

Research Article / Araştırma Makalesi

## THE RELATIONSHIP BETWEEN FIVE-FACTOR PERSONALITY TRAITS AND SOCIAL ENTREPRENEURSHIP TENDENCY: THE CASE OF UNIVERSITY STUDENTS

Asst. Prof. Elif Hasret KUMCU 

Aksaray University, Vocational School of Social Sciences, Aksaray, Türkiye, (elifhasretkumcu@aksaray.edu.tr)

Asst. Prof. Makbule Hürmet ÇETİNEL 

Uşak University, Faculty of Applied Sciences, Uşak, Türkiye, (hurmet.cetinel@usak.edu.tr)

### ABSTRACT

While some entrepreneurs make an initiative driven by a strong desire to make money, others motivated by the social benefit which they provide. Social entrepreneurs' personality traits are different from other entrepreneurs. Social entrepreneurs possess all the abilities of a successful entrepreneur, as well as a strong desire for change. They work to maximize social benefit in collective activities. They have a strong sense of social justice. Social entrepreneurs are confident, energetic, and they are capable of persuading others to participate in their ventures easily. The ability to develop a strong network can be considered as one of the important characteristics of visionary social entrepreneurs. Also, social entrepreneurs create superior value for their target audience. In this study, the relationship between the five-factor personality traits of Turkish college students and their social entrepreneurship tendencies were investigated. A comprehensive questionnaire was used to measure the five-factor personality traits and the social entrepreneurship tendencies of 229 college students in Uşak and Aksaray Universities. According to the findings; there is a significant relationship between the sub-dimensions of extraversion, compatibility, responsibility, openness to experiences, and the tendency of social entrepreneurship.

**Keywords:** Social Entrepreneurship, Five-Factor Personality Traits, Entrepreneurship.

## BEŞ FAKTÖR KİŞİLİK ÖZELLİKLERİ İLE SOSYAL GİRİŞİMCİLİK EĞİLİMİ ARASINDAKİ İLİŞKİ: ÜNİVERSİTE ÖĞRENCİLERİ ÖRNEĞİ

### ÖZET

Bazı girişimciler güçlü bir para kazanma arzusuyla bir girişimde bulunurken, diğerleri sağladıkları sosyal fayda ile motive olurlar. Sosyal girişimcilerin kişilik özellikleri diğer girişimcilerden farklıdır. Sosyal girişimciler, başarılı bir girişimcinin tüm yeteneklerine ve güçlü bir değişim arzusuna sahiptirler. Kolektif faaliyetlerde sosyal faydayı en üst düzeye çıkarmak için çalışırlar. Güçlü bir sosyal adalet anlayışına sahiptirler. Sosyal girişimciler kendinden emin, enerjiktirler ve başkalarını girişimlerine katılmaya kolayca ikna edebilirler. Güçlü bir ağ geliştirme yeteneği, vizyon sahibi sosyal girişimcilerin önemli özelliklerinden biri olarak kabul edilebilir. Ayrıca sosyal girişimciler, hedef kitleleri için üstün değer yaratırlar. Bu çalışmada, Türk üniversite öğrencilerinin beş faktör kişilik özellikleri ile sosyal girişimcilik eğilimleri arasındaki ilişki incelenmiştir. Uşak ve Aksaray Üniversitelerindeki 229 üniversite öğrencisinin beş faktör kişilik özelliklerini ve sosyal girişimcilik eğilimlerini ölçmek için kapsamlı bir anket kullanılmıştır. Elde edilen bulgulara göre; dışadönüklük, uyumluluk, sorumluluk, deneyime açıklık ve sosyal girişimcilik eğilimi alt boyutları arasında anlamlı bir ilişki bulunmaktadır.

**Anahtar Kelimeler:** Sosyal Girişimcilik, Beş Faktör Kişilik Özellikleri, Girişimcilik.

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## **1. Introduction**

Entrepreneurship play a vital role in the economic and social development of societies. The concept of social entrepreneurship represents an important phenomenon in the field of entrepreneurship. Social entrepreneurship is an entrepreneurial activity that reveals solidarity between society and individuals. The development of social business models is created with integrity between individuals and the society. Establishments such as professional associations, foundations, student unions, non-governmental organizations established by social entrepreneurs emerge as social business models. Such initiatives are established to support sustainable development and improvement in society. Social entrepreneurship refers to initiatives that focus on creating social benefit. Social entrepreneurship offers value to solve social problems by focusing on value creation. Social entrepreneurs aim to use existing resources effectively to solve social problems. They strive to produce solutions by providing teamwork and cooperation. A social entrepreneur is a person who offers innovative solutions to social problems with the aim of helping society and people rather than making a profit.

People with dominant social entrepreneurship skills, display distinctive aspects of the five-factor personality traits. Since the entrepreneurs with extroversion characteristics have stronger social network; they can form sound relationship with suppliers and customers. This would increase the success of long term, well-founded enterprises. The compatibility sub-dimension of five factor personality traits play a vital role in maintaining the social entrepreneurship and the efficient use of human resources. The main qualities of the responsibility dimension are leadership, goal orientation, productivity and determination. The long term survival depend on the the responsibility dimension of five factor personality traits of the entrepreneur. Thus, social entrepreneurs have a high level of responsibility. The openness to experience characteristics of entrepreneurs are expected to participate in long-term social entrepreneurship activities that require effort because the results will take a relatively long time. Being patient is a prominent aspect of social entrepreneurs. Social entrepreneurship basically focuses on solving social problems. Both social entrepreneurs and profit-oriented entrepreneurs face pressures endured by starting a new business. Social entrepreneurs are less neurotic while resisting this pressure (Gül, 2019:32-33).

The aim of this study is to determine the social entrepreneurship tendencies of university students in terms of Five-Factor Personality Traits. It is very important for young people to be interested in social issues, to produce innovations, to generate solutions to problems by using innovative perspective as they will lead our society in the future. The relationship between the sub-dimensions of personality traits; openness, responsibility, extraversion, compliance, and neuroticism were investigated by utilizing Structurel equation model and correlation analyses. The sub-dimensions of social entrepreneurship were also taken into account were social vision, social networking, innovation, sustainability and financial return.

## **2. Five-Factor Personality Traits**

Personality is the combination of characteristics or qualities that form distinctive traits which affect the individuals interaction with others (Robbins & Judge, 2017:135). According to Burger (2006:23) personality forms the consistent behavior patterns of an individuals stemming from herself/himself. Personality includes cognitive behavioral patterns (Cattel,

1965) and it can be defined as the way of life of the individual (Dubrin, 1994:56). Personality is the individual characteristics that define the feelings, thoughts and behaviors of the individual (Weinstein et al., 2008:330).

Personality includes the innate characteristics of the individual and the skills acquired later. In other words, it constitutes the biological dimension and the social dimension of the individual's psycho-social existence. Individual's unique attitudes and behaviors emerge from these innate and acquired characteristics (Akyıldız, 2006:3). Personality conveys important information about the individual. In other words, personality traits can be a guide for studying the social relations, the professional status of an individual as well as predicting the mental health problems (Li, 2020:368). The Big Five Factor personality model expresses the grouping of personality clusters that emerge from the foundations of personality trait theory. The Five Factors are seen as an explanatory personality model rather than a theory (De Fruyt et al., 2004:207). The five-factor personality model is a model developed by Costa & McCrae (1989) that defines personality as dimensions of five characteristics (Tommasel et al., 2015:814). Costa et al. (1991) listed five factor personality traits as; extroversion, agreeableness, openness to experiences, responsibility, neuroticism.

Five factor personality traits are defined as openness to experiences, responsibility, extroversion, adaptability, and neuroticism.

- *Openness to experiences*: It relates to creativity, innovation, ability to change and diversity preference and refers to the degree of intellectual curiosity.
- *Responsibility*: Explains the individual's ability to be self-disciplined, to be reliable and to be organized. It reflects the individual's planned behavior, future orientations, and the degree of willingness to abide by traditional rules, norms and standards.
- *Extroversion*: The individual is sociable, outgoing, active, has a positive mood, talkative, and has a tendency to encourage other individuals. It reflects the individual's optimism and social interaction.
- *Agreeableness*: It is the tendency of the individual to be compassionate and cooperative rather than suspicious and hostile. Compatibility refers to the degree to which an individual needs pleasant and harmonious relationships with others.
- *Neuroticism*: It refers to personal traits of people who are more prone to psychological stress. It explains the state of nervousness. In other words, it is the degree of experiencing behaviors outside of their control (Papoutsoglou et al., 2020:3; McCrae & Costa, 2004:588).

Social entrepreneurs are defined as those who establish and develop entrepreneurial activities that can create innovative and self-sufficient financial returns by structuring social networks in a sustainable way within the framework of a social vision. The concept of social entrepreneurship has become an increasingly important issue in recent years (Koe Hwee Nga & Shamuganathan, 2010:259). Many studies investigated the link between personality and entrepreneurship. However, studies on personality traits and social entrepreneurship are limited. The main purpose of this study is to determine the relationship between personality traits and social entrepreneurship. Due to the limited number of studies in the related field, it is thought that this research will contribute to the literature. Some of the studies dealing with personality traits and social entrepreneurship traits are listed below.

Koe Hwee Nga & Shamuganathan (2010) stated that personality traits affect an individual's actions and intentions. He reported that in the relationship between social entrepreneurship and personality traits, the adaptability dimension positively affects social entrepreneurship, while the openness feature has an effect on social vision, innovation and financial returns.

Ahmed et al. (2020) discussed personality traits and entrepreneurial intent. According to the results, responsibility from the personality traits of five factors has a positive effect on entrepreneurial intention. Extraversion, neuroticism, openness, and compatibility characteristics do not directly affect entrepreneurial intention.

Nga & Shamuganathan (2010) examined personality traits and social entrepreneurship intention in terms of demographic characteristics. According to their results, they found that compliance positively affects all dimensions of social entrepreneurship. Being open to new experiences has a positive impact on social vision, innovation and financial returns.

İrengün & Arikboğa (2015) investigated the effects of personality traits on social entrepreneurship. Their study indicates that there is a significant relationship between personality traits and the tendency to be social entrepreneur.

Wood (2012) investigated whether the personality traits affect the tendency to be innovative social entrepreneur. There are two types of initiatives in business employment: the social innovations and the technological innovations. Social entrepreneurship affects the personality traits. Openness to new experiences support the technological innovations whereas, empathy support the social innovations.

Wang et al. (2015) examined the five factor personality traits in terms of entrepreneurial intention. Entrepreneurial intention consists of two dimensions; faith and preparation. While the personality traits explain extroversion, openness to experiences, responsibility, entrepreneurial intention, belief and preparation, the neuroticism dimension does not have such an effect. Openness to new experiences and neuroticism have a direct impact on entrepreneurial intention.

### **3. Social Entrepreneurship**

The importance of social entrepreneurship and social innovation concepts have been increasing in the last decade. Social entrepreneurship focuses on creating the social values, social entrepreneurial characteristics and behaviors, financial problems or inter-sectoral cooperation in order to create a supported employment area, directing the strategies of enterprises with market orientation and developing social innovations (Choi & Majumdar, 2014:373).

Social entrepreneurship can be considered as a new model to achieve sustainable development. The development-oriented actions of social entrepreneurs define social entrepreneurship and form a research area on this subject (Chandra, 2018:306). According to Chávez et al. (2015:206), the internal and the external social entrepreneurs strive to create value in the society and take steps in this direction. Ahuja et al. (2019:2), suggested that the social entrepreneurship is a sustainable activity development in terms of social welfare by identifying a social situation in the society and developing a solution for this situation.

Social entrepreneurship includes many features of entrepreneurship. Social entrepreneurship constitutes a strong aspect of social change, while entrepreneurship has an important role in promoting economic growth and enhancing competitiveness. Both commercial and social entrepreneurship activities offer employment opportunities. (Medyanik & Al-Jawni, 2017:86). Social entrepreneurs design and implement innovative ideas for social benefit (Gilliss, 2011:256). In this context, social entrepreneurship can be defined as a set of activities and processes carried out by creating opportunities and new opportunities to improve and develop social welfare in the society. The social entrepreneur makes significant contributions to the social field by managing the existing organization with an innovative approach and adopting new business models (Zahra et al., 2009:519). In other words, the social entrepreneur bears the responsibility of dealing with social problems in society (Bikse et al., 2015:470). Social entrepreneurship initiates social change with innovative ideas and enables social needs to be met (Younis, 2020:1). Günzel-Jensen et al. (2020:1) stated that social entrepreneurship contributes to sustainable development goals.

Social entrepreneurs can develop new products and services within a business, as well as establish new ventures. In this context, social entrepreneurs adopt an innovative method of social development by increasing the quality of life of the workforce and participating in the new market economy (Liang, 2020:3). The dimensions of social entrepreneurship; social vision, social networking, innovation / innovation, sustainability and financial return (Nga & Shamuganathan, 2010:263).

- *Social vision*: Refers to the ability to struggle with social and environmental issues with a sense of responsibility, to see and evaluate opportunities and to determine common goals to create high social benefit (Kırılmaz, 2014: 62). According to Denizalp (2007:7) social entrepreneurs create a sustainable vision by identifying social problems and developing solutions accordingly.
- *Social networking*: Social networks enable the entrepreneur to improve network connections and share information. The individual's ability to manage formal or informal relationships in his environment and active participation in social networks support the entrepreneur's collective learning in developing effective and permanent solutions to problems (Caballero et al., 2013:6).
- *Innovation*: innovation is to create a different value with products and technology for sustainable socio-economic developments, to benefit from unexplored markets and to develop innovative ideas by creating strategic harmony (Nga & Shamuganathan, 2010:265).
- *Sustainability*: It aims to establish a balance between economic, social, and environmental interests in order to improve society (Ismail et al., 2014:3). Social entrepreneurs want to create a social value in ensuring and protecting the long-term continuity of all kinds of actions and activities (Nga & Shamuganathan, 2010: 264).
- *Financial Return*: Obtaining a financial return for the social entrepreneur maintains the continuity of the organization. Achieving financial returns is a part of success (Ismail et al., 2014:3).

Some of the studies on social entrepreneurship are as follows;

Rey-Marti (2020) discussed the characteristics, abilities, and behaviors of social entrepreneurs. He emphasized that creating social value for social sustainability is important in increasing social efficiency and effectiveness in businesses. According to his results, he found that the structure and planning of social enterprises are important in addition to the education social entrepreneurs receive.

Eng (2020) discussed the relationship between international social entrepreneurship and personal relationships. According to his results, personal ties play an important role in the harmony between social mission and corporate communication. It aimed to examine international social entrepreneurship, also addressing social responsibility between international charities and cross-border business organizations. International social entrepreneurship; social value creation facilitates the accountability of social goals; He states that personal relationships based on trust can help create commercial opportunities.

Hassan (2020) researched the intention of University students towards social entrepreneurship. He emphasized that the concept of self-efficacy and entrepreneurship training are effective in social entrepreneurship. He found that entrepreneurial networks and perceived university support have no effect on social entrepreneurship.

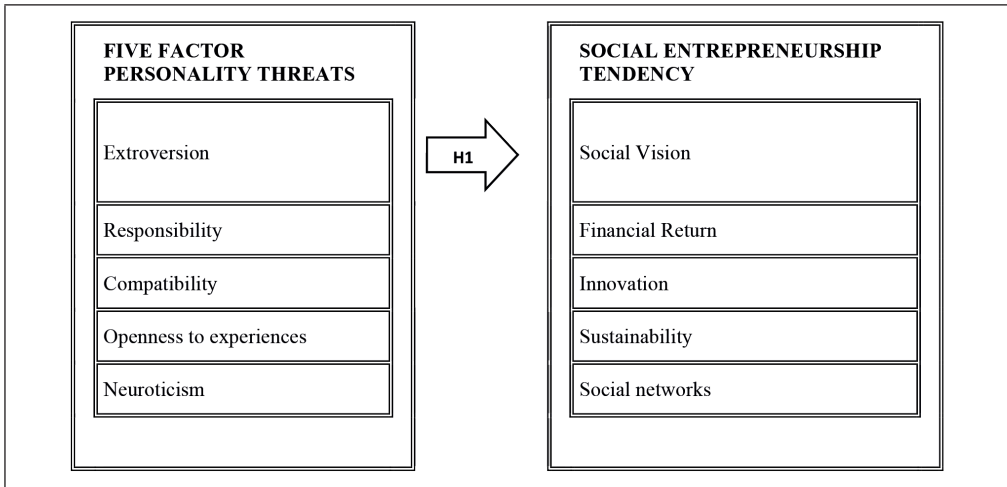
Wu et al. (2020) examined personality and social entrepreneurship. He explored the mediating role of moral detachment and empathic interest and perspective in the relationship between the dark aspects of personality (narcissism, aggression, Machiavellianism) and social entrepreneurship. According to the findings he obtained; education efforts found that the dark side of personality reduced its negative effects on social entrepreneurship. He stated that having high levels of empathic anxiety and taking perspective reduced the influence of the dark trinity of personality on breaking moral values.

Bacqa & Alt (2018) discussed the relationship between empathy and social entrepreneurial intention in terms of prosocial behavior. He stated that the feature that distinguishes social entrepreneurs from traditional entrepreneurs is the ability to empathy. He also emphasized that empathy is an important precursor of social entrepreneurial intention. He found that empathy explains the intention of social entrepreneurship with two characteristics. These; it is self-efficacy and social value.

#### **4. Research Model**

Two scales were used in this study to investigate the variables affecting the social entrepreneurship tendencies of university students. Five factors personality traits were determined as independent variables, and social entrepreneurship tendency as dependent variables. "Five Factor Personality Scale" is the scale adapted from Goldberg's (1992) scale. "Social Entrepreneurship Orientation Scale" is the scale developed by Nga & Shamaganathan (2010). The theoretical model of the research is included in Figure 1.

**Figure 1: Theoretical Model**



## 5. Methodology

The methodology involves collecting quantitative data using a questionnaire to measure the effects of personality traits of university students on social entrepreneurship tendency. Promoting entrepreneurship is one of the central policy goals of governments around the world. At this point, social entrepreneurship is in a very important position for the social results desired by countries as well as its effects on economic growth. Therefore, this research is to ask the following questions: what are the personality traits of the students in Turkey who have social entrepreneurship trends, is there a relationship between personality traits and social entrepreneurship tendency.

### 5.1. Research Methodology

With reference to the literature review, there are six main research hypotheses on the relationship between five factor personality traits, sub-dimensions of five factor personality traits, social entrepreneurship tendency and sub-dimensions of social entrepreneurship tendency. These six main hypotheses and sub-hypotheses are given in the conclusion section.

### 5.2. Population and Sample

In light of the research, the population of the study consisted of two state universities in Turkey; Usak University and Aksaray University. Students from Uşak University Faculty of Applied Sciences and Aksaray University Social Sciences Vocational School were selected by convenience sampling method. Using the convenience sampling method, the sample of the study consists of 229 students studying at various faculties and vocational schools who have taken business administration classes in their education. In this study, emails sent to the students asking them to participate in the study by filling the on-line questionnaire.



Işık & Aydın (2017) measured social entrepreneurship tendency with 247 students from three universities. Atatürk University. Recep Tayyip Erdoğan University and Artvin Çoruh University. Sirin et al. (2018) conducted a study with 230 students from Kahramanmaraş Sütçü İmam University School of Physical Education and Sports to determine their social entrepreneurship levels. In this study the sample group is comprised of 229 students similar to that of above mentioned studies.

### 5.3. Data Collection

An online questionnaire prepared with google forms was sent both via e-mail and via WhatsApp groups of the classes to the students who have business courses at both universities. The most attendance was by students from the logistics department. office management department. and accounting department. The survey has been arranged that does not allow leaving blank questions. therefore all surveys have been received fully completed. Collection of the questionnaires took place within three months.

### 5.4. Data Analysis

The mean of the theoretical sample distribution formed by the means of n-size samples taken from a universe with arithmetic mean  $\mu$  and standard deviation  $\sigma$  is equal to  $\mu$  and the standard error to  $\sigma / n$ . As n grows ( $n \rightarrow \infty$ ) the theoretical sampling distribution approaches the normal distribution. (Dişçi, 2008. cited Büyükuysal 2014:3) Based on the central limit theorem. our sample size is (Accepted) as normal distribution. since it is over 200.

As the article of Cronbach;  $\alpha$  is the mean of all possible split-half coefficients and  $\alpha$  is the value expected when two random samples of items from a pool are correlated (Cronbach, 1951:331). Cronbach's alpha test measures validity and reliability. the value of alpha ( $\alpha$ ) is expected to be min 0.7 (Cronbach, 1951:311). Here is the results of Cronbach's Alpha Reliability test in Table 1.

**Table 1: Reliability Statistics**

Reliability Statistics	
Cronbach's Alpha	Number of Items
0.927	77

Cronbach's Alpha reliability value is 0.93. Therefore. no statement was removed from the questionnaire.

#### 5.4.1. Descriptive Statistics

The majority of participants was undergraduate students (60.6); 39.4% of the are forth grade students and 31.6% of them are second grade students. 55.8% of the participants were female students while males 44.2%. The big portion of participants have income below 2500 Turkish liras (51.5%). 39.8% of them studying logistics. 29% office management. 24.2% accounting. 58.9% of the participants were age of between 21-23. 63.2% of them from Usak University and 36.8% of them from Aksaray University.



**Table 2: Descriptive Statistics**

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
University	Usak University	145	63.3	63.3	63.3
	Aksaray University	84	36.7	36.7	100
Branch	Logistics	92	40.2	40.2	40.2
	Office Management	66	28.8	28.8	69
	Accounting	55	24	24	93
	Others	16	7	7	100
Degree	Associate Degree	86	37.6	37.6	37.6
	Undergraduate	139	60.7	60.7	98.3
	Others	4	1.7	1.7	100
Grade	First Grade	52	22.7	22.7	22.7
	Second Grade	72	31.4	31.4	54.1
	Third Grade	15	6.6	6.6	60.7
	Forth Grade	90	39.3	39.3	100
Gender	Female	127	55.5	55.5	55.5
	Male	102	44.5	44.5	100
Age	18-20	50	21.8	21.8	21.8
	21-23	134	58.5	58.5	80.3
	24 and over	45	19.7	19.7	100
Income	2500 TL and below	119	52	52	52
	2501-4500	76	33.2	33.2	85.2
	4501-6500	20	8.7	8.7	93.9
	6501 and over	14	6.1	6.1	100
Total		229	100	100	

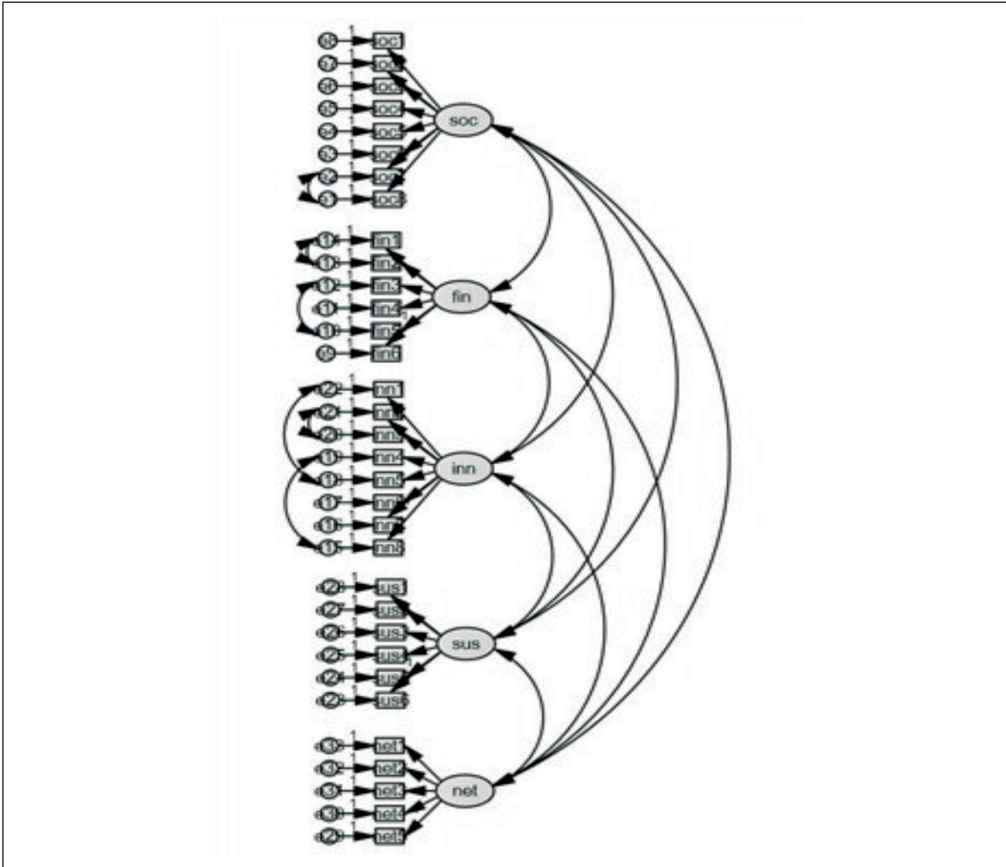
(TL = Turkish Liras)

#### 5.4.2. Confirmatory Factor Analysis for Social Entrepreneurship Scale

Confirmatory Factor Analysis (CFA) is an analysis method that is frequently used in the development of measurement models and provides important facilities. This method is a process for creating a latent variable (factor) based on observed variables through a previously created model. It is generally used in scale development and validity analysis or aims to verify a predetermined structure (Yaslioglu., 2017:78). The fit indices test to what extent the designed model fits with reality, thus revealing the constructional validity of the model (Bagozzi et al., 1991:421-458). Fit indices values: a cutoff value close to .90 for CFI and a cutoff value close to 0.08 for SRMR; and a cutoff value close to 0.06 for RMSEA is appropriate. When  $n < 250$  fit

indices values: SRMR>0.09 (or 0.10) and SRMR<0.06 (0.07, 0.08, 0.09, 0.10, or 0.11) resulted in acceptable proportions of simple and complex misspecified models under both robustness and nonrobustness conditions. (Li-tze Hu & Peter M. Bentler, 1999:27). (CMIN)  $X^2/df$  value <3 is appropriate and  $3 < X^2/df < 5$  is acceptable and also GFI value 0.90 is acceptable. (Kline, 2016:266-273). MI values of regression weights indicate which unobservable variables (factor) an observable variable (expression) is associated with (Arbuckle, 2008).

**Figure 2: Confirmatory Factor Analysis for Social Entrepreneurship Scale**



The first-level multifactorial structure of the social entrepreneurship scale, which consists of five sub-dimensions and a total of 33 items, was tested by confirmatory factor analysis (CFA) using the AMOS 24 Program. Due to the normal distribution of the data, the maximum likelihood calculation method was used. As a result of the CFA, fit indices (Accepted) in the literature were reached. CFA results are presented in Figure 1. The fit indices obtained as a result of CFA are given in Table 4. Accordingly, it shows that the five-factor model is compatible and acceptable with the data. These results showed that the institutional structure of the social entrepreneurship scale (five-factor model) was confirmed. As Regression Weights; all  $p$  values are significant.

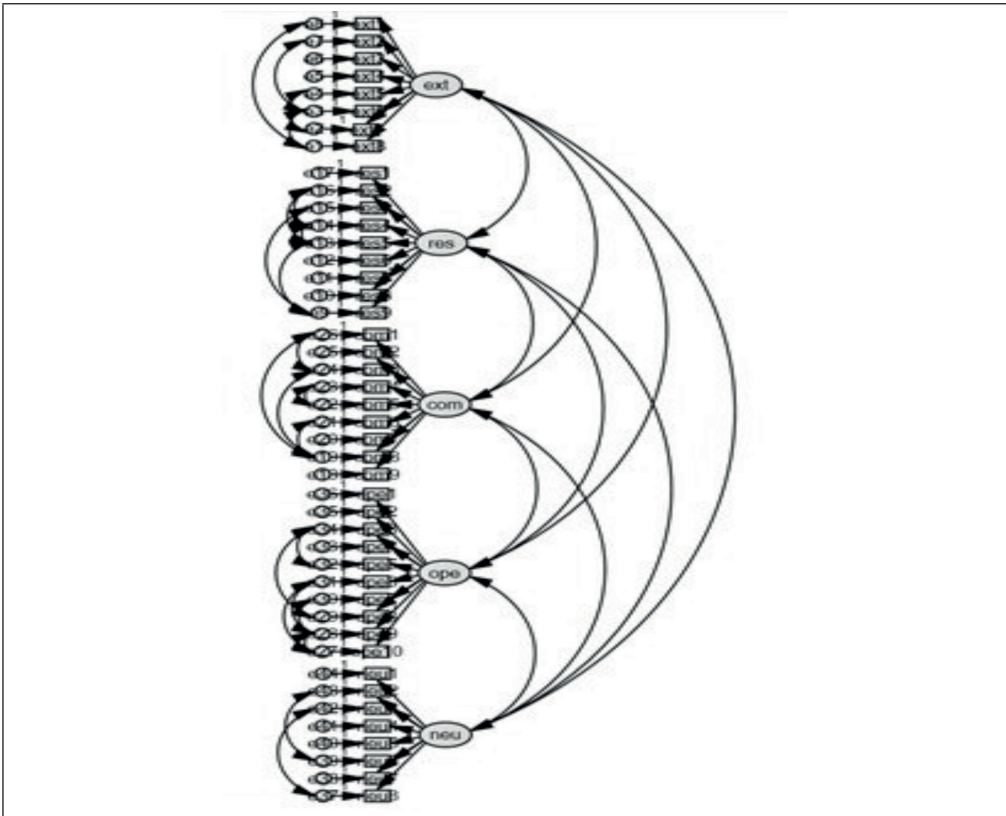
**Table 3: Absolute Fit Indices**

Absolute Fit Indices			Acceptable
CMIN/DF	2.11	<3	$3 < (X^2/df) < 5$
SRMR	0.065	<0.05	<0.08
<b>Indices</b>			
GFI	0.783	>0.95	>0.90
CFI	0.877	>0.95	>0.90
RMSEA	0.07	<0.05	<0.08

**5.4.3. Confirmatory Factor Analysis for Five Factor Personality Traits Scale**

The first-level multifactorial structure of the five factor personality scale, which consists of five sub-dimensions and a total of 44 items, was tested by confirmatory factor analysis (CFA) using the AMOS 24 Program. Due to the normal distribution of the data, the maximum likelihood calculation method was used. As a result of the CFA, fit indices (Accepted) in the literature could not be reached. CFA results are presented in Figure 2. The fit indices obtained as a result of CFA are given in Table 4.

**Figure 3: Confirmatory Factor Analysis for Five Factor Personality Traits Scale**



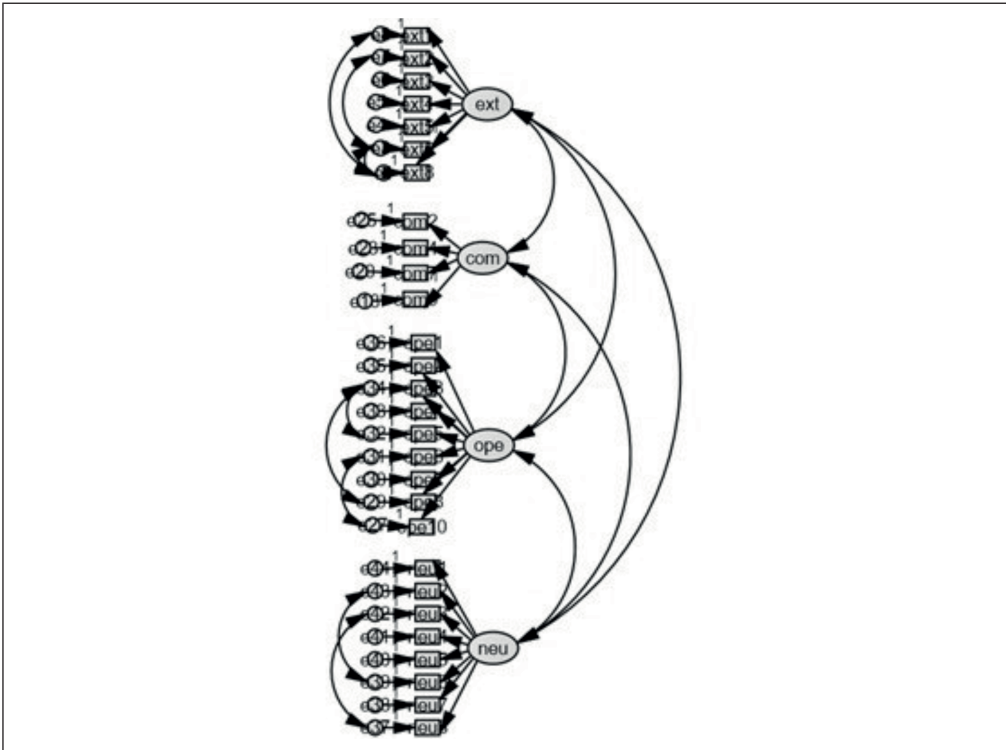
As regression weights observed; there are 16 *p* values that are not significant. Responsibility sub-dimension is observed totally non-significant with its 9 sentences. Other 7 sentences are from sub-dimension compatibility number 8. number 6. number 5. number 3. number 1; from sub-dimension openness to experiences number 9 and from sub-dimension extraversion number 7.

**Table 4: Absolute Fit Indices**

Absolute Fit Indices			Acceptable
CMIN/DF	2.427	<3	$3 < (X^2/df) < 5$
SRMR	0.108	<0.05	<0.08
<b>Indices</b>			
GFI	0.686	>0.95	>0.90
CFI	0.625	>0.95	>0.90
RMSEA	0.079	<0.05	<0.08

Since we are working with a scale whose validity and reliability has been tested and verified. we cannot exclude any sentence even if the *p* values are not significant. This result is completely related to the data set we are working on. (However. to see how the analysis results will change. the non-significant sentences were excluded from the model and repeated the confirmatory factor analysis).

**Figure 4: Confirmatory Factor Analysis**



As a result of the CFA, fit indices accepted in the literature could be reached. CFA results are presented in Figure 3. The fit indices obtained as a result of CFA are given in Table 5. As we mentioned above none of the sentences are excluded from the model while testing the hypotheses.

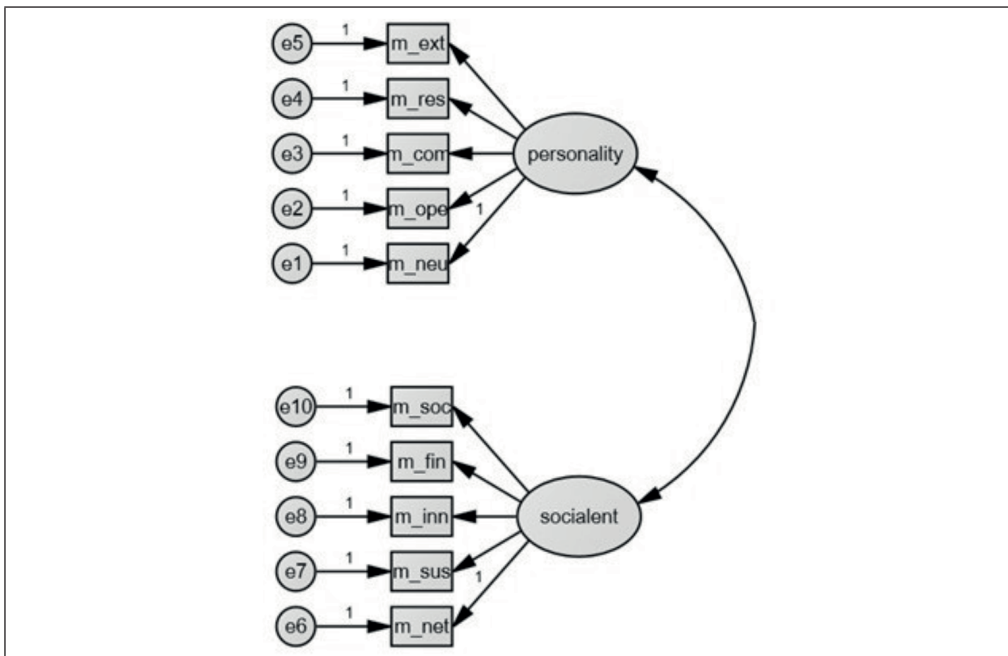
**Table 5: Absolute Fit Indices**

Absolute Fit Indices			Acceptable
<b>CMIN/DF</b>	<b>2.339</b>	<3	$3 < (X^2/df) < 5$
<b>SRMR</b>	<b>0.083</b>	<0.05	<0.08
<b>Indices</b>			
<b>GFI</b>	<b>0.91</b>	>0.95	>0.90
<b>CFI</b>	0.765	>0.95	>0.90
<b>RMSEA</b>	<b>0.077</b>	<0.05	<0.08

**5.4.4. Correlation Analysis**

The correlation coefficient gives information about both the direction and the degree of the relationship between variables. The correlation coefficient takes values between 0 and - / + 1 (Köseoğlu and Yamak, 2008: 245). The correlation between the theoretical model of the research is included in Figure 4 and the fit indices are given at Table 6. It is seen that fit indices are acceptable. As Regression Weights; all *p* values are significant.

**Figure 5: The Correlation Between The Theoretical Model**



Personality = Five factor personality treats Socialent= Social entrepreneurship tendency

**Table 6: Absolute Fit Indices**

<b>Absolute Fit Indices</b>			<b>Acceptable</b>
<b>CMIN/DF</b>	<b>3.222</b>	<3	$3 < (X^2/df) < 5$
<b>SRMR</b>	<b>0.061</b>	<0.05	<0.08
<b>Indices</b>			
<b>GFI</b>	<b>0.907</b>	>0.95	>0.90
<b>CFI</b>	<b>0.937</b>	>0.95	>0.90
<b>RMSEA</b>	0.099	<0.05	<0.08

In social sciences. if the Correlation Coefficient is between 0.70-1.00 as the absolute value. there is a high relationship; There is a moderate relationship between 0.70-0.30; It is (Accepted) that there is a low level relationship between 0.30-0.00 (Büyüköztürk, 2018:32; Saruhan & Özdemirci. 2016: 248).

Within the scope of the study. correlation analysis was conducted to see the relationships between five factor personality traits and social entrepreneurship tendency variables and sub-dimensions of these variables. Correlation analysis results are included in the Table 7.

When the analysis results in Table 7 are evaluated in terms of five factor personality traits. it has been determined that there is a moderately positive significant relationship between the five factor personality traits and social entrepreneurship tendency ( $r=0.645$ ;  $p<0.01$ ). There is a moderate positive significant relationship between social entrepreneurship tendency and the following sub-dimensions of the five factor personality traits; extroversion ( $r=0.576$ ;  $p<0.01$ ). compatibility ( $r=0.493$ ;  $p<0.01$ ). responsibility ( $r=0.452$ ;  $p<0.01$ ). openness to experiences ( $r=0.651$ ;  $p<0.01$ ). There is a low level positive significant relationship between social entrepreneurship tendency and neuroticism ( $r =0.293$ ;  $p<0.01$ ).

There is a moderate positive significant relationship between five factor personality traits and the following sub-dimensions of social entrepreneurship tendency; social vision ( $r=0.491$ ;  $p<0.01$ ). financial return ( $r=0.441$ ;  $p<0.01$ ). innovation ( $r=0.495$ ;  $p<0.01$ ). sustainability ( $r=0.430$ ;  $p<0.01$ ). social networks ( $r=0.438$ ;  $p<0.01$ ).

There is a moderate positive correlation between extraversion and the following sub-dimensions of social entrepreneurship tendency; social vision ( $r=0.467$ ;  $p<0.01$ ). financial return ( $r=0.347$ ;  $p<0.01$ ). innovation ( $r=0.445$ ;  $p<0.01$ ). sustainability ( $r=0.418$ ;  $p<0.01$ ). social networks ( $r=0.429$ ;  $p<0.01$ ).

There is a low level positive correlation between compatibility which is sub-dimension of personality threats and following sub-dimensions of social entrepreneurship tendency; social vision ( $r=0.298$ ;  $p<0.01$ ). sustainability ( $r=0.288$ ;  $p<0.01$ ). And there is a moderate positive significant relationship between compatibility and following sub-dimensions of social entrepreneurship tendency; financial return ( $r=0.395$ ;  $p<0.01$ ). innovation ( $r=0.407$ ;  $p<0.01$ ). social networks ( $r=0.348$ ;  $p<0.01$ ).

**Table 7: Correlation Analysis**

Correlations												
E.	R.	C.	O.	N.	S.V.	F.	I.	S.	S.N.	P.	S.E.	
E.	1											
R.	.482**	1										
	.000											
C.	.495**	.601**	1									
	.000	.000										
O.	.641**	.500**	.463**	1								
	.000	.000	.000									
N.	.419**	.390**	.481**	.360**	1							
	.000	.000	.000	.000								
S.V.	.467**	.328**	.298**	.582**	.197**	1						
	.000	.000	.000	.000	.003							
F.	.347**	.270**	.395**	.382**	.283**	.486**	1					
	.000	.000	.000	.000	.000	.000						
I.	.445**	.319**	.407**	.553**	.166*	.694**	.549**	1				
	.000	.000	.000	.000	.012	.000	.000					
S.	.418**	.335**	.288**	.527**	.084	.726**	.430**	.726**	1			
	.000	.000	.000	.000	.205	.000	.000	.000				
S.N.	.429**	.339**	.348**	.400**	.165*	.499**	.374**	.511**	.680**	1		
	.000	.000	.000	.000	.013	.000	.000	.000	.000			
P.	.797**	.756**	.791**	.780**	.703**	.491**	.441**	.495**	.430**	.438**	1	
	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		
S.E.	.576**	.452**	.493**	.651**	.293**	.841**	.725**	.851**	.859**	.747**	.645**	1
	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

( E= Extroversion. R= Responsibility. C= Compatibility. O = Openness to experiences. N= Neuroticism. SV= Social Vision.

F=Financial Return. I= Innovation. S= Sustainability. SN=Social network. P= Personality traits. SE= Social entrepreneurship)



There is a low level positive correlation between responsibility which is sub-dimension of personality threats and financial return ( $r=0.270$ ;  $p<0.01$ ). And there is a moderate positive significant relationship between responsibility and the following sub-dimensions of social entrepreneurship tendency; innovation ( $r=0.319$ ;  $p<0.01$ ). social networks ( $r=0.339$ ;  $p<0.01$ ). social vision ( $r =0.328$ ;  $p<0.01$ ). sustainability ( $r =0.335$ ;  $p<0.01$ ).

There is a moderate positive correlation between openness to experiences which is sub-dimension of personality threats and following sub-dimensions of social entrepreneurship tendency; social vision ( $r=0.582$ ;  $p<0.01$ ). sustainability ( $r=0.527$ ;  $p<0.01$ ). financial return ( $r=0.382$ ;  $p<0.01$ ). innovation ( $r=0.553$ ;  $p<0.01$ ). social networks ( $r=0.400$ ;  $p<0.01$ ).

There is a low level positive correlation between neuroticism which is sub-dimension of personality threats and following sub-dimensions of social entrepreneurship tendency; social vision ( $r=0.197$ ;  $p<0.01$ ). sustainability ( $r=0.084$ ;  $p<0.01$ ). financial return ( $r=0.283$ ;  $p<0.01$ ). innovation ( $r=0.166$ ;  $p<0.01$ ). social networks ( $r=0.165$ ;  $p<0.01$ ).

According to the results. hypotheses were rejected and accepted as below:

H1: There is a significant relationship between five factor personality traits and social entrepreneurship tendency. (Accepted)

H1.a: There is a significant relationship between extroversion. which is one of the sub-dimensions of five factor personality traits. and social entrepreneurship tendency. (Accepted)

H1.b: There is a significant relationship between compliance. which is one of the sub-dimensions of five factor personality traits. and social entrepreneurship tendency. (Accepted)

H1.c: There is a significant relationship between responsibility. which is one of the sub-dimensions of five factor personality traits. and social entrepreneurship tendency. (Accepted)

H1.d: There is a significant relationship between openness to experience. which is one of the sub-dimensions of five factor personality traits. and social entrepreneurship tendency. (Accepted)

H1.e: There is a significant relationship between neuroticism. one of the sub-dimensions of five factor personality traits. and social entrepreneurship tendency. (Rejected)

H1.1a: There is a significant relationship between five factor personality traits and social vision. which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.1b: There is a significant relationship between five factor personality traits and financial return. which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.1c: There is a significant relationship between five factor personality traits and innovation. which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.1d: There is a significant relationship between five factor personality traits and sustainability. which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.1e: There is a significant relationship between five factor personality traits and social networks. one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.2a: There is a significant relationship between extroversion, one of the sub-dimensions of the five factor personality traits, and social vision, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.2b: There is a significant relationship between extraversion, one of the sub-dimensions of the five factor personality traits, and financial return, one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.2c: There is a significant relationship between extraversion, one of the sub-dimensions of the five factor personality traits, and innovation, one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.2d: There is a significant relationship between extroversion, one of the sub-dimensions of five factor personality traits, and sustainability, one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.2e: There is a significant relationship between extroversion, one of the sub-dimensions of the five factor personality traits, and social networks, one of the sub-dimensions of social entrepreneurship disposition. (Accepted)

H1.3a: There is a significant relationship between compatibility, which is one of the sub-dimensions of five factor personality traits, and social vision, which is one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

H1.3b: There is a significant relationship between compatibility, which is one of the sub-dimensions of the five factor personality traits, and financial return, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.3c: There is a significant relationship between compatibility, which is one of the sub-dimensions of five factor personality traits, and innovation, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.3d: There is a significant relationship between compatibility, which is one of the sub-dimensions of five factor personality traits, and sustainability, which is one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

H1.3e: There is a significant relationship between compatibility, which is one of the sub-dimensions of five factor personality traits, and social networks, one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.4a: There is a significant relationship between responsibility, which is one of the sub-dimensions of five factor personality traits, and social vision, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.4b: There is a significant relationship between responsibility, which is one of the sub-dimensions of the five factor personality traits, and financial return, one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

H1.4c: There is a significant relationship between responsibility, which is one of the sub-dimensions of the five factor personality traits, and innovation, one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.4d: There is a significant relationship between responsibility, which is one of the sub-dimensions of the five factor personality traits, and sustainability, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.4e: There is a significant relationship between responsibility, which is one of the sub-dimensions of five factor personality traits, and social networks, one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.5a: There is a significant relationship between openness to experience, which is one of the sub-dimensions of the five factor personality traits, and social vision, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.5b: There is a significant relationship between openness to experience, one of the sub-dimensions of the five factor personality traits, and financial return, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.5c: There is a significant relationship between openness to experience, which is one of the sub-dimensions of five factor personality traits, and innovation, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.5d: There is a significant relationship between openness to experience, which is one of the sub-dimensions of the five factor personality traits, and sustainability, which is one of the sub-dimensions of social entrepreneurship tendency. (Accepted)

H1.5.e: There is a significant relationship between openness to experience, one of the sub-dimensions of five factor personality traits, and social networks, one of the sub-dimensions of social entrepreneurship disposition. (Accepted)

H1.6a: There is a significant relationship between neuroticism, one of the sub-dimensions of the five factor personality traits, and social vision, one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

H1.6b: There is a significant relationship between neuroticism, one of the sub-dimensions of the five factor personality traits, and financial return, one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

H1.6c: There is a significant relationship between neuroticism, which is one of the sub-dimensions of the five factor personality traits, and innovation, which is one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

H1.6d: There is a significant relationship between neuroticism, one of the sub-dimensions of the five factor personality traits, and sustainability, one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

H1.6e: There is a significant relationship between neuroticism, one of the sub-dimensions of the five factor personality traits, and social networks, one of the sub-dimensions of social entrepreneurship tendency. (Rejected)

## **6. Discussion and Conclusion**

This study aimed to determine the relationship between the Five-Factor Personality Traits and social entrepreneurship. The relationship between the personality traits of university

students and their social entrepreneurship tendencies were examined. The sub-dimensions of personality traits are openness, responsibility, extraversion, compliance, and neuroticism. The sub-dimensions of social entrepreneurship are social vision, social networking, innovation, sustainability and financial return. The universe of this research is two public universities; Uşak University and Aksaray University. The sample was determined using the convenience sampling method. The sample consisted of 229 participants from different departments of Uşak University Faculty of Applied Sciences and Aksaray University Vocational School. An online questionnaire was used since the research was conducted during the pandemic period. Personality traits and social entrepreneurship tendency scales were used in the study.

In the study, the data were analyzed using descriptive statistical methods, structural equation models, and correlation analyses. According to the descriptive statistics, 145 students from Uşak University and 84 students from Aksaray University participated. The age range of the participants was between 18 and 24, 127 female and 102 male students attended. The majority of the students were from the departments of logistics management, office management, and accounting.

Confirmatory Factor Analysis was performed and it was found that the variables had acceptable fit indices. As a result of the examination of the structural equation model; the model has been validated and the paths in the model have been interpreted. In this context, the effect of Five Factor Personality traits on Social Entrepreneurship Tendency is statistically significant. A high level of relationship was found between variables.

The correlation analysis indicates that there is a moderately positive significant relationship between five-factor personality traits and social entrepreneurship tendency. The sub-dimensions of social entrepreneurship tendency and five-factor personality traits: A moderate relationship was found between extraversion, compliance, responsibility, and openness to experience. There is a low level of a positive and significant relationship between social entrepreneurship tendency and neuroticism. Our data indicate that the neuroticism personality trait has a low effect on the social entrepreneurship tendency.

A moderately positive relationship was found between five-factor personality traits and social vision, financial return, innovation, sustainability, and social networks, which are sub-dimensions of social entrepreneurship. Our data indicate a moderately positive relationship between extraversion personality traits and all sub-dimensions of social entrepreneurship tendency and a low-level positive relationship between the compatibility personality trait and the social vision and sustainability sub-dimension of social entrepreneurship. A moderately positive correlation was found between the adaptive personality trait and innovation, financial return, and social networks sub-dimension. There is a moderately positive and significant relationship between the personality trait of responsibility and innovation, social networks, social vision, and sustainability, which are sub-dimensions of social entrepreneurship.

However, a low-level positive relationship was found between responsibility personality traits and financial return. There is a moderately positive relationship between the personality trait of openness to experiences and the sub-dimensions of social vision, sustainability, innovation, social networks, and financial return. A low-level positive relationship was found between neuroticism and social vision, sustainability, financial return, innovation, and social networks, which are sub-dimensions of social entrepreneurship.

According to our results, there is a significant relationship between five-factor personality traits and social entrepreneurship tendency, and this hypothesis was accepted. In the study, there was no significant relationship between the neuroticism personality trait and the sub-dimensions of social entrepreneurship tendency. In other words, the hypothesis “There is a relationship between the personality trait of neuroticism and social vision, financial return, innovation, sustainability, and social networks” was rejected. We also found a significant relationship between five-factor personality traits and social entrepreneurship tendency, and this hypothesis was accepted. We did not find a significant relationship between the neuroticism personality trait and the sub-dimensions of social entrepreneurship tendency. In other words, the hypothesis “There is a relationship between the personality trait of neuroticism and social vision, financial return, innovation, sustainability, and social networks” was rejected. The hypothesis “There is a relationship between responsibility personality trait and financial return” was rejected. The data suggest that the sub-dimensions of extraversion, compatibility, responsibility, openness to experiences, among the five-factor personality traits, have a significant effect on social entrepreneurship tendency. We conclude that in order to create value in developing and revealing social conditions in social entrepreneurship, there is a need for responsible, extroverted individuals who are open to new experiences. Individuals with this awareness need to be supported and encouraged to turn towards social entrepreneurship. The selection of the participants in the research from university students is important in terms of preparing plans and studies for social entrepreneurship among this young population. To support social entrepreneurship, cooperation should be developed at the university level.

In this research, if data could be collected from all departments of universities, social entrepreneurship tendency could be evaluated in terms of all departments. However, while some departments showed great interest in the online survey based on volunteerism, it was observed that some departments did not. In future studies; the research can be conducted with more participants and researchers can apply the study by choosing different samples.

### **Authors' Contributions**

First author's contribution to the article is 50%. second author's contribution to the article is 50%.

### **Statement of Interest**

There is no conflict of interest for the authors or third parties arising from the study.

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