Determination of Individual Innovation Perceptions of Students Studying Tourism at Undergraduate Level: The Case of Kastamonu University

Lisans Düzeyinde Turizm Eğitimi Alan Öğrencilerin Bireysel Yenilikçilik Algılarının Belirlenmesi: Kastamonu Üniversitesi Örneği

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Determination of Individual Innovation Perceptions of Students Studying Tourism at Undergraduate Level: The Case of Kastamonu University [1]

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Abstract: Innovation is seen as the key point of progress and development and its value is increasing day by day. In recent years, the necessity of individual innovation has become even more noticeable in order for innovation to exist in businesses. The aim of this study is to determine the individual innovativeness perceptions of university students and to determine whether they differ according to demographic variables. For this purpose, a research was conducted for students studying at Kastamonu University Faculty of Tourism in the 2020-2021 academic year. In order to determine the individual innovativeness levels of the students, the "Individual Innovation Scale" was used. The internal consistency coefficient of the 20-item scale was calculated as 0.802. The universe of the study consists of 792 students. Convenience sampling method, one of the non-probability sampling methods, was used as the sampling method. In this context, 314 students participated in the research and formed the sample. In order to determine the validity and reliability of the scale with the SPSS statistical program, explanatory factor analysis was applied to the data collected in a 5-point Likert type. In order to test the hypotheses, independent samples t-test and

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one-way ANOVA analyzes were performed. In addition, frequency analysis was applied to obtain statistical data on demographic characteristics. As a result of the analyzes, it was determined that the individual innovativeness perceptions of the participants differ according to their gender, the department they study, the income status of their families and their age.

Keywords: Tourism, innovation, individual innovativeness, tourism students, Kastamonu University.

Öz: Yenilikçilik ilerlemenin ve gelişmenin kilit noktası olarak görülmekte ve değeri gün geçtikçe daha da artmaktadır. Son yıllarda işletmelerde yenilikçiliğin var olabilmesi için bireysel anlamdaki yenilikçiliğin gerekliliği daha da hissedilir hale gelmiştir. Bu çalışmanın amacı üniversite öğrencilerinin bireysel yenilikçilik algılarının belirlenerek demografik değişkenlere göre farklılaşıp farklılaşmadığını tespit etmektir. Bu amaç doğrultusunda 2020-2021 öğretim yılı içerisinde Kastamonu Üniversitesi Turizm Fakültesi'nde öğrenim gören öğrencilere yönelik bir araştırma gerçekleştirilmiştir. Öğrencilerin bireysel yenilikçilik düzeylerini belirleyebilmek için "Bireysel Yenilikçilik Ölçeği" kullanılmıştır. 20 maddelik ölçeğin iç tutarlılık katsayısı 0,802 olarak hesaplanmıştır. Çalışmanın evrenini 792 öğrenci oluşturmak-tadır. Örneklem yöntemi olarak olasılık dışı örnekleme yöntemlerinden kolayda örnekleme yöntemi kullanılmıştır. Bu kapsamda 314 öğrenci araştırmaya katılarak örneklemi oluşturmuştur. 5'li likert tipinde toplanan veriler SPSS istatistik programı ile ölçeğin geçerlilik ve güvenirliğinin tespit edilmesi için, açıklayıcı faktör analizi uygulanmıştır. Hipotezlerin test edilmesi amacıyla, bağımsız örneklem t-testi ve tek yönlü ANOVA analizleri yapılmıştır. Ayrıca demografik özelliklere ilişkin istatistiksel verileri elde etmek amacıyla frekans analizi uygulanmıştır. Yapılan analizler sonucunda katılımcıların bireysel yenilikçilik algılarının cinsiyete, öğ-renim gördükleri bölüme, ailelerinin gelir durumuna ve yaşlarına göre farklılık gösterdiği tespit edilmiştir.

Anahtar Kelimeler: Turizm, inovasyon, bireysel yenilikçilik, turizm öğrencileri, Kastamonu Üniversitesi.

Introduction

One of the most important features of the information age brought to societies is innovation. Development and change have revealed a constant need for innovation. The increasing competitive environment requires continuous development and adapting to innovations becomes a part of daily life (Oktuğ & Özden, 2013). Because in mod-

ern institutions, it is accepted that innovativeness reveals and strengthens competitive ability (Zhang and Bartol, 2010). Individuals and institutions adapting to changing conditions or changing existing conditions as they wish are possible with innovation (Akdoğan & Karaarslan, 2013).

The concept of innovation has been the subject of many disciplines in the literature due to the changes and developments experienced in our age. The responses of innovation to individuals' adoption processes and innovations, or the consideration of these reactions according to a personal feature dimension, with the differences in social, cultural values and living spaces with universal characteristics is important for maintaining a healthy balance (Kılıçer, 2011; Adıgüzel, 2012). With innovation, it is mentioned that knowledge is transformed into economic and social benefit (Elçi, 2006). Thanks to developments in information and communication technologies, customers are also affected by innovative changes (Uygur et al., 2019). Adapting a new idea to organizational activities and as a result, increasing corporate efficiency and effectiveness can be associated with innovation (Küçük, 2017; Hitt et al., 2005; Arslan, 2001).

When looking at the dictionary meaning of the term "innovation" which is derived from the Latin origin word "innovatus", it is seen that it means the use of new methods in social, cultural and administrative environments. Innovation is defined as a new and different result. Although it has been explained with words such as "innovation", "renew/regenerate", "innovative" in Turkish, its meaning is too wide to be expressed in a single word (Yavuz et al., 2009). According to Kavrakoğlu (2006) and Uzkurt (2008), the concept of "innovation" does not have an exact equivalent in Turkish. Kavrakoğlu (2006) defined that the concept of innovation can be used to understand renewal but that is inherent to creativity and therefore innovation is creatively innovating in a subject. On the other hand, Uzkurt (2008) stated that the reason why innovation cannot be expressed as renewal is the things that are defined as new in the essence of innovation can be transformed into value and benefit economically and socially and therefore the term "renewal" in Turkish is insufficient to emphasize this.

Zerenler et al. (2007) state that the perception of the phenomenon of innovation differs from the past. Researchers have stated that innovation, which was seen as a genius making an invention or an entrepreneur taking an idea and transforming it into a commercial benefit, is no longer considered as a one-off process, but as a repeatable, systematic and organizational process (Zaltman et al., 1973; Zmud, 1982. ; Tushman and Nadler, 1986; Damanpour, 1991; Güleş and Bülbül, 2004; Çalıpınar and Baç, 2007). Researches have focused on innovation along the lines of efforts to provide the education necessary to survive in the 21st century (Wong-Kam, 2012).

Innovativeness also refers to individuals or organizations that have effective organizational results and have a high inclination to implement existing innovations

(Pekdoğan, 2017). The primary resource influencing the performance indicators of organizations is their employees. For this reason, it is extremely important for organization personnel to adopt and accept innovation. Tabak et al. (2010) draw attention to the fact that individuals are at the centre of innovation. Because, the widespread use of innovations that emerge in society is possible primarily if individuals accept and adopt these innovations (Yeğin, 2017). It is a characteristic that requires individual innovation discipline, learning skills and application ability. Two of the important qualities that innovative individuals have; is self-esteem and self-confidence. While self-esteem is about the individual feeling important and valuable; self-confidence is expressed as a tendency to believe in being successful by undertaking active tasks in different situations (Duran & Saraçoğlu, 2009).

Many changes we experience affect all aspects of social life. This situation also directs the human profile needed in all areas of society to change (Yazıcı, 2013). There is a need for individuals who will adapt to innovations and changes that contribute to them and accordingly the existence of an education system consisting of a changing, continuing development, open to technological innovations and productive education mass (Karaman, 2016).

Demirel (2009) defines lifelong learning associated with innovativeness as "a continuous process that develops an individual's potential and competencies throughout his life". Candy (2003) sees lifelong learning as the process in which the knowledge, values, skills and qualities that individuals encounter throughout their lives are acquired and can be applied in daily life. It is thought that determining the individual innovativeness level of students is important in terms of adopting innovations, using innovations and benefiting from innovations in the individual's awareness of development, change and renewal in the world during the life-long learning process. The continuation of the development and changes of societies in the way of modernization can be achieved by providing all individuals especially the young population, with the qualifications such as accessing information, using and reconstructing it, producing, problem-solving, analysing and synthesizing, adapting to innovations, critical and creative thinking (Sağlam and Kürüm, 2005). In this context, the study aimed to measure the individual innovativeness perceptions of Kastamonu University Tourism Faculty students, who will be among the individuals in the society and the employees of the future, and the relevant literature is given below.

Culture and Innovation

Globalization has brought a new perspective to international economic and cultural relations as in many other fields. There is an increase in international cultural relations as a natural result of the rapid development of information technologies and transportation systems, diversification of communication channels and innovative

change (Çaycı & Karagülle, 2016). However, the development of international cultural relations also brought along cultural differences (Aksoy, 2012). Accordingly, studies of researchers and related literature who think that culture can be one of many factors that can affect innovation are presented below.

H.G. Barnett (1953), as a cultural anthropologist, was described as one of the first to mention the relationship between culture and innovation (Herbig & Dunphy, 1998). Lin (2009) studied global automakers operating in 14 countries to investigate whether culture has an impact on product management and innovation. Vecchi and Brennan (2009) examined the innovation performance of manufacturing enterprises operating in 24 countries to determine the role of cultural characteristics in innovation performance.

Kaasa and Vadi (2010) conducted a study based on the number of patent applications in measuring the ability to initiate innovation to examine the relationship between the cultural dimensions revealed by Hofstede and the ability to initiate innovation. Williams and McGuire (2010) conducted a study with a sample of 63 countries and structural equation modelling to examine the impact of culture on national innovation and welfare. Rossberger and Krause (2012) investigated the study aiming to reveal the relationship between cultural value dimensions of 55 countries and national innovativeness in 2009, 2010 and 2011. Using the conditional and unconditional Data Envelopment Analysis (DEA) model, an experimental study was conducted by Halkos and Tzeremes (2013) in 25 European countries for the link between innovation performance and cultural factors. Efrat (2014) examined the impact of culture on the motivation to innovate at the national level in a study covering OECD countries. Çelikkol (2015) conducted a study to find out how national cultural characteristics, covering 34 OECD countries, affect innovation and competition.

In studies on innovation and culture, it has been observed that researchers generally choose some of the organizational characteristics and work on different dimensions. In this context, researchers analyzed the factors affecting innovative culture in four dimensions (Brettel & Cleven, 2011).

- The orientation of the future market,

- Learning organization orientation,

- Willingness to take risks,

- Orientation towards innovation brought by technology.

Leagreid et al. (2011) examined the innovative culture from a different point of view in terms of its task-oriented features, cultural-related institutional characteristics, situational beneficial factors and environment-related institutional characteristics.

In a study conducted on the dimensions of innovative culture taking into account the economic processes and the country's economy, the effects of educational institutions, non-profit-oriented research institutions, Silicon Valley studies and institutional knowledge changes were examined (Samli, 2012).

Individual Innovativeness

One of the features that sectors, organizations and people need in a changing world is innovation. Innovativeness has been defined as breaking out of certain patterns known by many, desire for change, wanting something different, taking risks, and is closely associated with knowledge. When the relevant studies are examined, it is seen that the definitions of individual innovativeness are explained differently.

Flynn and Goldsmith (1993) defined individual innovativeness as accepting an innovation earlier than others in its environment. When defining individual innovativeness Rogers (2003) emphasized that individuals have the ability to take risks in the face of innovations and be open to experiences that can occur with acceptance. Yuan and Woodman (2010) expressed individual innovativeness as developing, adopting or applying innovation and stated that individual innovativeness characteristics can differ from person to person and there is a feature that shows the change of individuals' attitudes towards innovations.

Kılıçer (2011) defined individual innovativeness as an attitude towards innovation, willingness, acceptance of innovation, transferring it to daily life and benefiting from these innovations. At the same time, individual innovativeness emerges as a concept that is addressed by prioritizing the characteristics of individuals and is used to express the differences of individuals' characteristics and their reactions to trying innovations (Şahin, 2016).

Based on the above definitions, the definition of individual innovativeness can be made as "the perception of any product, service or thought as new by a person". Individual innovativeness is considered as a discipline, learning ability and application ability. The individual's perception of an idea as innovation depends on the individual's reaction to the innovation (Rogers, 2003). In this context, it is the subject of the study to determine the individual innovativeness perception levels of the students of the Faculty of Tourism of Kastamonu University in order to produce new ideas and to implement the innovations made in the field of tourism.

Method

The questionnaire technique, one of the quantitative data collection tool was used to collect the data to be used for statistical analysis in the study. The questionnaire form prepared in line with the purpose of the research consists of two parts. The first

part covers questions about the demographic characteristics of the respondents. In the second part, there are questions prepared as a 5-Likert type for measuring the individual innovation perceptions of the participants. To determine students' individual innovation levels The "Individual Innovativeness Scale" developed by Hurt et al (1977) and adapted to Turkish by Kılıçer and Odabaşı (2010) was used.

This study was prepared with the approval of Kastamonu University Social and Humanities Sciences Researching and Publication Ethics Committee (Date:25.12.2020, Number: 4/83).

Research Hypotheses

Based on the explanations given in the literature part of the study, the following hypotheses have been created in order to measure the individual innovativeness perceptions of the students studying at Kastamonu University Faculty of Tourism.

H1 Individual innovativeness perceptions differ by gender.

H2 Individual innovativeness perceptions differ by department.

H3 Individual innovativeness perceptions differ by income level of the family.

H4 Individual innovativeness perceptions differ by age.

Population and Sample

The population of the study consists of the students studying at Kastamonu University Tourism Faculty in the fall semester of the 2020-2021 academic year. The sample of the study on the other hand consists of students who have the opportunity to fill in an online questionnaire during the period when the questionnaire is applied, due to the difficulty in determining the school attendance status of all students during the pandemic period. According to the information obtained from the student affairs, the population of the study was determined as 792 students. Although the whole population was tried to be reached, 314 students participated in the study and formed the sample.

The convenience sampling method, one of the non-probability sampling methods, was used as the sampling method. In this method, the aim is to include everyone who wants to be included in the sample (Gürbüz & Şahin, 2015). The following formula developed by Yamane (2001) was used in calculating the number of samples.

$$\frac{N.z^2.p.q}{(N-1).d^2 + z^2.p.q}$$

N: population size

n: sample size

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z: standard normal distribution table value for the desired reliability level

d: degree of accuracy

p: the proportion of individuals with the desired feature in the population (p + q = 1)

$$n = \frac{792.1,96^2.\,0,5.0,5}{(792-1).\,0,05^2 + 1,96^2.\,0,5.0,5} = \frac{760,6368}{2,9379} = 259$$

Data Collection Tool

In the study, Individual Innovativeness Questionnaire consisting of 20 expressions was applied to the students studying tourism to determine individual innovation perceptions. In the first part of the questionnaire form, statements about determining the demographic characteristics of the participants are included. The expressions in the second part were evaluated with the 5-point Likert-type scale as "Strongly Disagree (1), Disagree (2), Neither Agree Neither Disagree (3), Agree (4), and Strongly Agree (5)" to measure individual innovativeness perceptions.

Data Analysis

Explanatory factor analysis was applied to the data collected in 5-point Likert type to determine the validity and reliability of the scale with the SPSS statistical analysis program. To test the hypotheses, Independent Sample T-Test and One-Way ANOVA analyses were performed. In addition, frequency analysis was applied to obtain statistical data on demographic characteristics. When the reliability analysis of the Individual Innovation Scale was made, it was seen that the Cronbach's Alpha coefficient was 80.2%. When this situation is evaluated according to Cronbach's Alpha coefficients by Kayış (2009), it has been determined that the coefficient between $0.80 \leq \alpha < 1.00$ conforms to the statement that the scale is highly reliable.

Findings

Skewness and Kurtosis values were examined to determine whether the data collected in the study showed normal distribution. It was observed that the Skewness value ranged from -1.107 to +1.063 and the Kurtosis value varied between -1,403 and +1,293. When Kurtosis and Skewness values are between -1.5 and +1.5, it is accepted that the data show a normal distribution (Tabachnick and Fidell, 2013).

The frequency and percentage distributions regarding the answers given for the demographic distributions by the students who participated in the study were given in Table 1.

Table 1: Demographic Characteristics of the Students Participating in the Study

Gender	f	%	Department	f	%
Female	170	54,1	Tourism Management	92	29,3
Male	144	45,9	Tourism Guidance	144	45,9
Age			Gastronomy and Culinary Arts	78	24,8
17 - 19 years	62	19,7	**Family Income (Monthly)**		
20 - 22 years	216	68,8	Less than 2500 TL	99	31,5
23 years and older	36	11,5	Between 2501 TL – 3500 TL	150	47,8
Class			Between 3501 TL – 4500 TL	28	8,9
1st Grade	65	20,7	Between 4501 TL – 5500 TL	20	6,4
2nd Grade	97	30,9	More than 5501 TL	17	5,4
3th Grade	113	36,0			
4th Grade	39	12,4			
N=314					

According to Table 1, 45.9% of the students are male and 54.1% are female students. It was determined that 19.7% of the students participating in the study were between the ages of 17-19 years old, 68.8% were between the ages of 20-22 years old, and 11.5% were between the ages of 23 years old and over. 29.3% of the participant's study in Tourism Management, 45.9% in Tourism Guidance and 24.8% in Gastronomy and Culinary Arts. When the monthly family income of the students is examined, it is seen that 31.5% of them have an income of less than 2500 TL and 47.8% of them constitute the majority with income between 2501 TL - 3500 TL.

In the study, the KMO test performed to determine the construct validity of the Individual Innovativeness Scale was found to be 0.812 and the Barlett Sphericity Test result was found to be significant (p =, 000 <, 001) (Table 2). Büyüköztürk (2002) has described the KMO ratio above 0.80 as very good and the rates above 0.90 as excellent. Accordingly, the KMO value (0.812) resulting from the analysis is quite good.

Table 2: Individual Innovativeness Scale KMO and Bartlett's Sphericity Test Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,812
Bartlett's Test of Sphericity	Approx. Chi-Square	2448,470
	df	190
	Sig.	,000

Principle Component Analysis, which is frequently used in social sciences, was used as a factoring technique in exploratory factor analysis. Since zeroing the correlation between factors, thus providing clarity and significance in the interpretation of the factors, Varimax vertical axis rotation was performed and the lower limit of item eigenvalues was taken as 1.00 in determining the factor number. Two expressions with factor loadings below 0.32 were removed from the scale. According to Tabachnick and

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Fidell (2013), the factor load of an item on a factor should be at least 0.32.

Table 3: Individual Innovativeness Scale Explanatory Factor Analysis Results

Factors and Items	Factor Load	Eigenvalue	Variance Explained %
Factor 1: Resistance to Change		4,083	22,681
Item 4- I am generally cautious about accepting new ideas.	,561		
Item 6- I am suspicious of new inventions and new ways of thinking.	,624		
Item 7- I rarely trust new ideas until I can see whether the vast majority of people around me accept them.	,651		
Item 10- I am aware that I am usually one of the last people in my group to accept something new.	,745		
Item 13- I am reluctant about adopting new ways of doing things until I see them working for people around me.	,732		
Item 15- I tend to feel that the old way of living and doing things is the best way.	,628		
Item 17- I must see other people using new innovations before I will consider them.	,522		
Item 20- I often find myself sceptical of new ideas.	,791		
Factor 2: Opinion Leadership		3,660	20,334
Item 1- My peers often ask me for advice or information,	,619		
Item 8- I feel that I am an influential member of my peer group.	,839		
Item 9- I consider myself to be creative and original in my thinking and behaviour.	,853		
Item 11- I am an inventive kind of person.	,802		
Factor 3: Openness to experience		1,606	8,922
Item 2- I enjoy trying out new ideas.	,807		
Item 3- I seek out new ways to do things.	,822		
Item 12- I enjoy taking part in the leadership responsibilities of the groups I belong to.	,465		
Item 14- I find it stimulating to be original in my thinking and behaviour.	,457		
Factor 4: Risk Taking		1,327	7,371
Item 16- I am challenged by ambiguities	,838		

and unsolved problems.	
Item 19- I am challenged by unanswered questions.	,676

Extraction Method: Principal Component Analysis

According to Table 3, where the Individual Innovativeness Scale Factor Analysis results are shown, the contribution of the factors (dimensions) to the total variance is 22.681% for the first factor, 20.334% for the second factor, 8.922% for the third factor and 7.371% for the fourth factor. It is seen that the total contribution of these determined factors to the variance is 59.309%. In other words, these four factors explain 59.3% of the total variance. In multi-factor analyses, it is accepted as sufficient if the variance explained is between 40% and 60% (Çokluk et al., 2012).

When the factor analysis results are examined, it is seen that individual innovativeness is grouped under four titles. These factors (dimensions) were named as "Resistance to change", "Opinion Leadership", "Openness to experience" and "Risk taking", respectively, considering the literature information and the properties of the items. In the relevant literature, findings supporting the dimensions can be found in the studies of Kılıçer (2011), Işık and Türkmendağ (2016). It is seen that the factor loadings vary between 0.457 and 0.853. For the factor load value coefficient, which explains the relationship of items with the factor to which they belong, values above 0.45 are generally recommended as a good criterion for item selection (Büyüköztürk, 2002).

Whether the individual innovativeness perceptions of the students participating in the study differ significantly according to gender was investigated with the independent sample t-test. The results obtained are presented in Table 4.

Table 4: Independent Sample T-Test for Gender

	Gender	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means		
				F	Sig.	t	df	Sig. (2-tailed)
Individual Innovativeness Perceptions	Female	170	3,4143	10,072	,002	3,653	277,979	,000
	Male	144	3,1731					

As a result of the independent sample t-test for gender, because the level of significance in the Levene equality of variances test was below $p < 0.05$ and the variances were not evenly distributed, the T values for the uneven distribution of variances were taken into account. Accordingly, there was a significant difference between gender and individual innovativeness perceptions ($p = 0.000 < 0.05$) (Table 4). Thus, H1 hypothesis "Individual innovativeness perceptions differ by gender." was accepted.

Table 5: One-Way ANOVA Analysis Results Regarding Students' Departments

Individual Innovativeness Perceptions	Sum of Squares	Mean Square	F	Sig.
Between Groups	6,610	3,305	10,202	,000
Within Groups	100,752	,324		
Total	107,362			

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Department		Mean Difference	Sig.
Gastronomy and Culinary Arts	Tourism Guidance	-,04598	,823
	Tourism Management	,28637*	**,006**
Tourism Guidance	Gastronomy and Culinary Arts	,04598	,823
	Tourism Management	,33235*	**,000**
Tourism Management	Gastronomy and Culinary Arts	-,28637*	**,006**
	Tourism Guidance	-,33235*	**,000**

According to the results of the ANOVA test in Table 5, it was determined that there is a significant difference between the studying department and the individual innovativeness perceptions (p = 0.000 <0.05). According to the Post Hoc Games-Howell test conducted in addition to the ANOVA test, the averages of students' individual innovation perceptions differ according to the departments they study. Accordingly, H2 hypothesis "Individual innovativeness perceptions differ by department." was accepted.

ANOVA and Post Hoc Tukey tests were conducted to test whether there is a difference between the individual innovativeness perceptions of the participants and their family income and the relevant results are shown in Table 6.

Table 6: Results of One-way ANOVA Analysis Regarding Family Income Status

Individual Innovativeness Perceptions	Sum of Squares	Mean Square	F	Sig.
Between Groups	12,006	3,001	9,726	**,000**
Within Groups	95,356	,309		
Total	107,362			
Family Income (Monthly)		**Mean Difference**		**Sig.**
Less than 2500 TL	Between 2501 TL – 3500 TL	,27153*		**,002**
	Between 3501 TL – 4500 TL	-,01633		,874
	Between 4501 TL – 5500 TL	-,11538		,916
	More than 5501 TL	-,45839*		**,016**
Between 2501 TL – 3500 TL	Less than 2500 TL	-,27153*		**,002**
	Between 3501 TL – 4500 TL	-,28786		,089
	Between 4501 TL – 5500 TL	-,38690*		**,030**
	More than 5501 TL	-,72992*		**,000**
Between 3501 TL – 4500 TL	Less than 2500 TL	,01633		,617
	Between 2501 TL – 3500 TL	,28786		,089
	Between 4501 TL – 5500 TL	-,09904		,974
	More than 5501 TL	-,44206*		**,035**
Between 4501 TL – 5500 TL	Less than 2500 TL	,11538		,916
	Between 2501 TL – 3500 TL	,38690*		**,030**
	Between 3501 TL – 4500 TL	,09904		,974
	More than 5501 TL	-,34301		,335
More than 5501 TL	Less than 2500 TL	,45839*		**,016**
	Between 2501 TL – 3500 TL	,72992*		**,000**
	Between 3501 TL – 4500 TL	,44206		,075
	Between 4501 TL – 5500 TL	,34301		,335

When the results in Table 6 were examined, it was seen that there was a significant difference between family income status and students' perceptions of individual innovativeness (p = 0.000 <0.05). According to the Tukey test, the averages of students' individual innovativeness perceptions differ according to family income. Thus, H3 hypothesis, "Individual innovativeness perceptions differ by income level of the family." was accepted.

ANOVA and Post Hoc Tukey tests were conducted to test whether there was a difference between individual innovativeness perceptions and the ages of the participants and the results are shown in Table 7.

Table 7: Results of One-way ANOVA Analysis Regarding Students' Ages

Individual Innovativeness Perceptions	Sum of Squares	Mean Square	F	Sig.
Between Groups	12,012	6,006	19,589	,000
Within Groups	95,351	,307		
Total	107,362			

Age		Mean Difference	Sig.
17 - 19 years	20 - 22 years	-,00023	,916
	23 years and older	-,61407*	**,024**
20 - 22 years	17 - 19 years	,00023	,075
	23 years and older	-,61384*	**,037**
23 years and older	17 - 19 years	,61407*	**,012**
	20 - 22 years	,61384*	**,041**

According to the results given in Table 7, it was seen that there is a significant difference between the ages of the participants in the research and their individual innovativeness perceptions (p = 0.000 <0.05). According to the Tukey test, the averages of students' individual innovativeness perceptions differ according to their ages. Accordingly, H4 hypothesis "Individual innovativeness perceptions differ by age." was accepted.

Conclusions and Recommendations

In this study, it was aimed to determine whether the students' individual innovativeness perception levels differ according to demographic variables by evaluating the individual innovativeness levels of Kastamonu University Tourism Faculty students. The obtained research results are similar to other studies conducted to determine the individual innovativeness levels of university students (Kılıçer, 2011; Kert & Tekdal, 2012; Adıgüzel, 2012; Korucu & Olpak, 2012; Bitkin, 2012; Çuhadar et al., 2013; Işık and Türkmendağ, 2016).

As a result of the factor analysis conducted within the scope of the research, it was determined that the factors of "Resistance to Change", "Openness to Experience",

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"Opinion Leadership" and "Risk Taking" were effective on students' innovation levels. In the relevant literature, findings supporting these dimensions were found in the studies of Kılıçer (2011) and Işık and Türkmendağ (2016). In the study, it was examined whether the individual innovativeness levels of university students differ according to the gender variable and it was determined that the individual innovativeness levels differ significantly according to the gender variable. While this finding does not match with some studies in the literature (Rogers, 2003; Rogers & Wallace, 2011; Bitkin, 2012; Çuhadar et al., 2013; Kılıç et al., 2014), it is similar to some studies (Demirsoy, 2005).

The findings of the study revealed that there is a significant difference between the individual innovativeness levels of the students and the departments they study. According to the results of the ANOVA test, it was determined that there is a significant difference between the studied department and individual innovativeness perceptions (p = 0.000 <0.05). In addition, in the Post Hoc Games-Howell test results, the average of the students' perception of individual innovation differed according to the departments they studied.

As a result of the analysis, it was seen that there was a significant difference between family income and students' perceptions of individual innovativeness (p = 0.000 <0.05). The study was carried out with the students who preferred Kastamonu University for studying and normally live in different cities in Turkey. This situation also affects the economic income and expenditure balance of families. Accordingly, it is thought that the income levels of families differ among themselves, and the ability to follow and accept innovations may be related to purchasing power. It was determined that there is a significant difference between the ages of the participants and their individual innovativeness perceptions (p = 0.000 <0.05). According to Zimmer and Chappell (1999), age-related differences affect the adoption and acceptance of technological innovations.

In order for the tourism sector to cope with the tough competition conditions and to increase the level of economic prosperity, innovation is seen as an important component in the global sense as is the case with every sector. For this reason, it is important that students who will be employed in different businesses and positions in the tourism sector after graduating are open to innovation. In addition, it is thought that it would be beneficial to provide an innovative, technological and continuously renewed innovative learning-teaching environment to students whose education life continues. In order for this to be implemented, it is recommended to develop/improve physical and technical infrastructures.

The scope of the research is limited to university students studying at Kastamonu University. Similar studies can be conducted with students from different universities to generalize and compare the results obtained in this study. In addition, it

is recommended that the suspicious and negative attitudes of students towards innovations and the reasons for other findings be revealed through different qualitative and quantitative research methods.

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