019).

Multiple connectedness refers to a high level of relationship between independent variables. Bilateral correlations between independent variables can be examined to discover the problem of multiple connectedness in the data set. A relation higher than .80 means that the problem of multiple connectedness might be present in the data set (Field, 2009). It is possible to mention about the presence of multiple connectedness when the analyses result in a tolerance value, which is the ratio of the variance of an independent variable that cannot be explained by other independent variables, lower than $(1-R^2)$.20, and variance inflation factor of $VIF = 1/(1-R^2)$ higher than 10 (Gürbüz & Şahin, 2017). The tolerance value and variance inflation factor (VIF) of the current data set were examined, and it was found out that there was not a problem of multiple connectedness. Before carrying out multiple regression analysis, a correlation analysis was conducted between dependent and independent variables to see whether there is a problem of multiple connectedness in the data set. The results of the analysis are given in Table 4.

RESULTS

The first sub-problem of the current study seeks to determine whether five-factor personality traits and self-construal qualities predict university students' level of assertiveness at a statistically significant level. The results of the multiple regression analysis as to the first sub-problem of the study are given in Table 1.

Table 1. Results of multiple linear regression analysis regarding the predictors of the level of assertiveness

Variables	B	Standard Error	β	t	p	Paired r	Partial r
(Constant)	62.731	6.829		9.186	0.00**		
Neuroticism	-4.266	0.640	-0.224	-6.667	0.00**	-0.23	-0.29
Extraversion	9.356	0.707	0.540	13.240	0.00**	0.62	0.42
Openness to experience	1.868	0.941	0.085	1.985	0.05*	0.45	0.09
Agreeableness	-1.669	0.820	-0.079	-2.035	0.04*	0.19	-0.09
Conscientiousness	1.286	0.671	0.070	1.917	0.06	0.30	0.09
Individualism	5.410	0.952	0.221	5.681	0.00**	0.34	0.25
Relationalism	-1.261	1.105	-0.051	-1.141	0.25	0.19	-0.05
Collectivism	-2.228	0.877	-0.106	-2.540	0.01*	0.08	-0.11
R = 0.70	R ² =0.49	Adjusted	R ² =0.48				

$F_{(8,498)} = 60.313$, * $p < 0.05$, ** $p \leq 0.001$

As is clear in the results of multiple linear regression analysis given in Table 1, all the independent variables were included in the analysis to identify their predictive power. The variance analysis indicated that the regression equation obtained at the end of the analysis was statistically significant ($F(8, 498) = 60.313$; $p \leq 0.001$). In line with this, it is possible to state that at least one of the regression coefficients belonging to the variables included in the multiple linear regression analysis was statistically significant. The multiple regression analysis showed that neuroticism, agreeableness, openness to experience, extraversion, and conscientiousness, as well as individual, relational and collective self-construal, accounted for almost 49% of the variance in participants' scores of assertiveness. Standardized regression coefficients (β) and values of significance (p) were examined.

The study results indicated that the dimensions of neuroticism ($\beta = -0.224$, $p < 0.05$), agreeableness ($\beta = -0.079$, $p < 0.05$) and collectivism ($\beta = -0.106$, $p < 0.05$) predicted university students' level of assertiveness at a statistically significant level in the negative direction; whereas the dimensions of extraversion ($\beta = 0.540$, $p < 0.05$), openness to experience ($\beta = 0.085$, $p < 0.05$) and individualism ($\beta = 0.221$, $p < 0.05$) positively predicted university students' level of assertiveness at a statistically significant level. It was also clear at the end of the analysis that conscientiousness, a sub-factor of five-factor personality traits ($\beta = 0.070$, $p > 0.05$) as well as relationalism, a sub-factor of self-construal ($\beta = -0.051$, $p > 0.05$) did not predict university students' level of assertiveness at a statistically significant level. The study also included analyzing the predictor variables' order of significance in terms of the level of assertiveness in the light of regression coefficients and partial correlation coefficients (partial r) of independent variables. According to this, the order of significance was extraversion ($\beta = 0.540$, partial $r = 0.42$), neuroticism ($\beta = -0.224$, partial $r = -0.29$), individualism ($\beta = 0.221$, partial $r = 0.25$), collectivism ($\beta = -0.106$, partial $r = -0.11$), agreeableness ($\beta = -0.079$, partial $r = -0.09$) and openness to experience ($\beta = 0.085$, partial $r = 0.09$). The second sub-problem of the study, 'Do university students' scores of assertiveness differ according to gender at a statistically significant level?' was tested via an independent samples t-test. The results are given in Table 2.

Table 2. T-test results regarding university students' scores of assertiveness according to the variable of gender

Gender	n	\bar{x}	SS	df	t	η^2	p
Male	194	115.38	17.42	505	1.27	0.01	0.20
Female	313	113.21	19.36				

As shown in Table 2, there was no statistically significant difference between male and female participants' mean scores received on the assertiveness scale ($p > 0.05$). Male participants' mean score was 115.38, and the standard deviation was 17.42, whereas female participants' mean score was 113.21 and the standard deviation was 19.36. Furthermore, the eta square value (η^2) was calculated to see how influential the independent variable was on the dependent variable. According to this result, the independent variable had a low level of effect size on the dependent variable ($\eta^2 = 0.01$). Although the current result showed that male participants' mean score as to assertiveness was 2.17 more than female participants' mean score, this difference was not

statistically significant. Therefore, it is possible to state that participants' level of assertiveness did not differ at a statistically significant level according to the variable of gender ($t=1.272$, $p>0.05$).

The third sub-problem of the current study, 'Do university students' scores of assertiveness differ according to class level at a statistically significant level?' was tested via a one-way analysis of variance. Moreover, a homogeneity test of variances, one of the criteria to carry out a one-way analysis of variance, was conducted. According to the results of the Levene test, the hypothesis saying "there is not a statistically significant difference between variances" was approved ($p>0.05$). This result showed that a one-way analysis of variance could be conducted. Before presenting the results of one-way analysis of variance, the results of the descriptive analysis regarding undergraduate students' scores of assertiveness according to a class level were given. The results of the descriptive analysis are presented in Table 3.

Table 3. The results of the descriptive analysis regarding university students' scores of assertiveness according to their class level

Dependent Variable	Class Level	<i>n</i>	\bar{X}	<i>SS</i>
Assertiveness	Prep-class and 1 st Grade	168	114.26	18.81
	2 nd Grade	108	115.05	17.65
	3 rd Grade	120	113.58	18.09
	4 th Grade	111	113.23	20.13

As presented in Table 3, university students' scores of assertiveness according to their class level were close to each other. The mean score of prep class and first-grade students was 114.26 ($SS=18.81$), the mean score of second-grade students was 115.05 ($SS=17.65$); the mean score of third-grade students was 113.58 ($SS=18.09$), and the mean score of fourth-grade students was 113.23, ($SS=20.13$). One-way analysis of variance was conducted to see whether university students' level of assertiveness differed according to their class level at a statistically significant level. The results of the analysis are given in Table 4.

Table 4. The results of one-way analysis of variance regarding university students' scores of assertiveness according to the variable of class level

Source of variance	Sum of squares	<i>sd</i>	Mean Square	<i>F</i>	η^2	<i>p</i>
Inter-groups	214.724	3	71.575	0.205	0.01	0.89
Intra-groups	175952.321	503	349.806			
Total	176167.045	506				

It is clear in Table 4 that there was no statistically significant difference between university students' scores of assertiveness according to their class level ($F=0.205$, $p>0.05$). Moreover, the value of effect size was calculated to identify the effect of an independent variable on the dependent variable. The analysis showed that the effect size value was at a low level ($\eta^2=0.01$).

DISCUSSION

The study results indicated that extraversion and openness to experience predict university students' level of assertiveness in the positive direction at a statistically significant level. On the other hand, personality traits of neuroticism and agreeableness predicted university students' level of assertiveness in the negative direction at a statistically significant level. The variable that had the highest level of predictive power regarding assertiveness was extraversion. Extraversion was followed by neuroticism, agreeableness, and openness to experience in line with their predictive power, respectively. Sims (2017) carried out a study in which the effect of five-factor personality traits on assertive communication was examined and concluded that five-factor personality traits had a predictive power on skills of assertive communication. Supporting the finding of the current study, Sims found out that being extravert was a personality trait that had the most effect on assertiveness. The results of the two studies are similar in this respect. Furthermore, the findings of the current study were supported by other findings, which addressed the relation between assertiveness and personality in the context of comparative cultural differences. The related study also concluded that the most closely associated personality trait associated with assertiveness was extraversion (Tripathi et al., 2010). Costa & McCrae (1992) also carried out a study in which they focused on the four components of five-factor personality traits, and they addressed assertiveness as an aspect of extraversion in the revised inventory of five-factor personality traits. Considering this, it seems an expected result that the personality which predicts assertiveness at the highest level is extraversion. According to another study's findings, the variable that came second to predict assertiveness at a high level was neuroticism, which is a trait that is characterized by people who are anxious, do not trust people around them, angry and vulnerable (Doğan, 2013). A study

aimed at investigating the relationship between five-factor personality traits and communication skills revealed was a statistically significant relationship between communication skills and neuroticism in the negative direction. In other words, the higher people's level of neuroticism is, the less they can use communication skills effectively (Yiğit & Deniz, 2012). In this light, the literature supports the current study finding that neuroticism predicts assertiveness significantly at a statistically significant level. On the other hand, the personality trait of agreeableness refers to being friendly, harmonious, charming, and considerate (Chamorro-Premuzic, 2011). Agreeableness, which is also associated with altruist behaviour (McCrae & Costa Jr., 1989), differs from assertiveness, associated with expressing one's own needs, wishes, and demands (Potter, 2007). Individuals who possess the personality trait of agreeableness, considering others before themselves, are expected to have difficulty in expressing their discomforts or wishes easily or express themselves easily. Multiple regression analysis showed that another variable that had predictive power on assertive behaviour was the personality trait of openness to experience. Openness to experience, which predicts assertive behaviour at a statistically significant level positively, is closely associated with behavioral flexibility, untraditional attitude, and innovation (Chamorro-Premuzic, 2011). Likewise, assertiveness includes a behavioral pattern specific to a person and condition (Alberti & Emmons, 1998). In other words, it should be noted that assertiveness may not be perceived in the same way in all cultures and may appear differently in different cultures. In this light, an assertive person can be expected to have behavioral flexibility and adopt an innovative attitude. In this respect, it is possible to indicate that the personality trait of openness to experience has a tendency to assertive behaviours. Lastly, the current study indicated that the personality trait of conscientiousness did not predict assertiveness at a statistically significant level. Sims (2017) defined conscientious individuals as success-oriented and underlined that they could reach their goals via adopting an assertive communication style. Whereas a similar result was expected in this study, the current findings showed no statistically significant relationship between the two.

At the end of the analysis, which was conducted in the current study to see whether the sub-factors of self-construal predict university students' level of assertiveness, it came out that individual self-construal predicted university students' level of assertiveness at a statistically significant level in the positive direction. Those who have an individualistic self-construal were stated to be self-sufficient, autonomous, and self-centered (Markus & Kitayama, 1991). On the other hand, collective self-construal was associated with traditionalism (Kağıtçıbaşı, 2010), and people who had this type of self-construal thought that they would not be welcomed if they assertively expressed their ideas (Markus & Kitayama, 1991). From this point of view, it seems possible to indicate that people who have collective self-construal cannot express themselves easily. On the other hand, the current study has concluded that relational self-construal did not predict assertiveness at a statistically significant level. Relational self-construal included the need to being independent and being attached to somebody at the same time (Kağıtçıbaşı, 1996) and meant that people attach importance to both their own success and others' success around them (Başay, 2015). In this context, relational self-construal was expected to predict assertive behaviour because relational self-construal designates that people not only take their own needs and wishes into consideration but also try to preserve their social relations. However, the findings of the current study do not refer to such a relation. It would be better to address this study problem in further studies.

The current study revealed that university students' level of assertiveness did not differ according to gender at a statistically significant level. This finding supports previous research results (Çelik, 2016; Pourjali & Zarnaghash, 2010; Şenol, Akyol, & Can-Yaşar, 2018; Voltan-Acar et al., 2008; Zengin, 2017). However, there are also studies in the literature whose findings do not comply with the current study results and accordingly showed that gender created a statistically significant difference (Arı, 1989; Güneş, 2018; Kimble, Marsh & Kiska, 1984; Metin, 2014). This brings to mind that there might be some other mediating factors in the relationship between gender and assertive behaviour. These factors can include the social environment or maybe the society. In today's world, societies are changing very quickly, and this brings along the development. The change in society can also change individuals' expectations about themselves and society. Keeping up with these changes may require people to separate from their parents and make their own case as a separate person from their parents (Aslan & Güven, 2015). Education can contribute to people's development in this respect and help women acquire modern roles rather than traditional ones (Attanapola, 2004). A study carried out by Esen, Siyez, Soylu, and Demirgürz (2017) revealed that women's roles in daily life based on gender have started to change, masculine roles were also preferred by women now, and this was realized with an equalistic approach. Furthermore, old generations are replaced by the new ones, leading to changes in people's attitudes, behaviors, lifestyles, and life views (Adıgüzel, Batur, & Ekşili, 2014). From this point of view, female participants might have obtained assertiveness scores close to male participants as women are leaving gender stereotypes behind and starting to take masculine roles that are mostly associated with self-confidence, expressing oneself, and being assertive. Besides this, the way how a social environment perceives assertive behaviour, the conditions in which one has grown up, whether one is aware of his/her own weaknesses and strengths are also influential. Consequently, assertive behaviour is not specific to gender; individual differences and improving oneself can be more effective on assertive behaviour.

University students' level of assertiveness did not differ according to their class level at a statistically significant level. Literature review showed more studies focusing on the relation between age and level of assertiveness than the ones addressing the relation between class level and assertiveness. Within this framework, the literature review showed that there are studies having similar findings. In a study which aimed at investigating whether university students' level of assertiveness and adaptation were affected by their dominant self and some other variables, it was found out that there was no statistically significant difference between the levels of assertiveness of 4th and 1st -grade students (Arı, 1989). In another study, the scores of assertiveness of university students of nursing did not differ from each other at a statistically significant level (Metin, 2014). Furthermore, in a study that

addressed assertiveness and gender role attitudes, there was no statistically significant difference between university students according to age (Yaycı & Düşmez, 2016). On the other hand, a study that examined university students' gender, age, and cultural differences in terms of self-reported assertiveness scores expected an increase in people's level of assertiveness as their age increased (Kimble et al., 1984). As people get older, they are expected to have a higher level of assertiveness in line with the increase in their knowledge and experience (Şenol et al., 2018). The reason why the current study finding indicated no statistically significant difference according to age might be about the fact that the participants of the current study were around the same age. On the other hand, individuals' parents' attitudes and personality traits could be more effective on their level of assertiveness when compared to short-term effects of age.

CONCLUSIONS AND SUGGESTIONS

The current study has revealed that university students' level of assertiveness is closely associated with their personality traits and self-construal. Based on the findings of this study, it seems possible to state that people who have the personality traits of neuroticism and agreeableness, as well as those who possess a collective self-construal, need to improve their assertiveness more than others. Psychological counselors can refer to the results of the current study to establish psycho-education groups for individuals who have neurotic and agreeable personality traits but a low level of assertiveness as well as those having collective self-construal. Experts working at psychological counseling centers of universities can prepare leaflets or other kinds of materials that focus on the importance of the skill of assertiveness. Thus, they can help to raise awareness about the skill of assertiveness.

When it comes to preventive programs, the findings of the current study point out the need for families to have a more extravert but less repressive and autocratic attitude while bringing up their children. Experts can warn families in this direction during parenting education. Parents' attitudes can be affected by the cultural structure of individualism-collectivism, and these cultural attitudes are transferred from one generation to the next. Individualism and collectivism can have different advantages and disadvantages. However, it is of vital importance for individuals to be able to express themselves in interpersonal relations, to express their needs, feelings, and wishes; it is crucial for people to defend themselves. These are very closely associated with assertiveness. Therefore, psychological counselors and experts can focus on the relationship between being an assertive person and mental health and emphasize that adopting mostly a collectivist attitude can affect people's assertiveness negatively.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Statements of publication ethics

We hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

Author contributions

First author conceived of the presented idea and collect the data. Second author verified the analytical methods. All authors discussed the results and contributed to the final manuscript.

Researchers' contribution rate

The study was conducted and reported with equal collaboration of the researchers.

Ethics Committee Approval Information

Ethics committee approval was received for this study from the Ethics Committee of Hacettepe University (Date: May 20, 2019; Approval Number: 35853172-300).

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