
The association between gender and occupation in a gamified purchasing environment: perspective from Kosovo and Albania

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Abstract: Gamification is considered as a ‘magic bullet’ to induce dull experiences with fun and enjoyment. However, understanding the gamification attributes for s-commerce users falls short due to limited empirical research. The purpose of this study is to explore the differences between males and females and employed and unemployed buyers who purchase products and services via s-commerce when game elements are considered. A questionnaire containing 61 questions and was distributed via social platforms. To analyse the gathered data, EFA and Mann-Whitney U test have been employed. The study concludes that for Kosovar s-commerce users employment status is significantly different regarding game mechanics. Regarding gender, out of all game elements, significant differences were found only in aesthetics. On the other hand, no gender and occupation differences have been identified for Albanian s-commerce users. The results of this study are useful for companies which provide products/services focused on gender and employment status.

Keywords: aesthetics; game dynamics; game mechanics; gamification; online buying behaviour; social media; developing countries; Kosovo; Albania.

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1 Introduction

In the range of the latest changes and development in the mobile industry and internet usage, mobile commerce is considered to be the most developing industry (Lee and Wong, 2016). Followed with the facilitating conditions offered by the internet, shopping via mobile, social media or s-commerce retailers has, in general, made the consumer aware of the benefits they may obtain. Generally, games are attention grabbers in many shapes. Aiming to inject the consumers' buying experience with 'fun' and 'enjoyment', businesses are also using game elements in the non-gaming environment. Marketers and businesses have been using those elements to motivate and engage consumers through value exchange. The process of adding game elements is known as gamification. Gamification may sound as a new term, but game elements have been used in the military ever since its existence (Kim, 2014). The three prominent principles of gamification include game mechanics, dynamics and aesthetics (MDA) (Werbach and Hunter, 2012; Kim and Lee, 2015; Robson et al., 2015). The MDA framework is a framework built on the three principles of gamification. In addition, the framework has been previously applied in education, programming, healthcare and government. However, limited research has been carried out in the consumer behaviour domain.

The Republic of Kosovo (hereinafter: Kosovo) leads in the Western Balkans for the number of internet users. Assuming that e-commerce, s-commerce and m-commerce may be the most preferable purchasing mean for the forthcoming years. According to internet

World Stats (2017, 2018), there are above one million internet users (80.4%) in Kosovo and above two million internet users (73.5%) in Albania. According to IDRA Research & Consulting (2019), 63% of Albanians claimed to use the internet. Regarding the reason of usage, 16.9% Kosovars claim to use the internet for purchasing, but the majority use internet to access social platforms, the same trend has been stressed in Albania whereas, 59% of Albanians use internet for social networks (Deliu et al., 2019; IDRA Research & Consulting, 2019). Therefore, the considerable increase of internet users makes it useful to investigate the opportunities regarding business expansion and consumer changing behaviour.

This article presents the theoretical contribution on knowledge advancement, exploring and discussing matters pertaining to online purchasing, consumer behaviour and gamification. Gamification is considered as a ‘magic bullet’ to motivate and engage consumers when purchasing. Hence, this study aims to present the gender and occupation differences for consumers who purchase via s-commerce in two countries of the Western Balkans, Kosovo and Albania. The reasoning is that gender differences have been identified by numerous researchers in online shopping behaviour (Chen et al., 2015). Also, occupation is important due to the fact that the working place influences the store location and demand behaviour (Martinez-Caraballo and Burt, 2011). However, insufficient information has been provided regarding gender and occupation differences when purchasing in a gamified setting.

2 Literature review

2.1 Gamification elements: theoretical background

In the introductory phase, gamification was claimed to be a reason to play, even though records regarding its successful utilisation and application may be found in many scientific fields, mainly aimed at motivating and engaging end-users, students, patients, employees and consumers. Linking gamification with games in general has proved a conjecture; therefore, it is essential to clarify the meaning of gamification. According to Zichermann and Cunningham (2011), the term gamification is defined as a process of applying game thinking and mechanics for engagement and problem solving commonly applied in a non-game setting. Another definition of gamification is provided by Werbach and Hunter (2012), where gamification is considered as the use of game elements and game design techniques in a non-game environment to manoeuvre fun by offering existent items. Generally, game elements are applied as psychological motivators, specifically affecting intrinsic motivation (Kim and Lee, 2015), towards desirable behaviour (Chou, 2016) and engagement (Harwood and Garry, 2015; Sigala, 2015; Nobre and Ferreira, 2017). Other scholars describe gamification as a growing tool for technology acceptance and as a ‘magic bullet’ to encourage the end-user (Thiebes et al., 2014) and to change consumer behaviour (Hamari and Lehdonvirta, 2010; Werbach and Hunter, 2012). In education, gamification elements have been used to design a model language by using Unity as the cross-platform game engine (Matallaoui et al., 2015), a dynamical model of educational effectiveness (Kim and Lee, 2015), and increase the number of completed qualitative activities (Huang and Hew, 2018). Furthermore, gamification may also be applied for political alienation (Mahnic, 2014), inducing healthy and socialising lifestyles (Lee et al., 2017), and assisting Chinese young students

to increase physical activities (Mo et al., 2019). Also, for Chinese services users gamification was shown to influence positively the intrinsic need satisfaction (Xi and Hamari, 2019). Gamification as a motivational tool has been acknowledged for employees (Burke and Hiltbrand, 2011) and group work (Lounis et al., 2014). Furthermore, for online operating businesses gamification impact utilitarian and hedonic value and vicariously evokes satisfaction and brand love via utilitarian and hedonic value (Hsu and Chen, 2018). Gatautis et al. (2016) have identified a positive relation between the SOR model of consumer behaviour and the gamification pyramid designed by Werbach and Hunter (2012). However, Werbach and Hunter (2012) have reshaped the three types of game elements into a pyramid. They ranked dynamics at the top of the pyramid, followed by game mechanics at the middle and components at the foundation of the pyramid. Robson et al. (2015) have used the word 'emotions' instead of aesthetics. The authors suggested that the word 'emotions' provides a better description of the concept of the element rather than 'aesthetics'. Furthermore, scholars suggested that 'aesthetics' is entirely meaningful in the game-specific and game design. The MDA framework is employed to explain the player behaviour and feedback and game designer perspective due to the reason that gamification elements are based on the identical framework (Kim and Lee, 2015; Leclercq et al., 2017).

The first element of the MDA framework is game mechanics. The game mechanics are defined as the communication process developed between the player and game components. Game mechanics are a system or a group of tools used to encourage the player to respond to the game (Zichermann and Cunningham, 2011) and to enlighten the level of hardness within the game (Kim and Lee, 2015). In other words, game mechanics are the instruments used to build the game and to enhance the substance of the game. Concerning the influence of game mechanics on the consumer's level of commitment, it is greatly affected by the time of exposure (Leclercq et al., 2017). The study supports the game mechanics as a tool to motivate and engage concerning the creation, and boost and preserve users' co-creation platforms. Game mechanics are significantly important regarding the consumers' engagement resulting with trust and commitment (Harwood and Garry, 2015). Helmefalk and Marcusson (2019), in their study regarding gamification in a servicescape context, concluded that gamified mechanics impact engagement, motion, flow and emotions acknowledged as cognitive and affective responses which successively affect short and long-term marketing outcomes. Concerning gender and country differences for game mechanics elements, the following dissimilarities have been identified. Although avatars as one of game mechanics elements were not part of this research, gender differences were identified based on cultural features. Americans consumers selected avatars corresponding with their gender (Nowak and Rauh, 2005), however, Turkish consumers selected male avatars regardless of their gender (Unal et al., 2018). Additionally, regarding game purchasing gender differences, male Americans (61%) are the most frequent purchasers (Entertainment Software Association, 2018). Considering games as male-phenomena and since the elements are taken from games, the authors seek to investigate if the elements reflect the gender differences when purchasing. Despite the above, limited empirical research has been carried out regarding game mechanics and their gender and occupation differences. To fill the gap, the following hypothesis is established:

H1 Game mechanics differ based on (H1a) gender and (H1b) occupation for s-commerce purchasers.

Dynamics is the second component of the MDA framework. Many authors agree that dynamics explains the interaction between the player and the game (Zichermann and Cunningham, 2011; Thiebes et al., 2014). Moreover, dynamics wrap up the wished-for behaviour and looked-for behaviour (Elverdam and Aarseth, 2007). Thiebes et al. (2014) present arguments to emphasise that not all dynamics elements are suitable for all situations. The dynamics feature must be adjusted to the context before starting the design process. Concerning gender differences for competition as one of game dynamics element, men are highly motivated by the achievements obtained rather than women (Hartmann and Klimmt, 2006; Williams et al., 2008, 2009). Therefore, aiming to identify the suitable game dynamics elements and to recognise the gender and occupation differences when purchasing via s-commerce to improve the marketing strategy, the following hypothesis has been formulated:

H2 For s-commerce purchasers, game dynamics are indistinguishable regardless of (H2a) gender and (H2b) occupation.

The third element of the MDA framework is aesthetics. Aesthetics refer to the aroused emotions that games are able to induce within the player. Emotions are defined as the elements which evoke the emotional response of the player within the game (Robson et al., 2015) and as an influencer for surmounting the transitional obstacles (Shi et al., 2017). Kim and Lee (2015) have studied curiosity as an important element of game aesthetics for educational gamification. The usage of curiosity along with other gamified elements increased the learning process at class. Additionally, female players perceive less pleasure while playing due to low social motivation (Funk and Buchman, 1996; Lucas and Sherry, 2004; Jansz et al., 2010). However, thus far limited research has been focused on gender and occupation differences regarding aesthetics as a game element. Consequently, to dwindle the gap, the following hypothesis has been developed:

H3 Aesthetics elements differ regarding (H3a) gender and (H3b) occupation when purchasing via s-commerce.

2.2 S-commerce and online buying behaviour: theoretical background

Social media incorporates a wide range of online sites that are designed to simplify communication, collaboration, and the sharing of information among users (Tuten, 2008). Due to the increasing influence of social media among users, numerous businesses commence promoting their business via social media. According to Yahia et al. (2018), perceived usage easiness of s-commerce as a platform, facilitating conditions, hedonic motivation and habits intensify the commitment to use the s-commerce. Exposed to numerous choices engaging consumers and motivating buying behaviour is considered challenging for businesses. Therefore, businesses and marketers in recent times are employing game elements to reach desirable results.

Facebook users are emotionally and rationally attracted by the pleasure and the information quality perceived when shopping (Kim and Johnson, 2016). Findings by González et al. (2015) suggest that the usefulness, social influence and the feeling evoked by Facebook usage are the determinant factors for purchasing decision. However, for Instagram users, according to Yahia et al. (2018), the influential categories are a group with s-vendor characteristics, trust, platform perception and social support. For consumers who shop via Instagram, perceived hedonism is detected to influence the

satisfaction and intention to interact in Instagram, which for companies is translated into influencers for actual behaviour (Casaló et al., 2017). Concerning the purchase intention for Instagram users, Amornpashara et al. (2015) have listed the persuading factors for purchase intentions. The researchers confirmed five factors, where the first is the influence of transmitting an entertaining message, the second is the connection that can create an entertaining message, followed by commercial promotion as the third, the aspiring group as the fourth, and the fifth is the perceived usage easiness.

Hsu et al. (2018) concluded in their research on the online shopping experience of Taiwanese housewives between the age of 41 and 50, that the quality of information provided in s-commerce impacted their buying decision. Regarding the influence of celebrities based on gender, Djafarova and Rushworth (2017) found that celebrities on Instagram have an impact on female buying behaviour. On the other hand, bloggers, YouTube personalities and ‘Instafamous’ users are greatly influential regardless the gender. According to Nesbitt et al. (2018), both male and female US college students consider purchasing online hedonic products riskier than utilitarian products. Considering technology usage, males are highly influenced by usefulness of technology, while women are greatly influenced by the social factor (Morris and Venkatesh, 2000). Although females are hedonically motivated to purchase, males are more likely to purchase hedonic products online. Since no data have been found regarding gender differences in a gamified setting, the following hypothesis has been designed:

H4 Gender differences are detected when purchasing via s-commerce.

The employment status of consumers has a critical effect on their purchasing behaviour due to the fact that employed consumers tend to purchase services and goods frequently. Reasoning is that unemployed consumers tend to demand low-priced products online (Ekpe et al., 2016). Furthermore, Zambia and Pakistanese employed women tend to be involved in daily household purchases (Boateng et al., 2014; Riaz and Pervaiz, 2018) but the employment status of US women had no effect concerning purchasing behaviour. Beside the employment differences in purchasing behaviour in general, limited research has been conducted regarding employment status differences when purchasing via s-commerce, therefore, the following hypothesis has been set:

H5 Employed consumers tend to purchase via s-commerce more than unemployed consumers.

3 Methodology

3.1 Data collection and measurement development

This study was conducted with the aim to explore the changing consumer behaviour within gamification elements for males and females and employed and unemployed consumers who purchase products and services via social media. Therefore, to accomplish the aim of the study and to shed light on the possible gender and occupation differences, the survey has been chosen as the most convenient research design. Due to the fact that the questionnaire is relatively simple to explain and understand, it has been chosen as the data collection tool. Furthermore, the questionnaire enables to collect a large amount of data from a considerable population in a satisfactory cost-effective

fashion (Saunders et al., 2012). The questionnaire was designed based on the study of Kim and Lee (2015) and Leclercq et al. (2017) regarding gamification elements. Following the same studies, the MDA framework has been adjusted and used for the purpose of this study. The questionnaire contains 61 questions. The first section had 15 questions regarding MDA framework elements. Thirty questions about gamification elements, user behaviour and behavioural intention used a Likert scale from 1 to 5 (1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree and 5 – strongly agree) as a measurement tool of the level of agreement with the statements. Moreover, the questionnaire was first tested with a small sample of 50 respondents before being distributed via social media. The sample was chosen applying the principle of convenience based on the two following criteria: respondents had to purchase at least once via s-commerce and be an Albanian speaker living in Kosovo or Albania. Considering the fact that the Albanian language is the official language in both countries, the language is considered as a minor criterion. The data was gathered in Kosovo during the second period of 2018 and in Albania during the first period of 2019.

Table 1 The gamification elements and statements

<i>Dimension</i>	<i>Item</i>	<i>Survey statement</i>	<i>Source</i>
Game mechanics	GM01	By buying via social media, I am able to obtain points, badges and leader-boards	Haziri and Chovancova (2018)
	GM02	The benefits received for buying via social media are thrilling	
	GM03	Purchasing via social media helps me forget unpleasant events and makes me feel better than others	
	GM04	I felt motivated by the rewards, points and badges offered by sellers	
	GM05	Social media make shopping a fun and enjoyable process	
Dynamics	DY01	I felt like I am making a big step in my life while shopping via social media	Haziri et al. (2019b)
	DY02	It is important to see a high number of consumers wanting the same products as I	
	DY03	I felt like I have reached a high social status while I am shopping via social media	
	DY04	Shopping via social media allows me to deplete my creativity	
	DY05	I consider shopping via social media as a personalised and individual process	
Aesthetics	AS01	I get very emotional regarding the way I interact with everything while shopping via social media	Haziri et al. (2019a)
	AS02	I felt like I was discovering a totally new world while purchasing via social media	
	AS03	Satisfaction and delight are the words to describe my experience when shopping online	
	AS04	Buying online stimulates my fantasy	
	AS05	The bond I feel with the products/items/goods presented in social media is strong	

After data analysis, 340 respondents from Kosovo and Albania that fulfilled the conditions were selected for further analysis. Due to the lack of data regarding s-commerce purchase products and services, the data that have been collected may be generalised because the survey has covered all Kosovo and Albania. Based on the rule of thumb, the sample cannot be smaller than 100 for the exploratory factor analysis, even if the number of variables is lower than 20 (Gorsuch, 1983; Arrindell and Van Der Ende, 1985; Maccallum et al., 1999; Tabachnick and Fidell, 2014). Therefore, 340 valid responds are enough to conduct EFA and Mann-Whitney U test. The data have been analysed using SPSS version 23.

For classifying and grouping items concerning the creation of factors which explain the MDA framework applicability for purchasers via s-commerce, the EFA has been employed. By using a mathematical combination, EFA merges the observed variables into correlated factors. All the traditional steps to conduct the EFA have been followed. The analysis started with selecting and measuring the observed variables, organising the correlation matrix, extracting the set of factors from the correlation matrix, defining the number of factors, rotating the factors to increase interpretability, and finally, interpreting the results (Tabachnick and Fidell, 2014). To interpret, clarify and simplify results, the varimax with Kaiser normalisation rotation has been employed. Furthermore, the reliability means that a measure should reflect the construct that it is measuring. Reliability was used as a procedure to reduce the number of items which should compose a new variable. In Table 2, along with the factors, items, communality and loading factors, the results of Cronbach's coefficient alpha, which is a test of reliability, are presented as well. Regarding the value, a value of above 0.7 is a preferable value for Cronbach's alpha. Generally, for all loaded factors, Cronbach's alpha coefficient is higher than 0.7.

Table 2 Results for gamification elements for s-commerce purchasers

<i>Factor</i>	<i>Item</i>	<i>XK – factor loading</i>			<i>AL – factor loading</i>			<i>Communality</i>		<i>Reliability</i>	
		<i>1</i>	<i>2</i>	<i>3</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>
Aesthetics emotion	AS03	0.85					0.44	0.86	0.58	0.94	0.78
	AS04	0.85					0.83	0.83	0.77		
	AS02	0.82					0.35	0.84	0.63		
	AS01	0.80					0.67	0.74	0.55		
	AS05	0.70					0.54	0.73	0.48		
Game mechanics benefits	GM04		0.83			0.74	0.78	0.63	0.84	0.72	
	GM03		0.75			0.59	0.76	0.39			
	GM02		0.74			0.60	0.66	0.51			
	GM01		0.71			0.77	0.60	0.64			
	GM05		0.56			0.62	0.50	0.59			
Dynamics progress	DY02			0.82	0.47		0.68	0.45	0.84	0.70	
	DY01			0.63	0.76		0.70	0.63			
	DY04			0.63	0.42		0.79	0.63			
	DY03			0.63	0.73		0.77	0.56			
	DY05			0.43	0.74		0.44	0.58			

Note: XK – Kosovo and AL – Albania.

EFA along with Mann-Whitney U test has been employed to investigate the dissimilarities and similarities between two independent groups where the data are not normally distributed (Pallant, 2007). The Mann-Whitney U test is a non-parametric test used to recognise the significant differences for an ordinal dependent variable by a single dichotomous independent variable, indicating that the test does not provide sufficient information regarding variable distribution. Due to the fact, that gender and occupation are categorical data, the Mann-Whitney U test is necessarily suitable to recognise the differences between groups.

4 Findings

In the questionnaire, there were questions regarding gender and occupation. Although the questionnaire was designed to measure certain constructs, the data were run separately for both countries while performing EFA. The reasoning underpinning this is that the differences between countries are considered noteworthy. The distribution by gender was 68.2% female and 31.8% male for Albania and 65.3% female and 34.7% male for Kosovo from total 340 respondents. Regarding employment status, 45.4% respondents were employed and 54.7% unemployed in the Albanian sample, while 70% respondents were employed and 30% unemployed in the Kosovo sample.

The EFA results for gamification elements after rotation are summarised and presented in Table 2. The 15 variables were loaded into three-factor loading groups. Furthermore, the determinant of the correlation matrix's resulted to be higher than 0.00001 (Kosovo = 5.553E-6 and Albania = 0.005), indicating the absence of multicollinearity. KMO resulted 0.93 (Kosovo) and 0.89 (Albania), higher than the expected meaning that analyses can proceed further. The Bartlett's test was significant (p-value 0.00) implying that the correlation matrix is significantly different from an identity matrix within which correlations between variables are all zeros. The minimum communality value was 0.39 and the maximum was 0.86. The average among all items was 0.64. The factor correlation matrix resulted higher than 0.32 (for Kosovo 0.68, 0.57, 0.46 and for Albania 0.67, 0.59, 0.84) and the variance among the factors is higher than 10% (for Kosovo 30.93%, 24.10%, 16.28% and for Albania 20.04%, 18.25%, 17.95%) meaning that an orthogonal rotation should be performed. From the orthogonal rotation group, varimax with Kaiser normalisation has been chosen.

For the first factor, loading the total variance explained by those factors after the rotation procedure was 30.93%. The factor loaded as the first for Kosovo was loaded as the third for Albania and the total variance was 17.95%. The variance is composed of five items. The five items are loaded from aesthetics related to 'emotions, discovering, satisfaction, delight and fantasy'. The items are labelled as 'emotion'. Its internal consistency was high (for Kosovo: CA = 0.94 and for Albania: CA = 0.78), indicating that the construct reliability was really good. The aesthetics dimension is consistent with the expatiations since its items were not allocated to other factors.

The second factor explained 24.10% (Kosovo) and 18.25% (Albania) of the variance and contains five items of game mechanics. After the rotation method, varimax with Kaiser normalisation, the items related buyers experience with 'points, badges, benefits, rewards, fun and enjoy' were loaded on this factor. The second factor is labelled as 'benefits'. Its internal consistency was higher than the minimum criteria (for Kosovo:

CA = 0.84 and for Albania: CA = 0.72), indicating that the construct reliability was good. The game mechanics dimension is consistent with the expatiations since its items were not allocated to other factors.

The third loaded factor for Kosovo explained 19.15% and was loaded as the first for Albania explaining 20.04% of the variance and contains five items related to dynamics. Due to a low percentage of the variance description, it was classified as the third factor. The items of dynamics related to ‘progress and creativity’ are loaded on this factor. The third factor is labelled as ‘progress’. Its internal consistency was higher than the benchmark (for Kosovo: CA = 0.84 and for Albania: CA = 0.70), indicating that the construct reliability was satisfactory. The dynamics dimension is consistent with the expatiations since its items were not allocated to other factors.

From 340 respondents, 170 were from Kosovo and 170 from Albania. The results of the Mann-Whitney U test are shown in Table 3. Based on the mean rank, the unemployed from Kosovo are highly concentrated on game mechanics, while the employed on aesthetics and dynamics. On the other hand, the unemployed from Albania are concentrated on dynamics and aesthetics, whereas the employed are highly concentrated on game mechanics. Since $p < 0.05$, it implies that there are statistically significant differences between Kosovar employed and unemployed s-commerce purchasers for game mechanics. For aesthetics and dynamics, no evidence has been found to identify differences between the groups.

Table 3 Mann-Whitney U test results for occupation

	<i>Mean rank</i>				<i>Mann-Whitney U</i>		<i>Z</i>		<i>Sig.</i>	
	<i>Employed</i>		<i>Unemployed</i>							
	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>
Aesthetics	88.7	79.7	78.1	90.3	2,655.5	3,132	-1.3	-1.5	0.19	0.16
Game mechanics	78.2	91.9	102.6	80.2	2,164.5	3,085	-2.9	-1.5	0.00	0.12
Dynamics	85.4	79.3	85.7	90.6	3,025.5	3,106	-0.3	-1.4	0.97	0.14

Note: XK – Kosovo and AL – Albania.

Table 4 Mann-Whitney U test results for gender

	<i>Mean rank</i>				<i>Mann-Whitney U</i>		<i>Z</i>		<i>Sig.</i>	
	<i>Female</i>		<i>Male</i>							
	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>	<i>XK</i>	<i>AL</i>
Aesthetics	77.6	88.5	100.2	79.1	2,405.5	2,787	-2.8	-1.1	0.00	0.24
Game mechanics	83.9	85.6	88.5	85.4	3,099.5	3,125	-0.5	-0.23	0.56	0.98
Dynamics	81.5	85.7	93.0	85	2,028	3,105	-1.4	-0.09	0.14	0.92

Note: XK – Kosovo and AL – Albania.

Table 4 presents the results of the Mann-Whitney U test for gender. Following the mean rank results, the Kosovar female concentration lies higher on game mechanics and dynamics, whereas male are highly concentrated on all gamification elements. This is contrary to the Albanian sample, where the approximate similar concentration on gamification elements is noticed for both males and females. Since $p < 0.05$, it implies

that there are statistically significant differences between Kosovar females and males for aesthetics. Concerning other gamification elements, no evidence has been found to identify the differences between the groups.

5 Discussion

The gamification elements would be beneficial for s-commerce to create an interesting, enjoyable and stimulating environment to increase the sales by engaging and encouraging consumers toward purchasing behaviour. The study aimed to investigate the gender and occupation differences for s-commerce purchasers by employing the MDA framework. Findings reveal that Kosovar employed and unemployed consumers differ regarding aesthetics for social media users. In addition, there are differences between Kosovar male and female consumers regarding game mechanics. On the other hand, no differences were noted in Albanian consumers due to gender or occupation. Despite the wide range of gamification usage in many disciplines, according to the authors' knowledge, limited research has been done in the field of consumer behaviour and s-commerce purchasers.

In previous research, the game elements were divided into groups. The first group includes game elements such as badges, leader-boards, and performance graphs. The second group contains game elements such as avatars, meaningful stories and teammates (Sailer et al., 2017). The items which influence the consumers' motivation and commitment towards websites of companies are progressed pathways, reaction and rewards, social connection and attractiveness (Conaway and Garay, 2014). Comparing with previous researchers, who highlighted the impact of game elements on psychological need satisfaction, this research provides evidence regarding dissimilarities of the MDA framework on consumers who purchase via s-commerce. Scholars (Kim and Lee, 2015; Robson et al., 2015; Shi et al., 2017; Rahman et al., 2018) strongly support the link between emotion inducing and the positive impact on achieving the desirable behaviour. This study revealed gender differences for Kosovars regarding aesthetics, which is considered as the emotional side of both genders. Therefore, H3a is supported while no evidence has been found to support H3b. Regardless of biological gender differences, females are more likely than males to outperform when game elements include planning tasks and are completed in technical settings (Lukosch et al., 2017) and perform better in engagement and learning outcomes at education (Khan et al., 2017). However, game dynamics are indistinguishable for both groups and countries, hence H2 is supported. Moreover, game mechanics are significantly different based on the employment status of Kosovars ($p < 0.05$), so H1b hypothesis is supported and H1a rejected. On the other hand, no differences between the groups have been found for Albanians. Nevertheless, due to a low income, likewise in developing countries, price plays a significant role in consumer choices (Al Hawary and Harahsheh, 2014).

Evidence to support H4 regarding gender differences has been provided. The percentage of females is slightly higher than that of males for both countries, for instance Albanian s-commerce purchasers were 68.2% female and 31.8% male and Kosovar purchasers were 65.3% female and 34.7% male. Moreover, based on the mean rank, Kosovar males are moderately committed to gamification elements. H5 is not supported for neither of the countries, as employed Kosovars (70%) purchase more than the unemployed (30%) via s-commerce whereas employed Albanians (45.4%) purchase less

than the unemployed (54.7%). Findings reveal that unemployed Albanians concentrate considerably on the aesthetics and game dynamics, while the employed focus their attention on game mechanics only. Moreover, employed Kosovars are more concentrated on aesthetics while the unemployed are highly concentrated on aesthetics and dynamics. Thus, Kosovar consumers (54.6% still prefer to shop directly in the shop) fear online purchasing due to the obstacles depicted in the Kosovo Agency of Statistics Report (Deliu et al., 2018), where 27.7% of respondents are concerned over the security of payments, personal data protection, and receiving/returning goods. Furthermore, 20.1% do not have the necessary knowledge and tools (credit card) to engage in online purchasing. When purchasing products from abroad (via e-commerce, s-commerce and/or m-commerce), consumers encounter many obstacles stemming from e-commerce sites not recognising payment cards. Controversially, according to IDRA Research & Consulting (2019) report, Albanians (59%) use internet to take part into the social networks. As presented in the report published by Statista (2019), the revenues from e-commerce in Albania during 2019 is \$172 million and the largest sector of e-commerce market is electronics and media.

6 Conclusions and recommendations

New terms such as social media and gamification were considered solely as a buzzword back in 2003 and 2007. Although the majority thought that gamification is used simply as a justification to play video games (Chou, 2016), its successful application has been proven in numerous domains. The findings of this research reveal the fulfilment of the aim by identifying the gender and occupation differences regarding aesthetics, game dynamics and game mechanics.

Females are more likely to use s-commerce than males, but when game elements are considered in purchasing process, females are less concentrated than males. Aesthetics as game elements is another characteristic where gender differences are noticed. Furthermore, game mechanics are the game element where occupation differences have been noticed. Therefore, this paper contributes to expand the existing literature on gender and occupation in purchasing via s-commerce when game elements are considered. The study presents empirical data regarding gender and occupation differences along with the comparison between Kosovar and Albanian social media users.

This study, inspired by the MDA framework, provides important information for practitioners which can be applied in marketing strategy. Therefore, it would assist marketers to understand the importance of game elements and their differences regarding gender and occupation. The information might be useful due to adjustment for the promotional campaign, consumer engagement and motivation. Furthermore, the results confirm and extend the game elements application regarding domain and country context. The framework and methodology could be applied to countries at different levels of economic development in order to be able to generalise the results worldwide.

7 Limitations and future directions

This research has, like any other, has several limitations, which can be understood as an invitation for additional research. Firstly, the research has been conducted only in Kosovo

and Albania, namely, further research can be conducted in other countries in order to compare the results with other countries and cultures. Secondly, the sample used for this study biased toward s-commerce purchasers rather than non-s-commerce purchasers. Therefore, it is advisable that the study be conducted for offline purchasing as well, in order to achieve a reliable comparison. Thirdly, researchers can replicate and refine the findings in Kosovo and Albania by conducting studies in various other situations, environments and industries. Fourthly, including other moderators, for instance, income, age, residence area and educational level could be interesting factors for exploration. In addition, exploring game experience in a gamified settings as suggest by Vashisht and Sreejesh (2016) might lead to attention-grabbing results. Lastly, this work provides the foundation for further research regarding gamification, game elements and their impact on online consumer behaviour. And for practitioners, it provides information regarding the influence of game elements to be used and applied in online purchasing behaviour.

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