

The Effect of Text, Image and Video-Based Product Review Presentation Formats on Online Purchasing Intention ¹

Zübeyir ÇELİK ² - Aykut KABAK ³ - Aypar USLU ⁴

Submitted by: 09.12.2021

Accepted by: 05.04.2022

Article Type: Research Article

Abstract

This study aims to analyze the effect of product reviews shared by consumers in text-, image- and video-based formats on e-commerce websites on online purchasing intention. To this end, selected scale items were adapted and three different online surveys were designed for text- (Study-1), image- (Study-2), and video (Study-3)-based product review presentation formats. The research data (Study-1:207, Study-2:209, and Study-3:211) are collected from different participants through these three online surveys. The results of the regression analysis indicate that text-, image- and video-based product review presentation formats; and perceived review helpfulness, perceived review credibility, and positive perceived product understanding caused by these three product review presentation formats positively affect the online purchase intention. However, video-based product review presentation and positive perceived product understanding, perceived review credibility, and perceived review helpfulness caused by this format affect the online purchase intention more positively. The study provided implications and future research directions.

Keywords: Online Product Review Presentation Formats, Online Purchasing Intention, E-Commerce

Atıf: Çelik, Z., Kabak, A. ve Uslu, A. (2022). the effect of text, image and video-based product review presentation formats on online purchasing intention. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 22(2), 489-516.

¹ Within the scope of this study, the ethics committee permission was obtained with the decision of the Social and Human Sciences Publication Ethics Committee of Van Yüzüncü Yıl University, dated 23/11/2021 and numbered 2021/18-09.

² Van Yüzüncü Yıl University Erciş Faculty of Business Administration Department of Business Administration, zubeyircelik@yyu.edu.tr, ORCID: 0000-0003-1692-9378

³ Van Yüzüncü Yıl University Erciş Vocational School Department of Accounting and Tax, aykutkabak@yyu.edu.tr, ORCID: 0000-0001-6560-3011

⁴ Marmara University Faculty of Business Administration Department of Business Administration, auslu@marmara.edu.tr, ORCID: 0000-0002-6994-9367

Metin, Resim ve Video-Tabanlı Ürün İnceleme Sunum Formatlarının Online Satın Alma Niyetine Etkisi

Zübeyir ÇELİK⁵ - Aykut KABAK⁶ - Aypar USLU⁷

Başvuru Tarihi: 09.12.2021

Kabul Tarihi: 05.04.2022

Makale Türü: Araştırma Makalesi

Öz

Bu çalışma, tüketiciler tarafından e-ticaret sitelerinde metin, resim ve video tabanlı formatlarda paylaşılan ürün incelemelerinin online satın alma niyetine etkisini incelemeyi amaçlamaktadır. Bu amaçla seçilen ölçek maddeleri uyarlanmış ve metin- (Çalışma-1), resim- (Çalışma-2) ve video (Çalışma-3) tabanlı ürün inceleme sunum formatları için üç farklı online anket tasarlanmıştır. Araştırma verileri (Çalışma-1:207, Çalışma-2:209 ve Çalışma-3:211) bu üç online anket aracılığıyla farklı katılımcılardan toplanmıştır. Regresyon analizinin sonuçları, metin, resim ve video tabanlı ürün inceleme sunum formatlarının; ve bu üç ürün inceleme sunum formatının neden olduğu algılanan inceleme yardımseverliği, algılanan inceleme güvenilirliği ve olumlu algılanan ürün anlayışının, online satın alma niyetini olumlu yönde etkilediğini göstermektedir. Bununla birlikte, video tabanlı ürün inceleme sunumu ve bu formatın neden olduğu olumlu algılanan ürün anlayışı, algılanan inceleme güvenilirliği ve algılanan inceleme yardımseverliği, online satın alma niyetini daha olumlu etkilemektedir. Çalışma, çıkarımlar ve gelecekteki araştırma yönergeleri sağlamıştır.

Anahtar Kelimeler: Online Ürün İnceleme Sunum Formatları, Online Satın Alma Niyeti, E-Ticaret

⁵ Van Yüzüncü Yıl Üniversitesi Erciş İşletme Fakültesi İşletme Bölümü, zubeyircelik@yyu.edu.tr, ORCID: 0000-0003-1692-9378

⁶ Van Yüzüncü Yıl Üniversitesi Erciş Meslek Yüksekokulu Muhasebe ve Vergi Bölümü, aykutkabak@yyu.edu.tr, ORCID: 0000-0001-6560-3011

⁷ Marmara Üniversitesi İşletme Fakültesi İşletme Bölümü, auslu@marmara.edu.tr, ORCID: 0000-0002-6994-9367

Introduction

Until recently, consumers could share their product reviews on e-commerce websites only in text format. However, some e-commerce websites have recently started allowing consumers to share these reviews in text, image and video formats. For example, Amazon's e-commerce website, which started the first e-commerce shopping, allows its consumers to share their product reviews in text, image and video formats.

Online product reviews are indispensable to e-commerce websites (Yoo and Kim, 2014), since online product reviews may appear as pivotal for perceived ease of use and perceived usefulness of reviews, positive attitude towards reviews (Chau, Au and Tam, 2000), consumer engagement (Park, Lee and Han, 2007), mood (Park, Lennon and Stoel, 2005; Park, Stoel and Lennon, 2008), website familiarity (Jiang and Benbasat, 2007), perceived website quality (Flavián, Gurrea and Orús, 2009), perceived website usefulness (Jiang and Benbasat, 2007), positive attitudes towards website design and use (Hong, Thong and Tam, 2004), perceived website risk (Park et al., 2005), information search time (Hong et al., 2004), information acquisition (Fang, Brzezinski, Watson, Xu and Chan, 2004), the amount of information about the product (Jiang and Benbasat, 2007; Park et al., 2008), product recall (Hong et al., 2004), positive attitudes towards the product (Kim and Lennon, 2008; Park et al., 2008), perceived product quality (Blanco, Sarasa and Sanclemente, 2010; Wang and Dai, 2013), seller reputation (Wang and Dai, 2013), purchasing intention (Kim and Lennon, 2008; Park et al., 2005; Park et al., 2007; Park et al., 2008; Wang and Dai, 2013; Xu, Chen and Santhanam, 2015; Yoo and Kim, 2014), online shopping (Chau et al., 2000), consumer shopping performance (Li, Wei, Tayi and Tan, 2016) and consumers' intentions to revisit (Jiang and Benbasat, 2007).

Prior research has investigated the presentation formats of online product reviews. Nevertheless, few studies have examined the relationship between online product reviews in text, image and video formats and online purchasing intention (Xu et al., 2015). This current study examines the impact of consumers' shared reviews of product experiences on e-commerce websites, in text, image, and video formats, on online purchase intention. At the same time, this study examines the effects of positive perceived product understanding, perceived review helpfulness, and perceived review credibility as a result of these formats on online purchase intention. The findings of this study are expected to explain the relationship between online product review presentation formats and online purchase intention. In addition, the findings of this study are expected to explain whether perceived review helpfulness, perceived review credibility, and positive perceived product understanding in the context of online review presentation formats are associated with online purchase intention. Moreover, the findings identify the online product review presentation format among text-, image- and video-based online product review presentation formats, that is most related to online purchasing intention. Based on these findings, this study, considering its limitations, concludes with suggestions for scientific research.

Literature Review

The information technology makes it possible to make beneficial information presentations (Çelik and Kabak, 2020; Fang et al., 2004). The Media/Information Richness Theory (Daft and Lengel, 1986) proposes that the amount of verbal and non-verbal cues or stimulus processing, instant feedback, natural communication, and the ability to infuse the message through personal feelings are greater in rich media rather than plain media. The Dual Coding Theory (Paivio, 1986) argues that visual imagery helps learning more compared to verbal

associations as it is encoded in memory both visually and verbally. Based on these theories, several research investigated the relationship between the presentation formats of online product reviews such as static image, video-without-narration, video-with-narration, virtual-product-experience (Jiang and Benbasat, 2007), visual-verbal (Kim and Lennon, 2008), image-text, text-only (Hong et al., 2004) and text-voice/visual-auditory (Fang et al., 2004) - and consumer perception and/or behaviors. However, based on information technology, the effect of useful online information presentations shared in text, image and video formats on consumer perceptions (perceived review helpfulness, perceived review credibility and perceived product understanding) and purchasing behavior is tested in this study.

Review Presentation Formats

In this current study, text-based, image-based, and video-based product information presentation formats are defined as information dissemination and acquisition tools used to promote product features. Text-based and image-based product information are particularly important pieces of information regarding online product review presentations (Kim, Lee, Choi and Kim, 2021; Li et al., 2016). Also, video-based product information appears to be increasingly used among the major types of information related to online product review presentations (Çelik and Kabak, 2020; Jiang and Benbasat, 2007; Xu et al., 2015). These review presentation formats are used by consumers not only to share their product experiences but also to gather information about the product (Li et al., 2016; Xu et al., 2015). According to media theories, these rich information presentations have an impact on consumers' perceptions and purchasing behaviors (Xu et al., 2015). Therefore, online product review presentation formats are reported to influence online purchase intention (Kala and Chaubey, 2018; Xu et al., 2015; Obiedat, 2013; Kim and Lennon, 2008; Park et al., 2005). As a result, based on previous studies, it was predicted that text-based, image-based, and video-based product presentation formats would affect purchase intention, and H_{1a}, H_{1b}, and H_{1c} hypotheses were developed.

H_{1a}: Text-based product review presentation format will positively influence online purchase intention.

H_{1b}: Image-based product review presentation format will positively influence online purchase intention.

H_{1c}: Video-based product review presentation format will positively influence online purchase intention.

Digital content is defined as information and experiences that provide value for users (Kim et al., 2010). As a type of digital content, online product reviews can have a significant impact on consumer perceptions in the purchasing decision process (Mudambi and Schuff, 2010; Xu et al., 2015). More specifically, the quantity and quality of reviews (Park et al., 2007) and the review presentation format (Park et al., 2005) are important to consumers. Thus, it is reported that online product review presentation formats have a positive and significant impact on perceived review helpfulness (Liu and Du, 2019; Mudambi and Schuff, 2010). As a result, audio/video and text/picture testimonial ads on retail websites can have a significant impact on consumer behavior (Appiah, 2006). Therefore, H_{2a}, H_{2b}, H_{2c} were developed.

H_{2a}: Text-based product review presentation format will positively influence the perceived of helpfulness review.

H_{2b}: Image-based product review presentation format will positively influence the perceived of helpfulness review.

H_{2c}: Video-based product review presentation format will positively influence perceived review helpfulness.

The term experiential learning is expressed as a particular form of learning from life experience (Kolb, 2014). In experiential learning, it is stated that the number of product-related experiences (familiarity), learning motivation, and uncertainty of the information environment shape trust/conviction (Hoch and Deighton, 1989). Consumers are likely to rely on experiential content in text-based, image-based, and video-based online product presentation formats (Xu et al., 2015). Different product presentation formats have a significant impact on consumer perception of information quality (or content quality) in online information reviews (Flavián et al., 2009). It is reported that perceived review credibility is affected by online product review presentation formats (Xu et al., 2015). As a result, product presentation modes can have an impact on consumers' perceptions of information quality (Flavián et al., 2009). Accordingly, H_{3a}, H_{3b}, and H_{3c} have been developed.

H_{3a}: Text-based product review presentation format will positively influence perceived review credibility.

H_{3b}: Image-based product review presentation format will positively influence perceived review credibility.

H_{3c}: Video-based product review presentation format will positively influence perceived review credibility.

Mental imagery refers to the cognitive process in which multi-sensory information (or experience) is represented in an individual's working memory in terms of ideas, feelings, and memories (MacInnis and Price, 1987; Yoo and Kim, 2014). Mental imagery and mental imagery quality resulting from product presentation have a positive and significant correlation with positive emotion (Yoo and Kim, 2014). Thus, it is argued that online product review presentation formats have a positive and significant impact on perceived product understanding (Liu and Du, 2019; Overmars and Poels, 2015; Blanco et al., 2010; Jiang and Benbasat, 2007). It is known that the presentation of perceived product information affects consumers' perceptions of product quality (Wang and Dai, 2013). Based on this, H_{4a}, H_{4b}, and H_{4c} were developed.

H_{4a}: Text-based product review presentation format will positively influence perceived product understanding.

H_{4b}: Image-based product review presentation format will positively influence perceived product understanding.

H_{4c}: Video-based product review presentation format will positively influence perceived product understanding.

Perceived Review Helpfulness

In this study, perceived review helpfulness is defined as the perceived usefulness of shopping experiences that some consumers share with other consumers using text-based, image-based, and/or video-based product presentation formats. Perceived review helpfulness review is consumers' subjective evaluations (Mudambi and Schuff, 2010). It is possible to identify whether the product review presented in the relevant format is useful by looking at the positive (yes) or negative (no) ratings of consumers about this review (Chua and Banerjee, 2016).

Shared useful shopping experiences can help other consumers compare shopping alternatives and make better shopping decisions (Flavián et al., 2009).

Review helpfulness means perceived diagnosticity of review in the context of informed purchasing decision making (Liu and Du, 2019; Mudambi and Schuff, 2010; Overmars and Poels, 2015). Review helpfulness refers to the extent to which reviews help the consumer to make an informed purchase decision (Chua and Banerjee, 2014). Online review helpfulness is defined in relation to content, product, and reviewer signals (Siering, Muntermann and Rajagopalan, 2018). The perceived review helpfulness resulting from online product review presentation formats reportedly influences online purchase intention (Xu et al., 2015). Based on this, H_{5a}, H_{5b}, and H_{5c} were developed.

H_{5a}: Perceived review helpfulness resulting from the text-based product review presentation format will positively influence online purchase intention.

H_{5b}: Perceived review helpfulness resulting from the image-based product review presentation format will positively influence online purchase intention.

H_{5c}: Perceived review helpfulness resulting from the video-based product review presentation format will positively influence online purchase intention.

Perceived Review Credibility

Perceived review credibility in this study is defined as the acceptance of shopping experiences shared by some consumers using text, image, and/or video formats as reliable by other consumers. Review credibility refers to consumer perceptions of both the credibility of the reviewer and the credibility of the message delivered through the online product review presentation format (Mumuni et al., 2020). Product information provided by consumers differs from product information provided by sellers in terms of source credibility, being more subjective and more consumer-oriented (Park et al., 2007). Indeed, reviewer trustworthiness will affect the perception of the review as credible (Mumuni, O'Reilly, MacMillan, Cowley and Kelley, 2020). Therefore, credible information about shopping experiences plays an important role in online purchasing decisions (Overmars and Poels, 2015). Perceived review credibility is affected by reviewer credibility (Mumuni et al., 2020), product type, and online product review presentation format (Xu et al., 2015). Accordingly, H_{6a}, H_{6b}, and H_{6c} have been developed.

H_{6a}: Perceived review credibility resulting from the text-based product review presentation format will positively influence online purchase intention.

H_{6b}: Perceived review credibility resulting from the image-based product review presentation format will positively influence online purchase intention.

H_{6c}: Perceived review credibility resulting from the video-based product review presentation format will positively influence online purchase intention.

Perceived Product Understanding

In this study, perceived product understanding is defined as other consumers' perceptions of the product based on their experiences with a product that some consumers share using text, image, and/or video formats. Perceived product understanding is the consumer's perception of the product based on the product type in online product reviews, the characteristics attributed to the product by the reviewer, and the reviewer's

knowledge and experience of the product (Liu and Du, 2019; Overmars and Poels, 2015). Positive emotion can be defined as pleasant emotional content in reviews (Guo et al., 2020). Depending on online product review presentation formats, perceived product understanding of consumers may differ (Liu and Du, 2019). There is a positive and significant correlation between positive emotion caused by online product presentation formats and behavioral intention (Yoo and Kim, 2014). Therefore, it has been reported that positive perceived product understanding resulting from online product review presentation formats influences online purchase intention (Jiang and Benbasat, 2007). Therefore, H_{7a}, H_{7b}, H_{7c} were developed.

H_{7a}: Positive perceived product understanding resulting from the text-based product review presentation format will positively influence online purchase intention.

H_{7b}: Positive perceived product understanding resulting from the image-based product review presentation format will positively influence online purchase intention.

H_{7c}: Positive perceived product understanding resulting from the video-based product review presentation format will positively influence online purchase intention.

Research Method

Research Scales

First of all, it is worth noting that. A 5-point Likert-type scale (1. Strongly Disagree....5. Strongly Agree) was used when developing this current study questionnaire. As a result, responses were obtained from the participants according to their level of participation in the scale items. The scale items adapted for this study are as follows.

Product review presentation format scale was adapted from the study of Kala and Chaubey (2019): (1) Text/image/video based online product presentation demonstrate all benefits of product to me in a convenient and attractive form. (2) Text/image/video based online product presentation saves my time by providing images, pricing information, technical characteristics and many more relevant information. (3) Text/image/video based online product presentation enhances the personalization of the product (associating someone else's experience with oneself). (4) Appealing text/image/video based online product presentation such as quality, size product image, motion & use of model accelerates me to purchase products online. (5) Text/image/video based online product presentation gives me a feeling of complete satisfaction, happiness and fulfillment.

The perceived helpfulness scale of review was adapted from the study of Liu and Du (2019): (1) Text/image/video based online product presentation is helpful. (2) Text/image/video based online product presentation is useful. (3) Text/image/video based online product presentation is informative.”

Perceived product understanding scale were adapted from the study of Liu and Du (2019): (1) Text/image/video based online product presentation is helpful for me to evaluate the product. (2) Text/image/video based online product presentation is helpful in familiarizing me with the product. (3) Text/image/video based online product presentation is helpful for me to understand the performance of the product.

The perceived credibility scale of review was adapted from the study of Xu et al. (2015): (1) Text/image/video based online product presentation is truthful. (2) Text/image/video based online product presentation is believable. (3) Text/image/video based online product presentation is trustworthy. (4) Text/image/video based online product presentation is objective. (5) Text/image/video based online product presentation is reliable.

Online purchasing intention scale was adapted from the study of Xu et al. (2015): (1) Based on text/image/video-based online product presentation description, I would recommend my friend to buy this product. (2) Based on text/image/video-based online product presentation, I will purchase this product the next time I need a product like this. (3) Based on text/image/video-based online product presentation, it is likely that I will buy this product. (4) Based on text/image/video-based online product presentation, I will definitely try this product.

Research Scope and Data Collection Tool

Consumers share their experiences with the products they purchase with others in text, image, and video formats on some e-commerce websites. Some consumers exhibit shopping behavior by reviewing these experiences shared by other consumers. The target group of consumers for this study consist of consumers who examine the product reviews of other consumers on e-commerce websites. In other words, data were collected from some consumers who examined the consumer experiences shared in text format, image format, and/or video format related to products/brands on e-commerce websites. Ethics committee approval certificate dated 23/11/2021 and numbered 2021/18-09 was obtained from The Van Yüzüncü Yıl University Social and Human Sciences Publications Ethics Committee.

Target consumers were reached via social media (WhatsApp and Instagram), each survey link was shared with different consumers and data was obtained from consumers who voluntarily participated in the survey. Questionnaires concerning text-based, image-based, and video-based product reviews are not shared with the same consumer is to avoid common variance bias.

The scale items related to 5 variables in the research model (online purchasing intention, perceived product understanding, product review presentation format, perceived review helpfulness, and perceived review credibility) were adapted by the authors to three different product review presentation formats. Accordingly, three online surveys for text-based (Study-1), image-based (Study-2) and video-based (Study-3) product review presentation formats were designed. The research data were collected from participants through these three online surveys.

This study gathered points 207 respondents (Study-1) for text-based product review presentation format through online survey, 209 respondents (Study-2) for image-based product review presentation format through online survey and 211 respondents (Study-3) for video-based product review presentation format again through online survey. Since there are 5 variables in the research model, the sample size of the study-1 (N=207), study-2 (N=209) and the study-3 (N=211) meet the minimum size criteria of Stevens (1996, p. 72) 15 subjects per independent variable, and Tabachnick and Fidell (2007, p. 123) $N > 50 + 8M$ (M = number of independent variables).

Data Analysis

To analyze the data, the frequency, factor, reliability and simple linear regression analyses were performed using SPSS 25 package software. The effect of a non-categorical independent variable on the dependent variable was tested by linear regression analysis. However, to perform regression analysis, the obtained data must be normally distributed. In the following pages, normality tests were performed and it was concluded that the data obtained showed a normal distribution. In addition, partial correlation analysis method can be used to evaluate whether there is a common method variance bias for the data obtained (Podsakoff et al., 2003: 889-894). It was concluded that there was no common method variance bias for the data obtained by performing correlation analyzes.

Research Model

The research model (Figure 1) was designed to include the variables of product review presentation format, online purchasing intention, perceived product understanding, perceived review credibility, and perceived review helpfulness).

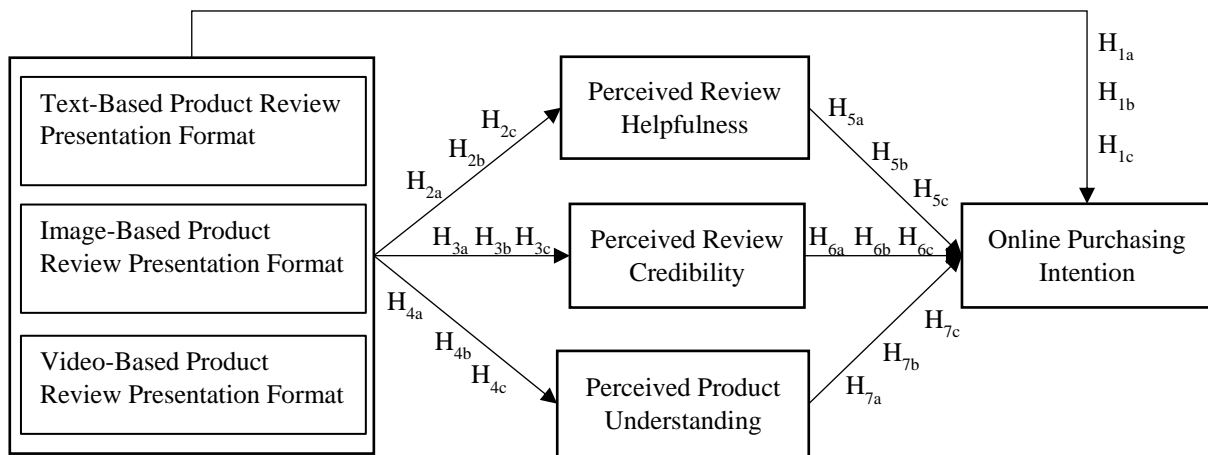


Figure 1. Research Model

Results

Results of Study-1

Table 1 shows the results of the frequency analysis regarding the demographic characteristics of Study-1 participants.

Table 1
Demographic Characteristics of Participants for Study-1

Demographic Characteristic	Group	Frequency	Percent
Gender	Male	71	34.3
	Female	136	65.7
Total		207	100.0
Age	18-25	123	59.4
	26-30	42	20.3
	31-35	25	12.1
	Over 35 ages	17	8.2
Total		207	100.0
Education Status (Graduated)	High school	62	30.0
	Associate degree	36	17.4
	Undergraduate	83	40.1
	Postgraduate	26	12.6
Total		207	100.0
Monthly Income	0-2500 TL	124	59.9
	2501-5000 TL	37	17.9
	5001-7500 TL	29	14.0
	Over 7501 TL	17	8.2
Total		207	100.0

Among the participants of Study-1 (100%; n=207), most of them are women (65.7%; n=136), aged between 18-25 (59.4%; n=123), undergraduate degree holders (40.1%; n=83) and have income varying between 0-2500 TL (59.9%; n=124).

Table 2
Types of Goods Reviewed by Participants on Commercial Websites for Study-1

Types of Products Reviewed on Commercial Websites	Frequency	Percent
Food-nutrition	14	6.8
Personal care	25	12.1
Durable household goods	12	5.8
Cell phone	9	4.3
Computer	6	2.9
Electronics	39	18.8
Clothing-textile	85	41.1
Vacation-travel	-	-
Motor vehicle	6	2.9
Other	11	5.3
Total	207	100.0

Most of the participants in Study-1 made reviews mostly about clothing and textile on commercial websites (41.1%; n=85). Also, it is striking that no participant made any review in the category of vacation and travel.

Table 3
Factor and Reliability Analysis Results for Study-1

Factor	KMO	Bartlett's Test of Sphericity			% Variance	Items	Factor Loading	Cronbach Alpha
		Approx. Chi-Square	df	Sig.				
Text-Based Product Review Presentation Format	.812	283.899	10	.000	55.439	Text1	.790	.798
						Text2	.768	
						Text3	.735	
						Text4	.719	
						Text5	.707	
Perceived Review Credibility	.869	526.213	10	.000	68.229	Credibility1	.877	.882
						Credibility2	.840	
						Credibility3	.840	
						Credibility4	.805	
						Credibility5	.764	
Perceived Review Helpfulness	.735	293.246	3	.000	78.745	Helpfulness1	.897	.865
						Helpfulness2	.891	
						Helpfulness3	.874	
Perceived Product Understanding	.722	268.241	3	.000	76.992	Understanding1	.900	.850
						Understanding2	.867	
						Understanding3	.865	
Online Purchasing Intention	.686	222.390	6	.000	58.983	Intention1	.831	.766
						Intention2	.764	
						Intention3	.741	
						Intention4	.732	

The KMO values were above .50 and the p values were below .0005 in the Bartlett's Test in Study-1, which is acceptable for factorability (Field, 2000). Following the factor analysis, each factor item had a factor loading over .50, which is recommended for social sciences (Hair et al., 2009). The reliability analysis performed after the factor analysis showed that the Cronbach's Alpha value of each factor (sub-dimension) was above .70, which implied that each factor is reliable (Nunnally, 1978).

Table 4
Normality Test Results for Study-1

Results	Text-Based Product Review Presentation Format	Perceived Review Credibility	Perceived Review Helpfulness	Perceived Product Understanding	Online Purchasing Intention
Skewness	-.307	.028	-.414	-.433	-.105
Kurtosis	.116	-.035	.385	-.125	-.049

Since the kurtosis and skewness coefficients of the variables are between -2 and +2, the data obtained for Study-1 showed a normal distribution (George and Mallery, 2010). Pearson correlation analysis was performed because the data showed normal distribution.

Table 5
Pearson Correlation Analysis Results for Study-1

Variables		Text-Based Product Review Presentation Format	Perceived Review Credibility	Perceived Review Helpfulness	Perceived Product Understanding	Online Purchasing Intention
Text-Based Product Review Presentation Format	Coefficient	1	.645**	.665**	.684**	.636**
	Sig.		.000	.000	.000	.000
Perceived Review Credibility	Coefficient	.645**	1	.595**	.597**	.698**
	Sig.	.000		.000	.000	.000
Perceived Review Helpfulness	Coefficient	.665**	.595**	1	.826**	.611**
	Sig.	.000	.000		.000	.000
Perceived Product Understanding	Coefficient	.684**	.597**	.826**	1	.619**
	Sig.	.000	.000	.000		.000
Online Purchasing Intention	Coefficient	.636**	.698**	.611**	.619**	1
	Sig.	.000	.000	.000	.000	

There is a significant positive relationship between both variables. Since the correlation coefficient between two separate variables is less than .90, it should be accepted that there is no common variance bias for the data obtained through the Study-1 questionnaire (Bagozzi et al., 1991, p. 437).

Table 6
Simple Linear Regression Analysis and Hypothesis Results for Study-1

Hypothesis	R ²	F	β	t	p	Result
H _{1a} : Text-based product review presentation format will positively influence online purchase intention.	.405	139.473	.636	11.810	.000	Supported
H _{2a} : Text-based product review presentation format will positively influence the perceived of helpfulness review.	.442	162.547	.665	12.749	.000	Supported
H _{3a} : Text-based product review presentation format will positively influence perceived review credibility.	.416	145.955	.645	12.081	.000	Supported
H _{4a} : Text-based product review presentation format will positively influence perceived product understanding.	.467	179.804	.684	13.409	.000	Supported
H _{5a} : Perceived review helpfulness resulting from the text-based product review presentation format will positively influence online purchase intention.	.373	121.937	.611	11.043	.000	Supported
H _{6a} : Perceived review credibility resulting from the text-based product review presentation format will positively influence online purchase intention.	.487	194.789	.698	13.957	.000	Supported
H _{7a} : Positive perceived product understanding resulting from the text-based product review presentation format will positively influence online purchase intention.	.383	127.447	.619	11.289	.000	Supported

The simple regression analysis conducted for Study-1 revealed that text-based product presentation format has a positive and significant effect on online purchasing intention ($\beta=.636$; $p=.000$), perceived review helpfulness ($\beta=.665$; $p=.000$), perceived review credibility ($\beta=.645$; $p=.000$) and perceived product understanding ($\beta=.684$; $p=.000$). Also, perceived review helpfulness ($\beta=.611$; $p=.000$), perceived review credibility ($\beta=.698$; $p=.000$) and positive perceived product understanding ($\beta=.619$; $p=.000$) caused by text-based product presentation format have a positive and significant effect on online purchasing intention.

Results of Study-2

The results of the frequency analysis for the demographic characteristics of Study-2 participants are shown in Table 7.

Table 7
Demographic Characteristics of Participants for Study-2

Demographic Characteristic	Group	Frequency	Percent
Gender	Male	140	67.0
	Female	69	33.0
Total		209	100.00
Age	18-25	73	34.9
	26-30	64	30.6
	31-35	46	22.0
	Over 35 ages	26	12.4
Total		209	100.0
Education Status (Graduated)	High school	76	36.4
	Associate degree	32	15.3
	Undergraduate	62	29.7
	Postgraduate	39	18.7
Total		209	100.0
Monthly Income	0-2500 TL	75	35.9
	2501-5000 TL	45	21.5
	5001-7500 TL	41	19.6
	Over 7501 TL	48	23.0
Total		209	100.0

Among the participants of Study-2 (100%; $n=209$), most of them are men (67.0%; $n=140$), aged between 18-25 (34.9%; $n=73$), high school graduates (36.4%; $n=76$) and have income varying between 0-2500 TL (35.9%; $n=75$).

Table 8

Types of Goods Reviewed by Participants on Commercial Websites for Study-2

Types of Products Reviewed on Commercial Websites	Frequency	Percent
Food-nutrition	16	7.7
Personal care	18	8.6
Durable household goods	12	5.7
Cell phone	15	7.2
Computer	4	1.9
Electronics	58	27.8
Clothing-textile	62	29.7
Vacation-travel	6	2.9
Motor vehicle	6	2.9
Other	12	5.7
Total	209	100.0

Most of the participants in Study-2 made reviews mostly about clothing and textile on commercial websites (29.7%; n=62). On the other hand, the fewest number of the participants made reviews about computers on commercial websites (1.9%; n=4).

Table 9

Factor and Reliability Analysis Results for Study-2

Factor Name	KMO	Bartlett's Test of Sphericity			% Variance	Items	Loading	Cronbach Alpha
		Approx. Chi-Square	df	Sig.				
Image-Based Product Review Presentation Format	.726	380.766	10	.000	58.476	Image1	.802	.822
						Image2	.784	
						Image3	.755	
						Image4	.752	
						Image5	.729	
Perceived Review Credibility	.882	786.875	10	.000	76.557	Credibility1	.921	.921
						Credibility2	.895	
						Credibility3	.887	
						Credibility4	.863	
						Credibility5	.803	
Perceived Review Helpfulness	.740	329.275	3	.000	80.570	Helpfulness1	.909	.879
						Helpfulness2	.900	
						Helpfulness3	.884	
Perceived Product Understanding	.665	220.941	3	.000	71.558	Understanding1	.890	.783
						Understanding2	.880	
						Understanding3	.761	
Online Purchasing Intention	.771	223.101	6	.000	60.691	Intention1	.802	.778
						Intention2	.792	
						Intention3	.770	
						Intention4	.750	

The KMO values were above .50 and the p values were below .0005 in the Bartlett's Test in Study-2, which is acceptable for factorability (Field, 2000). Following the factor analysis, each factor item had a factor loading over .50, which is recommended for social sciences (Hair et al., 2009). The reliability analysis performed after the factor analysis showed that the Cronbach's Alpha value of each factor (sub-dimension) was above .70, which implied that each factor is reliable (Nunnally, 1978).

Table 10
Normality Test Results for Study-2

Results	Image-Based Product Review Presentation Format	Perceived Review Credibility	Perceived Review Helpfulness	Perceived Product Understanding	Online Purchasing Intention
Skewness	-.680	-.141	-.977	-.695	-.186
Kurtosis	.273	-.634	1.231	.332	-.363

Since the kurtosis and skewness coefficients of the variables are between -2 and +2, the data obtained for Study-2 showed a normal distribution (George and Mallery, 2010). Pearson correlation analysis was performed because the data showed normal distribution.

Table 11
Pearson Correlation Analysis Results for Study-2

Variables		Image-Based Product Review Presentation Format	Perceived Review Credibility	Perceived Review Helpfulness	Perceived Product Understanding	Online Purchasing Intention
Image-Based Product Review Presentation Format	Coefficient	1	.577**	.633**	.629**	.597**
	Sig.		.000	.000	.000	.000
Perceived Review Credibility	Coefficient	.577**	1	.609**	.551**	.640**
	Sig.	.000		.000	.000	.000
Perceived Review Helpfulness	Coefficient	.633**	.609**	1	.730**	.599**
	Sig.	.000	.000		.000	.000
Perceived Product Understanding	Coefficient	.629**	.551**	.730**	1	.683**
	Sig.	.000	.000	.000		.000
Online Purchasing Intention	Coefficient	.597**	.640**	.599**	.683**	1
	Sig.	.000	.000	.000	.000	

There is a significant positive relationship between both variables. Since the correlation coefficient between two separate variables is less than .90, it should be accepted that there is no common variance bias for the data obtained through the Study-2 questionnaire (Bagozzi et al., 1991, p. 437).

Table 12

Simple Linear Regression Analysis and Hypothesis Results for Study-2

Hypothesis	R ²	F	β	t	p	Result
H _{1b} : Image-based product review presentation format will positively influence online purchase intention.	.357	114.764	.597	10.713	.000	Supported
H _{2b} : Image-based product review presentation format will positively influence the perceived of helpfulness review.	.401	138.729	.633	11.778	.000	Supported
H _{3b} : Image-based product review presentation format will positively influence perceived review credibility.	.333	103.200	.577	10.159	.000	Supported
H _{4b} : Image-based product review presentation format will positively influence perceived product understanding.	.395	135.359	.629	11.634	.000	Supported
H _{5b} : Perceived review helpfulness resulting from the image-based product review presentation format will positively influence online purchase intention.	.359	115.781	.599	10.760	.000	Supported
H _{6b} : Perceived review credibility resulting from the image-based product review presentation format will positively influence online purchase intention.	.410	143.835	.640	11.993	.000	Supported
H _{7b} : Positive perceived product understanding resulting from the image-based product review presentation format will positively influence online purchase intention.	.466	180.863	.683	13.449	.000	Supported

The simple regression analysis conducted for Study-2 revealed that image-based product presentation format has a positive and significant effect on online purchasing intention ($\beta=.597$; $p=.000$), perceived review helpfulness ($\beta=.633$; $p=.000$), perceived review credibility ($\beta=.577$; $p=.000$) and perceived product understanding ($\beta=.629$; $p=.000$). Also, perceived review helpfulness ($\beta=.599$; $p=.000$), perceived review credibility ($\beta=.640$; $p=.000$) and positive perceived product understanding ($\beta=.683$; $p=.000$) caused by image-based product presentation format have a positive and significant effect on online purchasing intention.

Results of Study-3

The demographic characteristics of Study-3 participants are shown in Table 13 as a result of the frequency analysis.

Table 13
Demographic Characteristics of Participants for Study-3

Demographic Characteristic	Group	Frequency	Percent
Gender	Male	137	64.9
	Female	74	35.1
Total		211	100.0
Age	18-25	84	39.8
	26-30	60	28.4
	31-35	49	23.2
	Over 35 ages	18	8.5
Total		211	100.0
Education Status (Graduated)	High school	47	22.3
	Associate degree	24	11.4
	Undergraduate	105	49.8
	Postgraduate	35	16.6
Total		211	100.0
Monthly Income	0-2500 TL	74	35.1
	2501-5000 TL	51	24.2
	5001-7500 TL	60	28.4
	Over 7501 TL	26	12.3
Total		211	100.0

Among the participants of Study-3 (100%; n=211), most of them are men (64.9%; n=137), aged between 18-25 (39.8%; n=84), undergraduate degree holders (49.8%; n=105) and have income varying between 0-2500 TL (35.1%; n=74).

Table 14
Types of Goods Reviewed by Participants on Commercial Websites for Study-3

Types of Products Reviewed on Commercial Websites	Frequency	Percent
Food-nutrition	17	8.1
Personal care	25	11.8
Durable household goods	20	9.5
Cell phone	7	3.3
Computer	9	4.3
Electronics	55	26.1
Clothing-textile	60	28.4
Vacation-travel	3	1.4
Motor vehicle	10	4.7
Other	5	2.4
Total	211	100.0

Most of the participants in Study-3 made reviews mostly about clothing and textile on commercial websites (28.4%; n=60). On the other hand, the fewest number of the participants made reviews about vacation and travel on commercial websites (1.4%; n=3).

Table 15
Factor and Reliability Analysis Results for Study-3

Factor Name	KMO	Bartlett's Test of Sphericity			% Variance	Items	Loading	Cronbach Alpha
		Approx. Chi-Square	df	Sig.				
Video-Based Product Review Presentation Format	.834	468.213	10	.000	64.226	Video1	.873	.860
						Video2	.811	
						Video3	.783	
						Video4	.771	
						Video5	.765	
Perceived Review Credibility	.858	745.583	10	.000	74.974	Credibility1	.906	.915
						Credibility2	.896	
						Credibility3	.857	
						Credibility4	.855	
						Credibility5	.812	
Perceived Review Helpfulness	.759	446.911	3	.000	85.709	Helpfulness1	.931	.916
						Helpfulness2	.930	
						Helpfulness3	.917	
Perceived Product Understanding	.753	436.164	3	.000	85.192	Understanding1	.936	.913
						Understanding2	.919	
						Understanding3	.914	
Online Purchasing Intention	.800	401.239	6	.000	71.195	Intention1	.884	.861
						Intention2	.861	
						Intention3	.829	
						Intention4	.799	

The KMO values were above .50 and the p values were below .0005 in the Bartlett's Test in Study-3, which is acceptable for factorability (Field, 2000). Following the factor analysis, each factor item had a factor loading over .50, which is recommended for social sciences (Hair, Black, Babin and Anderson, 2009). The reliability analysis performed after the factor analysis showed that the Cronbach's Alpha value of each factor (sub-dimension) was above .70, which implied that each factor is reliable (Nunnally, 1978).

Table 16
Normality Test Results for Study-3

Results	Video-Based Product Review Presentation Format	Perceived Review Credibility	Perceived Review Helpfulness	Perceived Product Understanding	Online Purchasing Intention
Skewness	-.680	-.239	-1.111	-.995	-.279
Kurtosis	.331	-.018	1.699	1.224	-.314

Since the skewness and kurtosis coefficients of the variables are between -2 and +2, the data obtained for Study-3 showed a normal distribution (George and Mallery, 2010). Pearson correlation analysis was performed because the data showed normal distribution.

Table 17
Pearson Correlation Analysis Results for Study-3

Variables		Video-Based Product Review Presentation Format	Perceived Review Credibility	Perceived Review Helpfulness	Perceived Product Understanding	Online Purchasing Intention
Video-Based Product Review Presentation Format	Coefficient	1	.691**	.724**	.683**	.673**
	Sig.		.000	.000	.000	.000
Perceived Review Credibility	Coefficient	.691**	1	.655**	.638**	.762**
	Sig.	.000		.000	.000	.000
Perceived Review Helpfulness	Coefficient	.724**	.655**	1	.850**	.670**
	Sig.	.000	.000		.000	.000
Perceived Product Understanding	Coefficient	.683**	.638**	.850**	1	.696**
	Sig.	.000	.000	.000		.000
Online Purchasing Intention	Coefficient	.673**	.762**	.670**	.696**	1
	Sig.	.000	.000	.000	.000	

There is a significant positive relationship between both variables. Since the correlation coefficient between two separate variables is less than .90, it should be accepted that there is no common variance bias for the data obtained through the Study-3 questionnaire (Bagozzi et al., 1991, p. 437).

Table 18

Simple Linear Regression Analysis and Hypothesis Results for Study-3

Hypothesis	R ²	F	β	t	p	Result
H _{1c} : Video-based product review presentation format will positively influence online purchase intention.	.453	173.341	.673	13.166	.000	Supported
H _{2c} : Video-based product review presentation format will positively influence the perceived of helpfulness review.	.524	230.431	.724	15.180	.000	Supported
H _{3c} : Video-based product review presentation format will positively influence perceived review credibility.	.478	191.389	.691	13.834	.000	Supported
H _{4c} : Video-based product review presentation format will positively influence perceived product understanding.	.466	182.634	.683	13.514	.000	Supported
H _{5c} : Perceived review helpfulness resulting from the video-based product review presentation format will positively influence online purchase intention.	.449	170.623	.670	13.062	.000	Supported
H _{6c} : Perceived review credibility resulting from the video-based product review presentation format will positively influence online purchase intention.	.580	288.761	.762	16.993	.000	Supported
H _{7c} : Positive perceived product understanding resulting from the video-based product review presentation format will positively influence online purchase intention.	.484	195.910	.696	13.997	.000	Supported

The simple regression analysis conducted for Study-3 showed that video-based product presentation format has a positive and significant effect on online purchasing intention ($\beta=.673$; $p=.000$), perceived review helpfulness ($\beta=.724$; $p=.000$), perceived review credibility ($\beta=.691$; $p=.000$) and perceived product understanding ($\beta=.683$; $p=.000$). Further, perceived review helpfulness ($\beta=.670$; $p=.000$), perceived review credibility ($\beta=.762$; $p=.000$) and positive perceived product understanding ($\beta=.696$; $p=.000$) caused by image-based product presentation format have a positive and significant effect on online purchasing intention.

Discussion and Conclusion

The results show that online purchase intention is positively affected by text-based, image-based, and video-based product reviews (H_{1a}, H_{1b} and H_{1c} are supported). These results are parallel to the findings of Kala and Chaubey (2018), Xu et al. (2015), Obiedat (2013), Kim and Lennon (2008), and Park et al. (2005). Furthermore, considering the β coefficient, the impact of video-based product review presentation format ($\beta=.673$) on online purchase intention is greater, compared to that of text-based product review presentation format ($\beta=.636$) and image-based product review presentation format ($\beta=.597$).

According to the results of the study, perceived review helpfulness is positively affected from the presentation formats of text, image and video-based product review (H_{2a}, H_{2b} and H_{2c} are supported). These results, according to Liu and Du (2019), and Mudambi and Schuff (2010) are in line with the results of the studies. However, considering the β coefficient, the effect of video-based product review presentation format ($\beta=.724$) on perceived review helpfulness is greater, compared to that of text-based product review presentation format ($\beta=.665$) and image-based product review presentation format ($\beta=.633$).

This study further revealed that perceived review credibility is affected positively from the presentation formats of text, image and video-based product review (H_{3a} , H_{3b} and H_{3c} are supported). These results, according to Xu et al. (2015) is in line with the results of the study. However, considering the β coefficient, the effect of video-based product review presentation format ($\beta=.691$) on perceived review credibility is greater, compared to that of text-based product review presentation format ($\beta=.645$) and image-based product review presentation format ($\beta=.577$).

Another important finding is that perceived product understanding is affected positively from the presentation formats of text, image and video-based product review (H_{4a} , H_{4b} and H_{4c} are supported). These results, according to Liu and Du (2019), Overmars and Poels (2015), Blanco et al. (2010), and Jiang and Benbasat (2007) are in line with the results of the studies. However, considering the β coefficient, the effect of text-based product review presentation format ($\beta=.683$) on perceived product understanding is greater, compared to that of video-based product review presentation format ($\beta=.683$) and image-based product review presentation format ($\beta=.629$).

In conclusion, video-based product review presentation format has a more significant effect on perceived review credibility, perceived review helpfulness, and online purchasing intention. However, text-based product review presentation format has a more significant effect on perceived product understanding. These results imply that reviews shared in video-based format on e-commerce websites are more noteworthy.

This study further concludes that perceived review helpfulness caused by text-based, image-based and video-based product review presentation formats positively influences online purchase intention (H_{5a} , H_{5b} and H_{5c} are supported). These results, according to Xu et al. (2015) is in line with the results of the study. However, considering the β coefficient, the effect of perceived review helpfulness caused by video-based product review presentation format ($\beta=.670$) on online purchasing intention is greater, compared to text-based product review presentation format ($\beta=.611$) and image-based product review presentation format ($\beta=.599$).

Also, perceived review credibility caused by text, image and video-based product review presentation formats appears to positively influences online purchase intention (H_{6a} , H_{6b} and H_{6c} are supported). These results, according to Xu et al. (2015) is in line with the results of the study. However, considering the β coefficient, the effect of perceived review credibility caused by video-based product review presentation format ($\beta=.762$) on online purchasing intention is greater, compared to text-based product review presentation format ($\beta=.698$) and image-based product review presentation format ($\beta=.640$).

Lastly, this study ascertains that positive perceived product understanding caused by text, image and video-based product review presentation formats appears to positively influences online purchase intention (H_{7a} , H_{7b} and H_{7c} are supported). These results, according to Jiang and Benbasat (2007) is in line with the results of the study. However, considering the β coefficient, the effect of positive perceived product understanding caused by video-based product review presentation format ($\beta=.696$) on online purchasing intention is greater, compared to text-based product review presentation format ($\beta=.619$) and image-based product review presentation format ($\beta=.683$).

To sum up, this study highlights that perceived review helpfulness, perceived review credibility, and positive perceived product understanding caused by video-based product review presentation format have a more significant effect on online purchasing intention.

Implications

This current study is one of the important attempts that examines and successfully explains the effects of product reviews shared by consumers in text, image and video-based formats on e-commerce sites on perceived review helpfulness, perceived review credibility, perceived product understanding, and online purchase intention. It is noteworthy that the video-based product review presentation format that consumers share on e-commerce sites and the effects of perceived review helpfulness, perceived review reliability and positive perceived product understanding on online purchase intention caused by this presentation format are more important. However, it should be noted that text and image-based product review presentation formats and perceived review helpfulness, perceived review credibility and positive perceived product understanding have a significant impact on online purchase intention. In conclusion, Thanks to this study, it has been seen that it is possible to explain the relationships between online product presentation formats and online purchasing behaviors of consumers by using the theoretical framework of The Media/Information Richness Theory and The Dual Coding Theory.

According to the results obtained with this study, the e-commerce site must allow its customers to share their experiences with the products or brands they purchase on the e-commerce site with other potential customers through these three different formats. Because if the e-commerce site allows its customers to share their experiences in these three different formats through the e-commerce site, it is thought that the e-commerce site will lead to more customers. Thus, the e-commerce site will make it possible for customers who sell on the commerce site to increase their sales.

Limitations and Future Research

This study has certain limitations. Considering these limitations, this study offers some directions for future research. Study-1, Study-2 and Study-3 are limited to a specific sample size. Therefore, it is not reasonable to generalize the results of these three studies. An investigation of the effect of online product review presentation formats on online purchase intention based on new data will be useful for generalizing the results of the study. The research subject of this study is limited to text-based, image-based and video-based product review presentation formats in consumer research. The scope of further studies may involve two video formats such as video-without-narration and video-with-narration. This study examines only the effect of the variables of perceived review helpfulness, perceived review credibility and perceived product understanding on online purchasing intention. Future studies may also focus on additional variables such as product type (experience and search) and review sentiment (positive and negative).

References

- Appiah, O. (2006). Rich media, poor media: The impact of audio/video vs. text/picture testimonial ads on browsers' evaluations of commercial web sites and online products. *Journal of Current Issues & Research in Advertising*, 28(1), 73-86. doi: 10.1080/10641734.2006.10505192
- Bagozzi, R. P., Yi, Y. and Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, 6(3), 421-458. doi: 10.2307/2393203
- Blanco, C. F., Sarasa, R. G. and Sanclemente, C. O. (2010). Effects of visual and textual information in online product presentations: looking for the best combination in website design. *European Journal of Information Systems*, 19(6), 668-686. doi: 10.1057/ejis.2010.42
- Chau, P. Y., Au, G. and Tam, K. Y. (2000). Impact of information presentation modes on online shopping: an empirical evaluation of a broadband interactive shopping service. *Journal of Organizational Computing and Electronic Commerce*, 10(1), 1-20. Retrieved from: core.ac.uk/reader/37882830
- Chua, A. Y. and Banerjee, S. (2014). Developing a theory of diagnosticity for online reviews. In *Proceedings of the International Multiconference of Engineers and Computer Scientists, 1*, 477-482. Retrieved from: http://www.iaeng.org/publication/IMECS2014/IMECS2014_pp477-482.pdf
- Chua, A. Y. and Banerjee, S. (2016). Helpfulness of user-generated reviews as a function of review sentiment, product type and information quality. *Computers in Human Behavior*, 54, 547-554. doi: 10.1016/j.chb.2015.08.057
- Çelik, Z. and Kabak, A. (2020). Online ürün incelemelerinde inceleme sunum formatlarının satın alma niyeti üzerindeki etkisine yönelik uygulamalı bir araştırma. *1st International Palandöken Scientific Research Congress*, Erzurum, Türkiye, 24-25 Kasım, 278-290. Retrieved from: https://b3b7dd1a-d8cb-4579-8cfc-f21897e0f1ee.filesusr.com/ugd/6dc816_037a059ce011477d9a37093c7064f258.pdf
- Daft, R. L. and Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571. doi: 10.1287/mnsc.32.5.554
- Fang, X., Brzezinski, J., Watson, K., Xu, S. and Chan, S. (2004). An empirical study of dual-modal information presentation. *AMCIS 2004 Proceedings*, 395. Retrieved from: <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1971&context=amcis2004>
- Field, A. (2000). *Discovering statistics using SPSS for windows*. London-Thousand Oaks-New Delhi: Sage Publications.

- Flavián, C., Gurrea, R. and Orús, C. (2009). The effect of product presentation mode on the perceived content and content quality of web sites. *Online Information Review*, 33(6), 1103-1128. doi: 10.1108/14684520911011034
- George, D. and Mallery, M. (2010). *SPSS for windows step by step: A simple guide and reference*. 17.0 update (10a ed.) Boston: Pearson
- Goldman, A. and Johansson, J. K. (1978). Determinants of search for lower prices: An empirical assessment of the economics of information theory. *Journal of Consumer Research*, 5(3), 176-186. doi: 10.1086/208729
- Guo, J., Wang, X. and Wu, Y. (2020). Positive emotion bias: Role of emotional content from online customer reviews in purchase decisions. *Journal of Retailing and Consumer Services*, 52, 101891. doi: 10.1016/j.jretconser.2019.101891
- Hair, J. F., Jr., Black, W. C., Babin, B. J. and Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hoch, S. J. and Deighton, J. (1989). Managing what consumers learn from experience. *Journal of Marketing*, 53(2), 1-20. doi: 10.1177/002224298905300201
- Hong, W., Thong, J. Y. and Tam, K. Y. (2004). Designing product listing pages on e-commerce websites: an examination of presentation mode and information format. *International Journal of Human-Computer Studies*, 61(4), 481-503. doi: 10.1016/j.ijhcs.2004.01.006
- Jiang, Z. and Benbasat, I. (2007). The effects of presentation formats and task complexity on online consumers' product understanding. *Mis Quarterly*, 31(3), 475-500. doi: 10.2307/25148804
- Kala, D. and Chaubey, D. S. (2019). Impact of product presentation on purchase intention: Moderating role of mood in online shopping of lifestyle products. In *Optimizing Millennial Consumer Engagement With Mood Analysis* (pp. 1-18). IGI Global. doi: 10.4018/978-1-5225-5690-9.ch001
- Kim, M., Lee, S. M., Choi, S. and Kim, S. Y. (2021). Impact of visual information on online consumer review behavior: Evidence from a hotel booking website. *Journal of Retailing and Consumer Services*, 60, 102494. doi: 10.1016/j.jretconser.2021.102494
- Kim, M. and Lennon, S. (2008). The effects of visual and verbal information on attitudes and purchase intentions in internet shopping. *Psychology & Marketing*, 25(2), 146-178. doi: 10.1002/mar.20204

- Kim, C., Oh, E. and Shin, N. (2010). An empirical investigation of digital content characteristics, value, and flow. *Journal of Computer Information Systems*, 50(4), 79-87. doi: 10.1080/08874417.2010.11645433
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT press.
- Liu, Y. and Du, R. (2019). The Effects of image-based online reviews on customers' perception across product type and gender. *Journal of Global Information Management (JGIM)*, 27(3), 139-158. doi: 10.4018/JGIM.2019070108
- Li, M., Wei, K. K., Tayi, G. K. and Tan, C. H. (2016). The moderating role of information load on online product presentation. *Information & Management*, 53(4), 467-480. doi: 10.1016/j.im.2015.11.002
- MacInnis, D. J. and Price, L. L. (1987). The role of imagery in information processing: Review and extensions. *Journal of Consumer Research*, 13(4), 473-491. doi: 10.1086/209082
- Mudambi, S. M. and Schuff, D. (2010). What makes a helpful online review? A study of customer reviews on amazon.com. *Management Information Systems Quarterly*, 34(1), 185–200. doi: 10.2307/20721420
- Mumuni, A. G., O'Reilly, K., MacMillan, A., Cowley, S. and Kelley, B. (2020). Online product review impact: The relative effects of review credibility and review relevance. *Journal of Internet Commerce*, 19(2), 153-191. doi: 10.1080/15332861.2019.1700740
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill. PewInternet.
- Obiedat, R. (2013). Impact of online consumer reviews on buying intention of consumers in UK: Need for cognition as the moderating role. *International Journal of Advanced Corporate Learning (IJAC)*, 6(2), 16-21. Retrieved from: <https://www.learntechlib.org/p/130292/>.
- Overmars, S. and Poels, K. (2015). Online product experiences: The effect of simulating stroking gestures on product understanding and the critical role of user control. *Computers in Human Behavior*, 51, 272-284. doi: 10.1016/j.chb.2015.04.033
- Paivio, A. (1986). *Mental representations: A dual coding approach*. New York: Oxford University Press.
- Park, J., Lennon, S. J. and Stoel, L. (2005). On-line product presentation: Effects on mood, perceived risk, and purchase intention. *Psychology & Marketing*, 22(9), 695-719. doi: 10.1002/mar.20080

- Park, D. H., Lee, J. and Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, 11(4), 125-148. doi: 10.2753/JEC1086-4415110405
- Park, J., Stoel, L. and Lennon, S. J. (2008). Cognitive, affective and conative responses to visual simulation: The effects of rotation in online product presentation. *Journal of Consumer Behaviour: An International Research Review*, 7(1), 72-87. doi: 10.1002/cb.237
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y. and Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. doi: 10.1037/0021-9010.88.5.879
- Siering, M., Muntermann, J. and Rajagopalan, B. (2018). Explaining and predicting online review helpfulness: The role of content and reviewer-related signals. *Decision Support Systems*, 108, 1-12. doi: 10.1016/j.dss.2018.01.004
- Stevens, J. (1996). *Applied multivariate statistics for the social sciences, (3rd edition)*: Mahwah, Lawrence Erlbaum: New Jersey.
- Tabachnick, B. G. and Fidell, L. S. (2007). *Using multivariate statistics, (5th edition)*. Boston: Pearson Education.
- Wang, Q. and Dai, Y. 2013. The influence of online product presentation and seller reputation on the consumers' purchase intention across different involvement products. *Pacific Asia Conference on Information Systems*, Jeju Island, Korea. Retrieved from: <https://core.ac.uk/download/pdf/301359581.pdf>
- Xu, P., Chen, L. and Santhanam, R. (2015). Will video be the next generation of e-commerce product reviews? Presentation format and the role of product type. *Decision Support Systems*, 73, 85-96. doi: 10.1016/j.dss.2015.03.001
- Yoo, J. and Kim, M. (2014). The effects of online product presentation on consumer responses: A mental imagery perspective. *Journal of Business Research*, 67(11), 2464-2472. doi: 10.1016/j.jbusres.2014.03.006

Genişletilmiş Özet

Amaç

Bu çalışma, tüketiciler tarafından e-ticaret sitelerinde metin, resim ve video tabanlı formatlarda paylaşılan ürün incelemelerinin ve bu ürün inceleme sunum formatlarının her birine dayalı olarak olumlu algılanan ürün anlayışı, algılanan inceleme yardımseverliği ve algılanan inceleme güvenilirliğinin online satın alma niyeti üzerindeki etkisini incelemeyi amaçlamaktadır.

Tasarım ve Yöntem

Tüketiciler satın aldıkları ürünlerle ilgili deneyimlerini bazı e-ticaret sitelerinde metin, resim ve video formatında başkalarıyla paylaşmaktadır. Bazı tüketiciler, diğer tüketiciler tarafından paylaşılan bu deneyimleri gözden geçirerek alışveriş davranışları sergilemektedir. Bu çalışmanın hedef kitlesi, e-ticaret sitelerinde diğer tüketicilerin ürün incelemelerini inceleyen bu tüketicilerdir. Kala ve Chaubey (2019) çalışmasından ürün inceleme sunum formatı ölçek soruları, Liu ve Du (2019) çalışmasından hem algılanan inceleme yardımseverliği hem de algılanan ürün anlayışı ölçek soruları ve Xu vd. (2015) çalışmasından hem algılanan inceleme güvenilirliği hem de online satın alma niyeti ölçek soruları bu mevcut çalışmaya uyarlanmıştır. Araştırma modelindeki bu beş değişkenle ilgili ölçek maddeleri yazarlar tarafından üç farklı ürün inceleme sunum formatına uyarlanmıştır. Buna göre metin- (Çalışma-1), resim- (Çalışma-2) ve video tabanlı (Çalışma-3) ürün inceleme sunum formatları için üç online anket tasarlanmıştır. Araştırma verileri, bu üç online anket aracılığıyla farklı katılımcılardan toplanmıştır. Van Yüzüncü Yıl Üniversitesi Sosyal ve Beşerî Bilimler Yayınları Etik Kurulu'ndan 23/11/2021 tarih ve 2021/18-09 sayılı etik kurul onay belgesi alınmıştır. Sosyal medya (WhatsApp ve Instagram) aracılığıyla ulaşılan hedef kitle içerisinde her bir anket bağlantısı (üç farklı anket için) farklı tüketicilerle paylaşılmış ve ankete gönüllü olarak katılan tüketicilerden veriler elde edilmiştir. Metin, resim ve video ürün sunumundaki ölçek soruları için farklı anket bağlantılarının aynı tüketiciyle paylaşılmamasının nedeni, ortak varyans yanlılığından kaçınmaktır. Online anketler aracılığıyla metin tabanlı ürün inceleme sunum formatı için 207 veri (Çalışma-1), görüntü tabanlı ürün inceleme sunum formatı için 209 veri (Çalışma-2) ve video tabanlı ürün inceleme için 211 veri (Çalışma-3) toplanmıştır. Üç farklı çalışma için tasarlanan online anketler aracılığıyla toplanan veriler SPSS'e girilmiştir. Verileri analiz etmek için SPSS 25 paket programı kullanılarak frekans, faktör, güvenilirlik ve basit doğrusal regresyon analizleri yapılmıştır.

Bulgular

Yapılan analizler sonucunda, çalışmanın sonuçlarının ilgili literatürdeki diğer çalışmaların sonuçları ile benzerlik gösterdiği görülmüştür. Bu başlık altında çalışmanın sonuçları açıklanırken diğer çalışmalara da atıfta bulunulmuştur. Çalışma-1, Çalışma-2 ve Çalışma-3'ün sonuçlarını özetlemek mümkündür. Bu üç çalışmadan elde edilen sonuçlara göre online satın alma niyetinin metin, resim ve video tabanlı ürün inceleme sunum formatlarından olumlu yönde etkilenmektedir (Kala ve Chaubey, 2018; Xu vd., 2015; Obiedat, 2013; Kim ve Lennon, 2008; Park vd., 2005). Bu çalışmanın sonuçlarına göre, algılanan inceleme yardımseverliğinin (Liu ve Du, 2019; Mudambi ve Schuff, 2010), algılanan inceleme güvenilirliğinin (Xu vd., 2015) ve algılanan ürün anlayışının (Liu ve Du, 2019; Overmars ve Poels, 2015; Blanco vd., 2010; Jiang ve Benbasat, 2007) metin, resim ve video tabanlı ürün inceleme sunum formatlarından olumlu yönde etkilenmektedir. Diğer taraftan bu çalışma sonuçlarına göre, bu üç ürün inceleme sunum formatlarından (metin, resim ve video) kaynaklanan algılanan inceleme yardımseverliği, algılanan inceleme güvenilirliği (Xu vd., 2015) ve olumlu algılanan ürün

anlayışı (Jiang ve Benbasat, 2007) online satın alma niyetini olumlu etkilemektedir. Son olarak, çalışma sonuçlarına göre, video tabanlı ürün inceleme sunum formatı, online satın alma niyetinin yanı sıra hem algılanan inceleme yardımseverliği hem de algılanan inceleme güvenilirliği üzerinde daha önemli bir etkiye sahiptir. Ancak metin tabanlı ürün inceleme sunum formatı, algılanan ürün anlayışı üzerinde daha önemli bir etkiye sahiptir. Bu sonuçlar, e-ticaret sitelerinde video tabanlı formatta paylaşılan incelemelerin öne çıktığını göstermektedir. Sonuç olarak, bu çalışma, online satın alma niyeti üzerinde hem video tabanlı ürün inceleme sunum formatının hem de video tabanlı ürün inceleme sunumu formatının bir sonucu olarak olumlu algılanan ürün anlayışının, algılanan inceleme yardımseverliğinin ve algılanan inceleme güvenilirliğinin daha önemli bir etkiye sahip olduğunu vurgulamaktadır.

Sınırlılıklar

Bu çalışmanın belirli sınırlamaları vardır. Çalışma-1, Çalışma-2 ve Çalışma-3 belirli bir örneklem büyüklüğü ile sınırlıdır. Bu çalışmanın araştırma konusu, tüketici araştırmalarında metin, resim ve video tabanlı ürün inceleme sunum formatları ile sınırlıdır. Bu çalışma, bu sunum formatlarından kaynaklı olarak yalnızca algılanan inceleme yardımseverliği, algılanan inceleme güvenilirliği ve algılanan ürün anlayışı değişkenlerinin online satın alma niyeti üzerindeki etkisini incelemektedir.

Öneriler

Tüketicilerin e-ticaret sitelerinde paylaştığı video tabanlı ürün inceleme sunum formatının ve bu sunum formatının neden olduğu olumlu algılanan ürün anlayışının, algılanan inceleme yardımseverliğinin ve algılanan inceleme güvenilirliğinin online satın alma niyeti üzerindeki etkilerinin daha fazla önemli görülmesi dikkat çekicidir. Ancak, online satın alma niyeti üzerinde metin ve resim tabanlı ürün inceleme sunum formatlarının ve bu formatlardan kaynaklı olarak olumlu algılanan ürün anlayışının, algılanan inceleme yardımseverliğinin ve algılanan inceleme güvenilirliğinin önemli bir etkisi olduğu belirtilmelidir. Bu çalışma ile elde edilen sonuçlara göre e-ticaret sitesi, müşterilerinin e-ticaret sitesinde satın aldıkları ürün veya markalarla ilgili deneyimlerini bu üç farklı format aracılığıyla diğer potansiyel müşterilerle paylaşmalarına olanak sağlamalıdır. Çünkü e-ticaret sitesi, müşterilerinin bu üç farklı formattaki deneyimlerini e-ticaret sitesi üzerinden paylaşmalarına olanak sağlarsa, e-ticaret sitesinin daha fazla müşteriye yol açacağı düşünülmektedir. Böylece e-ticaret sitesi, ticaret sitesinde satış yapan müşterilerin satışlarını artırmasını mümkün kılacaktır.

Özgün Değer

Bu mevcut çalışma, tüketiciler tarafından e-ticaret sitelerinde metin, resim ve video tabanlı formatlarda paylaşılan ürün incelemelerinin, algılanan inceleme yardımseverliği, algılanan inceleme güvenilirliği, algılanan ürün anlayışı ve online satın alma niyeti üzerindeki etkilerini inceleyen ve bu etkilerini başarılı bir şekilde açıklayan önemli girişimlerdendir.

Araştırmacı Katkısı: Zübeyir ÇELİK (%40), Aykut KABAK (%30), Aypar USLU (%30)