

## The Relationship between Individual Innovativeness and Locus of Control: A Research on Tourism Faculty Students

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### Abstract

The main purpose of this study is to determine the relationship between individual innovativeness and locus of control. In this context, first investigating the individual innovativeness and locus of control in the literature and try to identified. In order to determine the relationship between the individual innovativeness and locus of control; implemented a survey to the tourism management students of Tourism Faculty in Kırklareli University who educated academic year of the 2015-2016 and 183 students were reached. A questionnaire, as a data collection tool used in this research, which was composed of three parts. The first part of the questionnaire included demographic information of the participants; the second part included "Individual Innovativeness Scale" developed by Hurt, Joseph & Cook (1977) and adopted into Turkish culture by Kılıçer & Odabaşı (2010) the last part of the questionnaire included "Internal-External Locus of Control Scale" developed by Rotter (1966) and adopted into Turkish culture by Dağ (1991). The data obtained from the research was analyzed by the statistical software package SPSS 22 (Statistical Package for the Social Sciences for Windows 20) is used.

**Keywords:** Individual management, locus of control, tourism

### Introduction

Personal characteristics of employees as a determiner of service quality in tourism industry gains importance gradually in which regional, national and international rivalry is encountered intensely. In addition to diversification of tourism products, to offer new and alternative tourism products as well as to be able to comply with changing business processes via advancing technologies in administration and marketing, increase the significance of employees whose innovativeness level is high. Undoubtedly innovativeness and the behaviours that influence the innovativeness have a prominent role for the increase of organizational performance. Particularly, innovativeness in terms of private sector means increase of performance and gain more profit (Tabak, Erkuş & Meydan, 2010). When viewed from the aspect of tourism enterprises, innovativeness is generally is classified as product innovation, service innovation, organizational innovation, marketing innovation and radical innovation

Responsibilities for experiences or beliefs for causes concerning incidents of individuals, results in significantly not only their social life but also their business life. Some people believe that they may control every incidents and success or failure encounter on the other hand some people think that luck and fate are key determinants for their lives. This diversity of views leads to alteration in behaviours (Basım & Şeşen, 2007). Studies related innovation have multiple structure. In this sense, scientific studies about innovativeness are considered as research branches that comprise interdisciplinary content diversities. Attitudes of individuals who works in organizations have an essential role for approach to innovation of any organization.

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Therefore to understand individual process at the innovative reality, researchers have investigated emotional and behavioral reactions against innovativeness (Köroğlu, 2014). Innovativeness in terms of enterprises is precondition for creating the difference and is the key for advancement. Innovation sources of enterprises are generally classified as internal resources and external resources, employees have significant role for internal resources. Also Wejnert (2002) indicated that one of the characteristics of innovators is personal characteristics. In addition to this in the literature, elements that influence innovativeness of employees are classified by Parzefall Seeck & Leppänen (2008) as; individual level factors, job-related factors, team level factors and organizational level factors, Patterson Kerrin & Gatto-Roissard (2009); cognition, knowledge, motivation, personality, behaviours, emotions and mood states and developmental factors, Hammond, Neff & Farr (2011); job characteristics, motivation, individual differences, work context. Brunner (2015) in his doctoral thesis one of basic characteristics that influences innovativeness is indicated to be personality features which consist of six related subfactors; tolerance of ambiguity, openness to experience, self-leadership, self-efficacy, internal locus of control and proactivity and also said that many research which have been made to determine factors and subfactors that influence individual innovativeness are not totally adequate and it is needed to do more researches to understand individual factors better.

According to the literature review, there are researches to determine relationship between technology application and locus of control (LOC) are; Coovert & Goldstein (1980), Kay (1990), Hoffman, Novak & Schlosser (2003), Chak (2003), Hsia, Chang & Tseng (2014), Hsia (2016). Researches to determine relationship between LOC and innovativeness are more restricted; Mueller & Thomas (2001), Tabak Erkuş & Meydan (2010), Türker & İnel (2012), Engle, Mah & Sadri (2014). The main purpose of the study is to determine relationship between innovativeness features and an aspect of personality characteristics LOC of the students who study in tourism faculties in which managers of the future are trained. Researches about tourism educated students in this subject are restricted so that contribution to literature is provided. In first chapter of research literature review for LOC and individual innovativeness terms are examined. The data which is obtained via questionnaire is analyzed in second chapter. Proposals are made related to the subject in the final chapter.

## **1. Literature Review**

### **1.1. Locus of Control (LOC)**

When the literature examined theoretical background of the the concept of LOC, appears to conceptualize in “social learning theory” in 1954 by Rotter (1966) based on the principles of learning theory and Rotter (1966) indicates that rewarding or gratification is crucial important for the obtaining skills and knowledge for the students as a course of human nature and accepting universally. While living positive experiences defined as rewards, negative experiences defined as punishment by individual, LOC is perceived as a force that controls reward and punishment inside or outside of the individual (Yerekaban, 2007; Kaplan Güler, 2016).

LOC theory offers an explanation about how individuals perceive the impact of their personal actions on environmental outcomes (Bertolini, Higgs & Hook, 2011). LOC refers to the degree of the individual perceives the cause of the events affecting his contingent upon his own behavior or attributes versus the degree to which is controlled by forces outside of himself and may occur independently of his own actions and describes the two groups as internal locus of control and external locus of control by Rotter (1966).

If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, Rotter has termed this is a belief in internal control (Rotter 1966). When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, Rotter has labeled this is a belief in external control (Rotter, 1966). According to the research; internal and external controlled of individuals are differentiate from others in terms of some of the personal characteristics.

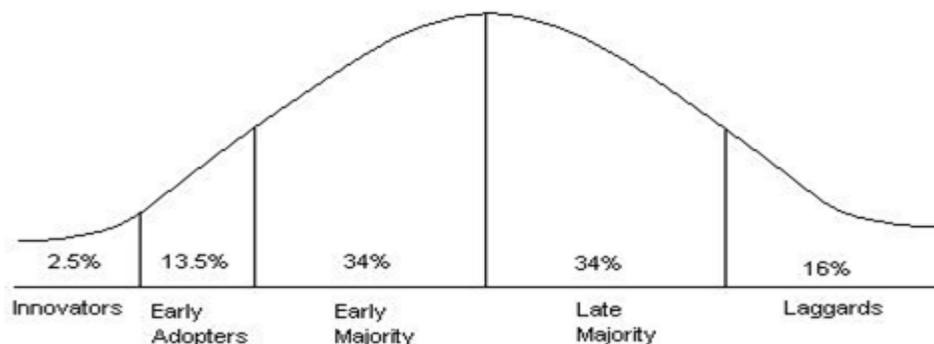
## 1.2. Individual Innovativeness

In contemporary society often mentioned concept of innovation as described “an individual, a group or society’s perceived as a new idea, implementation or object” (Rogers, 1983; Kılıçer & Odabaşı, 2010). Innovation is related to the identification of individuals inter individual differences in their response to the new and conceptualized by three general approaches. These approaches are; behavioral, global personality trait and domain-specific personality trait. Also each approaches are measurable (Goldsmith & Foxall, 2003).

When examined the literature on individual innovation, innovativeness is expressed as; “the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than the other members of a system” by Rogers (1983), Rogers and Shoemaker (1971); “willingness to change” by Hurt, Joseph & Cook (1977); “is the degree to which an individual makes innovation decisions independently of the communicated experience of others” by Midgley (2015), “individual’s tendency to learn about and adopt technology” by Svensson (2012). Sociologists have revealed many theories that describing adoption and diffusion of emerging an innovation by the individual and society. In the literature Tarde is regarded as a pioneer of researchers associated with the diffusion of innovation with the book is “The Laws of Imitation” published in 1903 (Wejnert 2002; Örün, et all, 2015; Kalotra 2014; Kumar & Kaur 2014).

In 1962, Rogers M. Everett, improving his doctoral thesis and publishing his study named of “Diffusion of Innovation” which describes the process of adopted by society of innovation and has revealed “Diffusion of Innovation Model” accepted in many areas. Rogers (1983) noted that there are four basic elements namely innovation, communication channels, time and social systems in the diffusion of innovation. The opinion which is belongs to the diffusion curve of adoption of innovations close the normal distribution and bell curve shape pave the way for categorized in standart form who adopt innovations (Kılıç, 2015). Roger’s study (1983) individuals are divided into five different classes in terms of innovation. These classifications listed as according to accepts from slowest to fastest of innovation; innovators (%2.5), early adopters (%13.5), early majority (%34), late majority (%34) and laggards (%16). This curve is shown in Figure1.

**Figure 1: Innovation Adopt Categories**

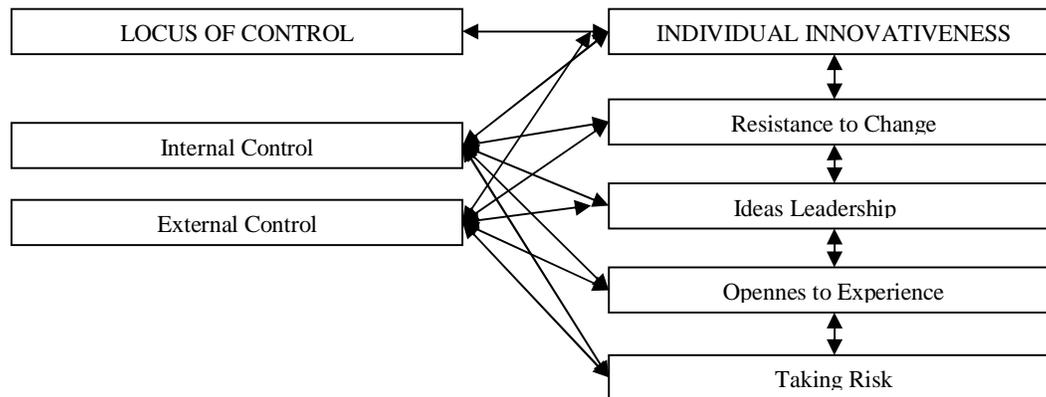


Rogers (1983). Diffusion of Innovations

## 3. Implementation

### 3.1. Research Model

To find out the relationship between LOC and individual innovation is the purpose of this study on Tourism Management students of Tourism Faculty in Kırklareli University. The model developed in this context, is shown in figure 2.

**Figure 2: The Model Representation**

The main hypotheses that have been situated and tested in the research are;

- ❖ H<sub>1</sub>: There is a significant relationship between internal control and resistance to change dimension of participant.
- ❖ H<sub>2</sub>: There is a significant relationship between internal control and ideas leadership dimension of participant.
- ❖ H<sub>3</sub>: There is a significant relationship between internal control and opennes to experience dimension of participant.
- ❖ H<sub>4</sub>: There is a significant relationship between internal control and taking risk dimension of participant.
- ❖ H<sub>5</sub>: There is a significant relationship between internal control and total size of individual inovativeness of participant.
- ❖ H<sub>6</sub>: There is a significant relationship between external control and resistance to change dimension of participant.
- ❖ H<sub>7</sub>: There is a significant relationship between external control and Ideas leadership dimension of participant.
- ❖ H<sub>8</sub>: There is a significant relationship between external control and opennes to experience dimension of students.
- ❖ H<sub>9</sub>: There is a significant relationship between external control and taking risk dimension of participant.
- ❖ H<sub>10</sub>: There is a significant relationship between external control and the total size of individual innovation of students.
- ❖ H<sub>11</sub>: There is a significant relationship between total size of LOC and individual innovativeness of participant.

### 3.2. Population and Sample

The population of the the research comprise 263 students who educated Tourism Management students of Tourism Faculty in Kırklareli University academic year of the 2015-2016 and 183 usable responses from students has been turned.

### 3.3. Instruments

A questionnaire, as a data collection tool used in this research, which was composed of three parts. The first part of the questionnaire included demographic information of the participants; the second part included "Individual Innovativeness Scale" developed by Hurt, Joseph & Cook (1977) and adopted into Turkish culture by Kılıçer & Odabaşı (2010). Individual Innovativeness Scale is also a Likert type scale consists of 20 items in total (Kılıçer & Odabaşı, 2010). The last part of the questionnaire included "Internal-External Locus of Control Scale" developed by Rotter (1966) and adopted into Turkish culture by Dağ (1991). LOC scale is consists of 29 items. There are two options in the scale and each of item indicated a and b. The data obtained from the research was analyzed by the statistical software package SPSS 22.0 (Statistical Package for the Social Sciences for Windows 22.0). Percentage, mean, standard deviation is used as a descriptive statistical methods in the evaluation of the data. Kolmogorov-Smirnov and Shapiro Wilk test was applied and the results show that the distribution of scores are not normal so that decided to use non-parametric tests. The findings was evaluated in the 95% confidence interval and 5% significance level.

**Findings**

**Reliability of the Research**

Individual Innovativeness Scale Cronbach’s Alpha value of data was found 0. 863. LOC Scale Reliability Analysis calculated with the KR 20 because of the two-point Likert and reliability of data was found 0.70.

**Demographic Characteristics of The Sample**

As mentioned above, 183 questionnaires subjected to analysis. %48.1 of the sample (n:88) was female and the other %51.9 (n:95) was male. Distribution of the sample according to the years of education: %11,5 (n:21) was 1. class, %26,8 (n:49) was 2. class, %30,6 (n:56) was 3. class, and % 31,1 (n:57) was 4. class. The average age of participants was 20.61 years and the grade point average was 2.446 (n:183).

**Table 1. The Distribution of Individual Innovativeness Scores**

Categories of individual innovativeness	Individual innovativeness classification and scores	F (n)	%
Innavators	80>	12	6,6
Early Adopters	69-80	41	22,4
Early Majority	57-68	78	42,6
Late Majority	46-56	30	16,4
Laggards	46<	22	12,0
<b>Total</b>		<b>183</b>	<b>100.0</b>

Distribution of the sample according to the Individual Innovativeness Scores; %6,6 (n:12) was innavators, %22,4 (n:41) was early adopters, %42,6 (n:78) was early majority, %16,4 (n:30) was late majority and %12 (n: 22) was laggards.

**Table 2. Locus of Control Levels**

	Groups	F (n)	%
LOC	Internal	89	48,6
	External	94	51,4
	Total	183	100,0

Distribution of the sample according to the LOC levels; %48,6 (n: 89) was internal and %51,4 (n:94) was external.

**Table 3. The Spearmann Correlation Test**

		LOC	Individual Innovativeness	Resistance to Change	to Ideas Leadership	Opennes Experience	to Taking Risk
<b>LOC</b>	r	1,000					
	p	0,000					
<b>Individual Innovativeness</b>	r	0,086	1,000				
	p	0,246	0,000				
<b>Resistance to Change</b>	r	-0,023	-0,473**	1,000			
	p	0,760	0,000	0,000			
<b>Ideas Leadership</b>	r	0,074	0,842**	-0,030	1,000		
	p	0,323	0,000	0,684	0,000		
<b>Opennes to Experience</b>	r	0,104	0,877**	-0,075	0,838**	1,000	
	p	0,161	0,000	0,311	0,000	0,000	
<b>Taking Risk</b>	r	0,027	0,589**	0,113	0,557**	0,625**	1,000
	p	0,720	0,000	0,129	0,000	0,000	0,000

According to result of the Spearman correlation test, relationships between LOC and individual innovativeness was not statistical significance. But relationship amongs individual innovativeness and its dimension indicated that Table 4.

**Table 4. The Mean Scores of Individual Innovations according to LOC**

	Group	n	Mean	Sd	MW	p
Individual Innovativeness	Internal	89	60,404	12,860	3 771,000	0,250
	External	94	63,191	12,255		
Resistance to Change	Internal	89	22,551	5,671	4 164,500	0,959
	External	94	22,511	5,664		
Ideas Leadership	Internal	89	17,101	5,229	3 719,500	0,194
	External	94	18,309	4,621		
Openness to Experience	Internal	89	17,348	5,436	3 723,500	0,197
	External	94	18,617	4,877		
Taking Risk	Internal	89	6,506	2,035	3 942,500	0,496
	External	94	6,777	2,080		

In order to determine whether to show a significant difference mean scores of individual innovation and its dimensions (resistance to change, ideas leadership, openness to experience and taking risk) according to the locus of control variables (internal-external) of participants were not statistically significant result of the Mann Whitney-U test. ( $p > 0.05$ ).

## Conclusion

The main purpose of this study is to determine the relationship between individual innovativeness and LOC. The model and hypotheses developed in this context and tested. The result of the analyze all hypotheses were rejected. Tabak, Erkuş & Meydan (2010) also couldn't find any relationship between LOC and individual innovativeness in Turkey. Also research can be tested on a larger sample. In addition, research can be apply, including employees of tourism enterprices.

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