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DEMOGRAPHIC CHARACTERISTICS AND PERCEIVED VALUE DIFFERENCES IN MOBILE BANKING: AN EMPIRICAL STUDY IN TURKEY*

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Öz

This study aims to determine whether demographic variables such as age, gender, income and education affect the experiential value perceptions of mobile banking users. The data collected in Turkey in August 2018 from 390 mobile banking users were analyzed by the SPSS statistical analysis program and tested through t-test and variance (ANOVA) analysis methods. The results indicated that there are no significant differences in value perceptions among mobile banking users in terms of gender and age variables. However, mobile banking users differ significantly concerning their personal and sensory value perceptions with a view to their income and education levels. This study revealed that there is a statistically significant relationship between the income and education levels of mobile banking users and their personal and sensory value perceptions. To increase the personal and sensory value perception of low income and low educated mobile banking customers, the banks should develop user-friendly, customizable and appealing mobile banking applications. This research is one of the rare studies exploring the relationship between the perception of value and demographic variables (gender, age, income, education level) within the context of mobile banking. If how consumers' perceptions of value differ in terms of demographic variables is determined, it might

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be possible to design a successful market segmentation for customers, mobile marketing mix and strategy that improve satisfaction and loyalty in mobile banking.
Keywords Mobile Marketing, Mobile Banking, Demographic Characteristics, Perceived Value.

MOBİL BANKACILIKTA DEMOGRAFİK ÖZELLİKLER VE ALGILANAN DEĞER FARKLILIKLARI: TÜRKİYE'DE AMPİRİK BİR ÇALIŞMA

Öz

Bu çalışma yaş, cinsiyet, gelir ve eğitim gibi demografik değişkenlerin mobil bankacılık kullanıcılarının deneyimsel değer algılarını etkileyip etkilemediğini belirlemeyi amaçlamaktadır. Ağustos 2018'de Türkiye'de 390 mobil bankacılık kullanıcısından toplanan veriler, SPSS istatistiksel analiz programı kullanılarak t-testi ve varyans (ANOVA) analiz yöntemleri ile test edilmiştir. Sonuçlar, mobil bankacılık kullanıcıları arasında cinsiyet ve yaş değişkenleri açısından değer algılarında anlamlı bir farklılık olmadığını göstermektedir. Ancak, mobil bankacılık kullanıcıları gelir ve eğitim düzeyleri bakımından kişisel ve duyusal değer algıları yönüyle önemli ölçüde farklılık göstermektedir. Bu çalışma, mobil bankacılık kullanıcılarının gelir ve eğitim düzeyleri ile kişisel ve duyusal değer algıları arasında istatistiksel olarak anlamlı bir ilişki olduğunu ortaya koymaktadır. Bankalar düşük gelirli ve düşük eğitimli mobil bankacılık müşterilerinin kişisel ve duyusal değer algısını artırmak için kullanıcı dostu, özelleştirilebilir ve duyusal yönden cazip mobil bankacılık uygulamaları geliştirmelidir. Bu araştırma, mobil bankacılık bağlamında değer algısı ile demografik değişkenler (cinsiyet, yaş, gelir, eğitim düzeyi) arasındaki ilişkiyi araştıran nadir çalışmalardan biridir. Tüketicilerin değer algılarının demografik değişkenler açısından farklılıkları belirlenebilirse başarılı bir pazar bölümlemesi ile mobil bankacılıkta memnuniyet ve sadakati artıran pazarlama karması ve stratejilerini tasarlamak mümkün olabilir.
Anahtar Kelimeler: Mobil Pazarlama, Mobil Bankacılık, Demografik Özellikler, Algılanan Değer.

Introduction

Rapid advancements in mobile communication technologies have made it possible for customers to experience mobile marketing on mobile devices. The severely competitive banking sector has also been profoundly affected by radical changes in a modern digital marketing environment. The banking sector has made a significant leap forward worldwide in mobile marketing by adapting to current technological innovations introducing internet banking and mobile

banking, respectively. Mobile banking is a popular self-service mobile marketing tool that allows financial transactions anytime and anywhere. Fintech analyst Juniper Research (2018) emphasized that over 2 billion users will access retail banking services via smartphones, tablets, PCs and smartwatches in 2018, representing nearly 40% of the global adult population. The accelerated adoption in India and China shows that mobile banking users consist of 50% of the global banked population.

Compatibility with customer lifestyle (Verissimo, 2016), the rise in consumer welfare (Jain, 2017), the development of mobile communication technology (Barjaktarovic, 2016), the diffusion of the internet and smartphones (Shankar *et al.*, 2010) coupled with the cost-saving efforts of financial sector executives (Flavian, 2006) sustain the spread of mobile banking usage.

To the extent that customers view service as fairly homogeneous, they care about the service less than the provider. Traditionally, the price has operated as the major determinant of buyer choice. The alternative to the price competition is to develop a differentiated offer or delivery (Kotler, 2001). As in all service sectors, a positive and value-driven customer journey should be designed by banks at all digital touchpoints to achieve customer satisfaction and loyalty. Indeed, Doyle (2003) contends that the basic idea of marketing is to offer customers a superior value. Value-based marketing is a management process that maximizes the shareholder value by designing strategies that will provide the leverage of differentiating by establishing trust-based relationships with customers. The value-centered marketing approach is built on three basic pillars. First, customers prefer firms that offer them the best value package. Secondly, customers purchase solutions to their requirements, not only the products. Thirdly, it is vital to have a loyal customer base by forging a long-term relationship.

To prevail in a fierce competitive financial business environment, in addition to maximizing the delivery of value, the banks should also reduce costs. Mobile banking is the most cost-effective alternative distribution channel with a $ 0.01 cost per transaction (bankingly.com). This makes it imperative for the banking sector decision-makers to encourage channel migration from traditional delivery channels to the low-cost internet and mobile banking alternative distribution channels. Thus, the banking sector in Turkey has witnessed steady growth concerning mobile banking users in the past few years. According to data from The Banks Association of Turkey (TBB), in December 2019 there are

47.8 million active individual mobile banking users (58% of the country's population) whose number increased by 25% compared with the same period of the previous year. The rapid digitalization in the last decade had some repercussions for the financial sector workforce both in Turkey and the World. Owing to the digitalization from 2015 until today, the number of bank branches in Turkey decreased by 1.018, while the number of employees in the sector decreased by 11.698 (TBB, 2020). The current success in mobile banking has been identified as one of the major factors that caused a record number of bank branch office closures in the USA (Minjoon & Palacios, 2016).

This paper aims to fill a research gap by studying the relationship between the demographic variables and experiential value dimensions. To the extent of the author's knowledge, the relationship between experiential value and the demographic differences in mobile banking remains underexplored. It is important to explore the value perception differences of mobile banking customers concerning their demographic characteristics to create unique or memorable experiential value packages for consumers. Because, if the difference in perception of value in terms of demographic variables is determined, it might be possible to design a successful mobile marketing mix and strategy that improve loyalty and satisfaction in mobile banking.

The remainder of the paper is structured as follows: the literature review of experiential value, mobile banking and mobile banking experience are presented next. This is followed by the methodology, the findings, the results, discussion and suggestions for future studies.

A. Literature Review

1. Experiential Value

In contrast to the traditional marketing point of view, Schmitt (1999) states that consumers should be considered as both emotional and rational decision-makers. Schmitt (2010) maintains that "experience" as a concept refers to the perceptions, emotions, and ideas that consumers get when they come across products and brands in the markets during consumption activities. Pine & Gilmore (1998) argue that experience occurs when a company uses services as the stage, and goods as decor, to deal with customers in a way to create a memorable event. Services have increasingly become commoditized; therefore experiences have emerged as the fourth economic offering which Pine & Gilmore call as "the experience economy". Gilmore & Pine (2002) underline the

fact that the experience itself is marketing. A successful experience needs to be engaging, robust, compelling and memorable.

According to Zeithaml (1988), the consumer point of view definitions of value can be grouped into four: Value is low price, value is whatever the consumer demands in a product, value is the quality consumer gets for the price paid, and value is what the consumer gets for what is given. In this definition, Zeithaml implies that the consumer's perception of value is a combination of the costs incurred in obtaining the product or service and the benefits gained by it. In their pioneering study which conceptualized experience in marketing literature, Holbrook & Hirschman (1982) contrasted the prevailing information processing model with an experiential view that focused on the symbolic, hedonic, and esthetic nature of consumption, namely the pursuit of fantasies, feelings, and fun. He argued that consumer research should concentrate on the moral aspects (cheerfulness, sociability, elegance) rather than the utilitarian benefits of conventional goods and services.

Sheth *et al.* (1991) argue that value has functional, social, emotional, epistemic (obtaining information) and conditional dimensions. Lush & Vargo (2006) state that in the services sector, the customer is a part of the value creation process during consumption. This is termed as "co-creation of value". Value is interactional and determined solely by the beneficiary. As value shifts to experiences, the market is becoming a forum for conversation and interactions between consumers, consumer communities, and firms. The dialogue, access, transparency, and understanding of risks-benefits are central to the next practice in value creation. To exemplify co-creation of value in the financial sector, when customers use financial self-service technologies such as ATMs, internet and mobile banking, they become part of the service formation process.

Experiential value is a perceived, relativistic preference for product attributes or service performances arising from interaction within a consumption setting that facilitates or blocks the achievement of customer goals or purposes (Mathwick *et al.*, 2002). According to Medberg & Heinonen (2014), the perceived value in the banking service is not under the direct control of the banks. Conversely, the values derived in financial services are also affected by the customer's lifestyle and feelings and past experiences. Schmitt (1999) states that there are five different types of customer experiences what he calls "the experiential modules". The experiential modules to be managed in Experiential Marketing include sensory experiences (sense), affective experiences (feel),

creative cognitive experiences (think), physical experiences, behaviors and lifestyles (act), and social-identity experiences that result from relating to a reference group or culture (relate). Varshneya & Das (2017) argue that there are four distinct dimensions of value which were termed as cognitive value, hedonic value, social value and ethical value.

2. Mobile Banking

Mobile banking is a service provided by financial institutions that allow its customers to conduct financial transactions using a mobile phone or tablet, and software called an app (George, 2016). According to Sharma (2011), internet banking and mobile banking are the equivalents of the transformation of the "brick and mortar" physical stores into the "click and order" virtual stores in the financial sector.

When the literature in the field of mobile banking is explored, the studies primarily focus on behavioral intent, the adoption, the service quality, the risks and benefits of e-banking, internet banking and mobile banking (Çoban & Demirhan, 2019b). In the review of the marketing literature, there is ample evidence that demographic differences affect the adoption of mobile banking (Abayomi *et al.,* 2019; Alkhaldi & Kharma, 2019; Laforet & Li, 2011; Ntseme *et al.,* 2016). Among other factors, including demographic variables, perceived usefulness, perceived ease of use and perceived credibility are the main important determinants of e-banking adoption (Jalal *et al.,* 2011). If demographic variables are effective in the adoption of mobile banking, it can be argued that demographic characteristics may also be effective over the value perceptions of mobile banking customers. Because consumers adopt a product or get service with the ultimate motivation to acquire value.

In studies concerning service quality perceptions, significant differences were found out among electronic banking users in terms of age and income demographic variables (Nasuminnisa *et al.,* 2014). A high-quality service means that perceived value for that service is higher than expected by the customer or that service has superior value. Therefore, there is a relationship between service quality and perceived value. Since perceived quality influences perceived value (Zeithaml, 1988), the relationship between service quality and demographic characteristics can also be established between the perception of value and demographic characteristics.

Besides, demographic variables (age, gender, education) have a significant effect on the perceived satisfaction of mobile banking applications (Mkpojiogu *et al.*, 2016). In Gupta & Panchal's study (2019) satisfaction level in mobile banking varies between males and females, but there is no difference in the satisfaction regarding the education level. Moreover, age, education, and income level have a significant effect on customer loyalty towards mobile banking (Sindwani, 2017). Findings also reveal that the experiential value dimensions affect both satisfaction and loyalty in mobile banking. Furthermore, consumer satisfaction has a positive effect on consumer loyalty in mobile banking (Demirhan, 2019). These results indicate that the higher the perception of value, the greater the satisfaction and loyalty in mobile banking.

3. Mobile Banking Experience

Examining the mobile banking applications of 30 major banks worldwide from an experiential perspective, Zarifopoulos & Economides (2009) stressed the importance of creating an effective mobile banking service design. What is so important in mobile banking is the creation of a unique experience for consumers to gain a competitive advantage. Thus, the development of mobile banking services is a basis for creating new and value-added services for customers (Laukkanen & Lauronen, 2005).

There are numerous studies on both physical stores and e-stores that demographic differences affect experiential value perceptions of customers. A study in Indian retail stores (Deshwal, 2016) revealed that differences in age, gender, education level, and family income affected the customers' experience dimensions of peace of mind, moments-of-truth, outcome focus, and product experience. A study in Turkey by Yıldırım *et al.* (2015) on furniture stores found out the effects of age, gender and education on the perceptions of customers with regard to furniture store atmosphere.

By mobile banking experience, consumers gain functional, emotional, personal, assurance, cognitive, social and sensory values. Sensory experience value in mobile banking is to attain a positive customer experience on issues such as visual appeal, color matching, easy-to-read text, sound and image clarity. Emotional experience value in mobile banking is the arousal of happiness and feeling safe and comfortable during mobile banking usage. Cognitive experience value in mobile banking is related to the economic benefits, price reductions, having the experience anytime and anywhere. Relational experience value in mobile banking is the value of the relationship

obtained in terms of the self, symbolic consumption, socialization and helping others. Behavioral experience value in mobile banking is the use of mobile banking regardless of time and place suitable for free lifestyle. The functional experience value includes the simplicity and user-friendly design that even consumers distant from technological products can use. The assurance value is to provide a safe and secure user experience away from all risks, especially financial risks (Demirhan, 2019).

Customers are value maximizers (Kotler, 2001). If customers believe that the perceived value in mobile banking is high, it is quite likely that they adopt mobile banking. Besides, the perceived benefits and the perceived sacrifices have both effects on perceived value in mobile banking which implies that perceived benefits play a more important role in determining the value of mobile banking (Xiong, 2013). According to Wu & Tseng (2015), there is a positive relationship between experiential marketing practices in an online shop (therefore, with mobile banking experience) and customer loyalty. The perception of experiential marketing differs significantly (gender, marital status, income) by demographic variables. The perception of experiential value differs in terms of gender and age variables in online travel website users (Datta & Vasantha, 2016). There is a strong relationship between perceived experiential value and satisfaction (Malik, 2012). Satisfaction in mobile banking causes behavioral intent (Chen & Chen, 2010). The experiential value affects satisfaction and loyalty at all degrees of trust (low, medium or high). Trust has effects on satisfaction and loyalty. Increasing the experiential values of mobile banking might boost trust in mobile banking usage (Çoban & Demirhan, 2019a).

To sum up, it is obvious that customers differ significantly in terms of their demographic profile (age, gender, education, income) regarding the adoption, service quality perception, satisfaction and loyalty in mobile banking. Within this perspective, it is argued in this research that the experiential value perceptions of mobile banking customers are affected by their demographic characteristics such as age, gender, education and income.

B. Methodology

1. The Sample of the Research

The research was carried out on individual consumers in August 2018 who use mobile banking living in the city center of Nevsehir, Turkey. Besides, to attain the most accurate results, a non-random purposive sampling method

was employed in the study. In a non-random purposive sampling method, the researcher includes the respondents in the survey who use and who are familiar with the subject (Nakip, 2013). Therefore, the questionnaire was applied to consumers who use mobile banking. 500 questionnaires were distributed to the respondents. Of the 454 questionnaires returned, 390 suitable were analyzed.

2. The Data Collection Method

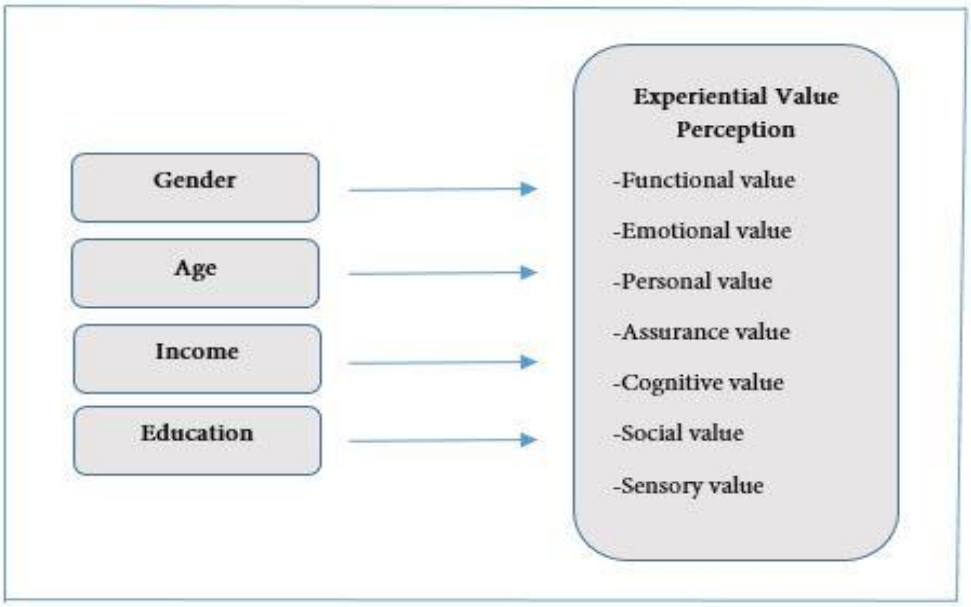
As a data collection tool, the questionnaire was prepared which includes expressions of experiential values, satisfaction and loyalty in mobile banking. The questionnaire was pre-tested and revised to ensure content validity. The questionnaire included multiple and two-choice questions, including the demographic characteristics of the participants. The expressions concerning experiential value dimensions, trust, satisfaction and loyalty were presented on a five-point Likert scale ranging from "1: Strongly Disagree" to "5: Strongly Agree". The studies of various authors were used in the preparation of the statements in the survey that were adapted to mobile banking (Arnold & Reynolds, 2003; Jun & Palacios, 2016; Mathwick *et al.*, 2001; Parasuraman *et al.*, 2005; Thakur, 2014; Zeithaml *et al.*, 2000).

The data were analyzed by the SPSS statistical analysis program. The perceived experiential value dimensions in mobile banking (functional, emotional, personal, assurance, cognitive, social and sensory value) were determined as a result of the exploratory factor analysis. (Demirhan, 2019; Çoban & Demirhan, 2019b). An independent t-test was conducted to determine the differences in the perception of the experiential value of the individual mobile banking users by gender. Besides, ANOVA analysis was applied to determine the differences in the perception of the experiential value of the individual mobile banking users concerning their age, education and income variables.

3. The Purpose, Model and Hypotheses

The purpose of this study is to determine the differences of experiential value perceptions of mobile banking customers in Turkey regarding their demographic characteristics (gender, age, income and education). In other words, with this study, it was tried to find out whether demographic differences were effective in the value perceptions of mobile banking customers' user experience. In this framework, the research model is displayed in Figure 1 below.

Figure 1. Research Model



The following hypotheses were posited as a result of the arguments mentioned in the study:

Hypothesis 1: Experiential value perceptions of mobile banking users differ significantly between males and females.

Hypothesis 2: Experiential value perceptions of mobile banking users differ significantly among different age groups.

Hypothesis 3: Experiential value perceptions of mobile banking users differ significantly among different income groups.

Hypothesis 4: Experiential value perceptions of mobile banking users differ significantly among different education levels.

All these hypotheses have seven sub-hypotheses. For example, in $H1_{.1}$: functional value, $H1_{.2}$: sensory value, $H1_{.3}$: emotional value, $H1_{.4}$: personal value, $H1_{.5}$: assurance value, $H1_{.6}$: cognitive value, $H1_{.7}$: social value.

C. Findings

1. Descriptive Statistics

Before the descriptive statistics, Cronbach's Alpha test was conducted which was found to be 0.927 meaning that the form was reliable. The

demographic statistics of the respondents are presented in Table 1.

Table 1. Demographic Statistics of Mobile Banking Users

Education	Frequency	%	Bank Type	Frequency	%
High School and Before	69	17.7	Public	221	56.7
Vocational School	68	17.4	Private	151	38.7
Faculty	185	47.4	Islamic Banking	7	1.8
Master/Doctoral	68	17.5	Public + Private	11	2.8
Total	390	100	Total	390	100
Income	**Frequency**	**%**	**Gender**	**Frequency**	**%**
1.800 TL and Less	73	18.7	Female	156	40
1.801 TL – 3.000 TL	108	27.7	Male	234	60
3.001 TL – 4.500 TL	112	28.7	Total	390	100
4.501 TL and More	97	24.9			
Total	390	100			
Age	**Frequency**	**%**			
25 and Younger	73	18.7			
26 - 40	224	57.4			
41 - 55	88	22.6			
56 and Older	5	1.3			
Total	390	100			

234 (60%) of the participants are male, while 156 (40%) are female. 73 (18.7%) of the participants are 25 years old and below, 224 (57.4%) are between 26 and 40 years old, 88 (22.6%) are between 41 and 55 years old, 5 (%1.3) are 56 years and older. When the education levels of the respondent are analyzed, 69 (17.7%) of the participants are high school and pre-graduates, 68 (17.4%) are of vocational school graduates, 185 (47.4%) are of faculty and equivalent graduates and 68 (17.4%) are masters and doctoral study graduates. 73 (18.7%) of the participants have between 0 -1.800 TL monthly income, 108 (27.7%) have

between 1.801 - 3.000 TL income, 112 (28.7%) have between 3.001 - 4.500 TL income, 97 (24.9%) have an income of 4.501 TL and higher.

2. Data Analysis

a. The Comparison of Experiential Perception of Value by Gender

An independent t-test was conducted to determine the experiential value differences of individual mobile banking users living in Nevsehir by gender. The findings are presented in Table 2.

Table 2. The Comparison of Experiential Value Perception by Gender

Experiential Value Dimensions	Group	n	Mean	sd	F	t	p	Hyp. Accept/ Reject
Functional	Male	233	3.8240	0.75082	1.665	-1.026	0.198	H1.1 = Rejected
	Female	157	3.8997	0.68778				
Sensory	Male	233	3.4750	0.89778	1.856	0.553	0.174	H1.2 = Rejected
	Female	157	3.4268	0.80758				
Emotional	Male	233	3.0694	0.89235	0.893	-0.253	0.345	H1.3 = Rejected
	Female	157	3.0924	0.85826				
Personal	Male	233	3.6702	0.72289	0.140	0.018	0.709	H1.4 = Rejected
	Female	157	3.6688	0.73788				
Assurance	Male	233	3.3748	0.71866	0.034	-0.027	0.854	H1.5 = Rejected
	Female	157	3.3769	0.73529				
Cognitive	Male	233	3,6642	0,85200	1.606	0.907	0.206	H1.6 = Rejected
	Female	157	3,5876	0,79455				
Social	Male	233	3,0547	0,91941	1,801	1,606	0,180	H1.7= Rejected
	Female	157	3,1162	0,82602				

When Table 2 is examined, there is no statistically significant difference between males and females in terms of functional, emotional, personal, assurance, cognitive, social and sensory experiential value dimensions (p> 0.05).

b. The Comparison of Experiential Perception of Value by Age Groups

ANOVA analysis was applied to determine the experiential value perception differences of the individual mobile banking users by age groups living in Nevsehir. The findings are presented in Table 3.

Table 3. The Comparison of Experiential Perception of Value By Age Groups (Anova)

Experiential Value Dimension		Sum of Squares	df	Mean Square	Mean	F	p	Hyp. Accept/ Reject
Functional	Between Gr.	1.474	3	0.491		0.931	0.425	H2.1 = Rejected
	Within Gr.	203.643	386	0.528				
	Total	205.117	389		3.85			
Sensory	Between Gr.	1.088	3	0.363		0.486	0.692	H2.2 = Rejected
	Within Gr.	287.864	386	0.746				
	Total	288.952	389		3.46			
Emotional	Between Gr.	5.641	3	1.880		2.468	0.062	H2.3 = Rejected
	Within Gr.	294.059	386	0.762				
	Total	299.700	389		3.08			
Personal	Between Gr.	2.905	3	0.968		1.839	0.140	H2.4 = Rejected
	Within Gr.	203.267	386	0.527				
	Total	206.172	389		3.67			
Assurance	Between Gr.	1.351	3	0.450		0.857	0.464	H2.5 = Rejected
	Within Gr.	202.812	386	0.525				
	Total	204.163	389		3.38			
Cognitive	Between Gr.	0.243	3	0.081		0.117	0.950	H2.6 = Rejected
	Within Gr.	267.199	386	0.692				
	Total	267.442	389		3.63			
Social	Between Gr.	4.506	3	1.502		1.943	0.122	

	Within Gr.	298.405	386	0.773			H2.7 = Rejected
	Total	302.911	389		3.08		

When Table 3 is examined, it is seen that there are no statistically significant differences among age groups in terms of functional, emotional, personal, assurance, cognitive, social and sensory experiential value dimensions ($p > 0.05$). In ANOVA analysis, LSD (Least Significant Differences) test was used to determine the difference between the age demographic variable and the experiential value perception.

c. The Comparison of Experiential Perception of Value by Income

ANOVA test was applied to determine the experiential value perception differences of the individual mobile banking users living in Nevsehir concerning their education level. The findings are presented in Table 4.

Table 4. The Comparison of Experiential Perception of Value by Income (Anova)

Experiential Value Dimensions		Sum of Squares	df	Mean Square	Mean	F	p	Hyp. Accept/ Reject
Functional	Between Gr.	1.378	3	0.459		0.870	0.456	H3.1 = Rejected
	Within Gr.	203.739	386	0.528				
	Total	205.117	389		3.85			
Sensory	Between Gr.	6.067	3	2.022		2.759	0.042	**H3.2 = Accepted**
	Within Gr.	282.885	386	0.733				
	Total	288.952	389		3.46			
Emotional	Between Gr.	1.098	3	0.366		0.473	0.701	H3.3 = Rejected
	Within Gr.	298.602	386	0.774				

	Total	299.700	389		3.08		
	Between Gr.	7.373	3	2.458		4.772	0.003
Personal	Within Gr.	198.800	386	0.515			**H3.4 = Accepted**
	Total	206.172	389		3.67		
	Between Gr.	.073	3	0.024		0.337	0.799
Assurance	Within Gr.	204.090	386	0.529			H3.5 = Rejected
	Total	204.163	389		3.38		
	Between Gr.	1.465	3	0.488		0.046	0.987
Cognitive	Within Gr.	265.976	386	0.689			H3.6 = Rejected
	Total	267.442	389		3.63		
	Between Gr.	3.512	3	1.171		1.509	0.212
Social	Within Gr.	299.399	386	0.776			H3.7 = Rejected
	Total	302.911	389		3.08		

When Table 4 is examined, it is seen that there are no statistically significant differences between education levels of consumers in terms of functional, emotional, assurance, cognitive and social experiential value dimensions ($p > 0.05$). However, there is a statistically significant difference between personal and sensory experience value and education level ($p < 0.05$). In ANOVA analysis, LSD (Least Significant Differences) test was used to determine the difference between the income variable and the experiential value perception.

Table 5. The Evaluation of Experiential Value Perception by Income Level (Multiple Comparison Table)

Experiential Value Dimensions	Income Level	Income Level	Mean	Mean Difference	Standard Error	p
Sensory Value	1800 TL - Below	1801-3000 TL	3.49	0.21081	0.12971	0.105
		3001-4500 TL		-0.11856	0.12877	0.358
		4501 TL-Over		0.03498	0.13264	0.792
	1801-3000 TL	1800 TL-Below	3.28	-0.21081	0.12971	0.105
		3001-4500 TL		**-0.32937***	0.11545	0.005
		4501 TL-Over		-0.17583	0.11975	0.143
	3001-4500	1800 TL-Below	3.60	0.11856	0.12877	0.358
		1801-3000 TL		**0.32937***	0.11545	0.005
		4501 TL-Over		0.15353	0.11874	0.197
	4501 TL-Over	1800 TL-Below	3.45	-0.03498	0.13264	0.792
		1801-3000 TL		0.17583	0.11975	0.143
		3001-4500 TL		-0.15353	0.11874	0.197
	1800 TL-Below	1801-3000 TL	3.44	-0.15589	0.10874	0.152
		3001-4500 TL		**-0.33280***	0.10795	0.002
		4501 TL-Over		**-0.36371***	0.11120	0.001
Personal Value	**1801-3000 TL**	1800 T-Below	3.59	0.15589	0.10874	0.152
		3001-4500 TL		-0.17692	0.09678	0.068
		4501 TL-Over		**-0.20783***	0.10039	0.039
	3001-4500	**1800 TL-Below**	3.77	**0.33280***	0.10795	0.002
		1801-3000 TL		0.17692	0.09678	0.068

	4501 TL-Over		-0.03091	0.09954	0.756
4501 TL-Over	**1800 TL-Below**	3.80	**0.36371***	0.11120	0.001
	1801-3000 TL		**0.20783***	0.10039	0.039
	3001-4500 TL		0.03091	0.09954	0.756

According to Table 5, it is seen that the sensory value perceptions of the users with an income level of 3001-4500 TL (3.60) are higher than that of mobile banking users with an income level of 1801-3000 TL (3.28). It has been determined that the personal value perceptions of users between 3001-4500 TL (3.77) and 4501 TL (3.80) are higher than those with an income level of 1800 TL and below (3.44) and 1801-3000 TL (3.59).

d. The Comparison of Experiential Perception of Value by Education Level

ANOVA test was applied to detect the differences in the perception of the experiential value of individual mobile banking users living in Nevsehir concerning the level of education. The findings are presented in Table 6.

Table 6. The Comparison of Experiential Perception of Value by Education Level (Anova)

Experiential Value Dimensions		**Sum of Squares**	**df**	**Mean Square**	**Mean**	**F**	**p**	**Hyp. Accept/ Reject**
	Between Gr.	3.452	3	1.151				
Functional	Within Gr.	201.665	386	0.522		2.203	0.087	H4.1 = Rejected
	Total	205.117	389		3.85			
	Between Gr.	6.289	3	2.096				
Sensory	Within Gr.	282.663	386	0.732		2.862	0.037	**H4.2 = Accepted**
	Total	288.952	389		3.46			

	Between Gr.	2.957	3	0.986				
Emotional	Within Gr.	296.743	386	0.769		1.282	0.280	H4.3 = Rejected
	Total	299.700	389		3.08			
	Between Gr.	9.445	3	3.148				
Personal	Within Gr.	196.728	386	0.510		6.177	0.000	**H4.4 = Accepted**
	Total	206.172	389		3.67			
	Between Gr.	0.533	3	0.178				
Assurance	Within Gr.	203.630	386	0.528		0.337	0.799	H4.5 = Rejected
	Total	204.163	389		3.38			
	Between Gr.	0.102	3	0.034				
Cognitive	Within Gr.	267.340	386	0.693		0.049	0.986	H4.6 = Rejected
	Total	267.442	389		3.63			
	Between Gr.	1.926	3	0.642				
Social	Within Gr.	300.985	386	0.780		0.823	0.482	H4.7 = Rejected
	Total	302.911	389		3.08			

When Table 6 is examined; it is seen that there are no statistically significant differences between education levels of consumers in terms of functional, emotional, assurance, intellectual and social experiential value dimensions ($p > 0.05$). However, there is a statistically significant difference between personal and sensory experience value and education level of consumers ($p < 0.05$). In ANOVA analysis, LSD (Least Significant Differences)

test was used to determine the difference between the education demographic variable and the experiential value perception.

Table 7. The Evaluation of Experiential Value Perception by Education Level (Multiple Comparison Table)

Experiential Value Dimensions	Income Level	Income Level	Mean	Mean Difference	Standard Error	p
Sensory Value	**High School**	Vocational Sch.	3.24	-0.12603	0.14623	0.389
		Faculty		**-.33265***	0.12071	0.006
		Master/ Doctoral		-0.22407	0.14623	0.126
	Vocational Sch.	High School	3.36	0.12603	0.14623	0.389
		Faculty		-0.20662	0.12136	0.089
		Master/ Doctoral		-0.09804	0.14676	0.505
	Faculty	**High School**	3.57	**.33265***	0.12071	0.006
		Vocational Sch.		0.20662	0.12136	0.089
		Master/ Doctoral		0.10859	0.12136	0.371
	Master/ Doctoral	High School	3.46	0.22407	0.14623	0.126
		Vocational Sch.		0.09804	0.14676	0.505
		Faculty		-0.10859	0.12136	0.371
Personal Value	**High School**	**Vocational Sch.**	3.36	**-.24062***	0.12199	0.049
		Faculty		**-.41255***	0.10070	0.000
		Master/ Doctoral		**-.39945***	0.12199	0.001
	Vocational Sch.	**High School**	3.60	**.24062***	0.12199	0.049
		Faculty		-0.17192	0.10124	0.090
		Master/ Doctoral		-0.15882	0.12243	0.195
	Faculty	**High School**	3.77	**.41255***	0.10070	0.000
		Vocational Sch.		0.17192	0.10124	0.090
		Master/ Doctoral		0.01310	0.10124	0.897
	Master/ Doctoral	**High School**	3.76	**.39945***	0.12199	0.001

	Vocational Sch.	0.15882	0.12243	0.195
	Faculty	-0.01310	0.10124	0.897

According to Table 7, the sensory value perceptions of faculty graduates (3.60) are higher than those of high school and pre-educated mobile banking users (3.24). Besides, it is seen that the personal value perceptions of vocational school graduates (3.60), faculty graduates (3.77) and master/doctoral graduates (3.76) are higher than the high school and pre-educated mobile banking users (3.36).

Results, Discussion and Suggestions

Mobile banking continues to improve as an innovative and alternative distribution channel to meet the ever-changing expectations of the financial services customers. In the digital era, not only the product or service itself but providing solutions to diverse expectations of the customers and upholding the quality of the digital experience in the online service delivery process seem to be important as well.

In the marketing literature, there have been few studies examining the demographic differences of consumers in terms of the adoption, service quality, satisfaction and loyalty of mobile banking customers. Therefore, the findings of these limited numbers of researches were compared with this research which studies the relationship between demographic differences and experiential value perceptions of mobile banking customers.

As a consequence of this study, no significant differences were found out between gender and age demographic variables and mobile banking experiential value perception. However, this study concluded that there is a statistically significant relationship between the income and education level of mobile banking users and their personal and sensory value perceptions. In other words, as the level of income and education of customers increases, the personal and sensory value perceptions of mobile banking users increase as well. This relationship might be explained, namely by time and effort saving benefits of mobile banking for highly educated and high-income customers. Yet, as for the relationship between the income and education levels of customers and their functional, emotional, social, cognitive and assurance perceptions of value, no significant relationship was determined.

Various studies emphasize the importance of sensory value and personalization in marketing experiences which is compatible with this research. Berry *et al.* (2002) stress that the "clues" that make up a customer experience concerns both the actual functioning of the good or service and the emotions, the smells, sounds, sights, tastes and textures of the good or service, as well as the environment in which it is offered. There is a relationship between sensory impressions regarding touristic destination experiences and destination loyalty (Agapito *et al.,* 2017). The income of customers and online sensory value perception has a significant relationship (Wu & Tseng, 2015). The service personalization has effects on customer satisfaction and e-loyalty, and customer satisfaction has a positive effect on e-loyalty in the internet banking context (Tong *et al.,* 2012). Personalization increases switching costs as well as satisfaction, which results in further use of social network sites (Park, 2014).

In Laforet & Li's study (2011), age was not found to be an effective factor in the use of mobile banking which supports our study. However, unlike this study, no significant relationship was found out between the education variable and the use of mobile banking. However, in a study conducted by Ntseme *et al.* (2016), a positive relationship was determined between mobile banking adoption and gender and age variables which contradicts this research. According to these authors, male and young people are prone to using mobile banking. Moreover, Wu & Tseng (2015) determined that gender and marital status have a significant impact on the experiential value perception of customers. In a study by Abayomi *et al.* (2019), the results revealed that while gender, age and income influence the adoption of mobile banking services, the education level has no impact. Alkhaldi & Kharma's study (2019) found out that users' demographic characteristics (age, education, income), except for gender, played a role in moderating the adoption of m-banking services. Nasuminnisa *et al.* (2014) argue that regarding service quality perceptions, significant differences were found out among electronic banking users in terms of age and income demographic variables.

It is believed that this study will contribute to future researches on similar topics since this is one of the rare studies examining the relationship between the perception of value in mobile banking and demographic variables (gender, age, income, education). As a result of the findings of this study, the following recommendations are made to the practitioners:

As education and income levels decrease, so does the perception of experiential value in mobile banking. The reasons behind this relationship worth more in-depth research. It is crucial to understand the reservations and expectations of users with a low level of education to increase the value perception and to make educative and informative studies for this group. Based on these findings, it is possible to increase the perception of the experiential value of the customers with low-education and low-income levels by developing a customizable and sensorily appealing mobile banking applications.

There is no doubt that digitalized consumers expect a satisfactory experience during their customer journey that can be met by a holistic approach through omnichannel banking services. To this end, the artificial intelligence (AI) and the augmented reality (AR) are currently the two major fintech innovations to further the quality of customer experience in mobile banking. How can they contribute specifically to personal and sensory value perceptions of low-income and low-educated mobile banking customers?

To begin with, the virtual assistants (digital assistance services) of chatbot solutions powered by artificial intelligence (AI) may be used to provide instant transactional support. The voice command and voice recognition technologies, personalized reminders and alerts, automated transactions, saving and spending advice via data analytics may enhance their perception of value. By analyzing these customers, creating investment offers suitable for their risk profile may increase their perception of value. Similarly, devising virtual portfolios, developing in-built services that provide market tracking within mobile banking applications may be attractive to low-educated and low-income customers.

In addition to personalization, promoting visual appeal may facilitate the use of mobile banking as well. The colors, the contrasts, shapes, pictures, fonts and visual balance of a mobile banking app design that is attractive to five senses are of great importance. By creating innovative and immersive customer experience solutions such as ergonomic navigation, scanning debit/credit cards with the smart phone's camera, instant payment methods, social platforms, informative and educative financial e-learning solutions and marketing campaigns through augmented reality and artificial intelligence, the banks may entice low-income and low-educated customers. Last but not least, to ask for rating and evaluating mobile banking menus by customers in terms of personalization and sensory features at the end of the transaction may be useful

within the context of developing a benchmark mobile banking app. It must be noted that the whole suggestions to increase the value perceptions of low-income and low-educated customers are also valid for high-income and high-educated customers.

Since the perception of experiential value regarding mobile banking has not been explored enough, it may be recommended researchers to study on understanding why customers' perceptions of value differ in mobile banking concerning their income and education levels. The expectations of mobile banking users with low/high income and low/high education level might be studied as well.

The fact that the data were obtained in Nevsehir city center in August 2018, which is a short period, is among the limitations of the study. The survey was carried out on only the individual mobile banking customers. Therefore, it should be supported by studies on commercial and corporate mobile banking users in different cities and countries, and in different periods.

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