

The effects of user generated content and traditional reference groups on purchase intentions of young consumers: A comparative study on electronic products

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ABSTRACT

This paper investigates the impact of post-purchase user generated content (UGC) and traditional reference groups on the purchase intentions for electronic products (e-products) among young consumers in Jordan. To achieve this, a descriptive methodology was adapted, with a quantitative approach and survey strategy utilizing a five-point Likert scale questionnaire distributed to 450 university and college students in Jordan. 400 filtered and screened copies underwent statistical analyses. SPSS version 21 was utilized to describe and analyze the data. The results revealed a strong impact of post-purchase UGC on purchase intentions of e-products among young consumers. The results also revealed that traditional reference groups have a lower significant impact on the purchase intentions of young consumers, indicating that young consumers rely on online communities more than they rely on family, friends, colleagues, and other social organizations. The findings are discussed with a view to their implications, with recommendations for future research.

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1. Introduction

In the contemporary world, it is unquestionable that information and information technologies have influenced all sectors of socio-economic life (Bataineh et al., 2016). A crucial factor that causes constant innovative advances in digital applications is the widespread use of social applications, platforms, and social communication sites, which have encouraged individuals to interact with each other and form online communities (Hajli, 2015). The online social relationship development and the popularity of social networking sites have opened the door to a new trend called social commerce (Bataineh et al., 2015a; Hajli, 2013). Company websites play a significant role in marketing, enabling customers to easily access all information relevant to their products through browsing these websites at any time, and anywhere (Al Qeisi & Alabdallah, 2013, 2014). In the 1980s, there was great interest in developing communication platforms that offered a virtual exchange of ideas and opinions to complement traditional channels that remained the default (Mustafa & Al-Abdallah, 2020). Numerous forms of social platforms subsequently emerged that exceeded the capabilities of traditional communication in ubiquitous global service provision, and during the 2000s social media networks, smartphone technology, and e-commerce revolutionized modern communications. With the development of technology, user participation grew more widespread in the following years with increased use of social networks (Bataineh et al., 2015b; Bialy, 2017). Millions of people interact and share their common ideas with the fast-growing social media, which makes these applications an ideal platform for any company, increasing the

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popularity and accessibility of brands and facilitating the process to reach their target customers (Al-Abdallah et al., 2021; Chandio et al., 2015). In the meantime, social commerce related to sociality provides firms with electronic ways to sell their products or services through social media platforms such as Instagram and Facebook, instead of regular e-commerce, which is based more on consumers' own participation and their relationship with companies (Alabdallah, 2013; Erdogmus & Tatar, 2015). Recently, the world has undergone a massive evolution in social commerce, and several studies have been conducted to investigate its success factors, proving that trust is the key factor that influences success, requiring more attention from companies (Kim & Park, 2013). The use of e-commerce and social commerce entails a degree of risk uncertainty, as consumers often fear providing their personal and financial information over the internet (Alabdallah, 2015; Al-Abdallah et al., 2018; Nunkoo & Ramkissoon, 2013). However, younger users (digital natives, who grew up with modern digital technologies) are much less reticent, and it is notable that a large percentage of e-commerce transactions are conducted by young people aged 18-24 (NPD, 2019).

Compared to traditional buying formats, where the customer can try, feel, and experience goods before buying, electronic purchasing poses new challenges and risks from the buyer side, driving most consumers to search and ask about the feedback of other consumers (Vinerean et al., 2013), leading to the formation of online communities that present the personal experience of consumers on almost everything one can think off. User Generated Content (UGC) has emerged and became an important factor in the purchasing process of consumers worldwide (Al-Abdallah & Bataineh, 2018; Cheung & Thadani, 2012). UGC is not limited to the products themselves but is extended to include core and ancillary services provided by different suppliers (Alabdallah et al., 2014a), including post-purchase service (PPS), which is especially important when buying products that might require such customer aftercare (Balakrishnan et al., 2014). However, there are several social factors that traditionally influence consumer behavior, of which Kotler and Keller (2006) considered reference groups to be one of the most important. Sometimes, customers tend to buy a specific product not because they like it personally, but because it is liked by family members or by their peer groups (Gulati, 2017). It is important to understand what kind of influence traditional reference groups still have on young consumers in the digital world. Therefore, this study is designed to investigate the impact of post-purchase UGC on the intentions to buy e-products among young consumers, both directly, and through the moderation of traditional reference groups.

2. Literature Review

2.1 Purchase Intentions

Purchase intentions are the desire of an individual to buy a specific product or service in the future, which do not always lead to conducting a purchase transaction, because the latter depends on numerous other individual and contextual factors before the actual point of sale (Warshaw & Davis, 1985). Consumer evaluation of diverse product and transaction features (including the intrinsic qualities of the product itself, the price relative to need and competitors, and personal financial and aesthetic priorities etc.) shape their intention to purchase. Researchers explain that consumers go through the process of identifying the product they desire to purchase, finding product information, comparing, and evaluating it with competing options or products, and finally committing to their decision (Mustikasari & Widaningsih, 2018). Since the market offers a wide range of brands promoting different-value products to attract consumers, online communities are platforms for brands to provide their merchandise along with supporting purchase intention-related information, to save customers time and attract them to their brands. Customers will inherently go through the process of defining the product intended to purchase, so bringing required information for this process to the product offering enables them to start searching and evaluating the product before committing to purchase it more effectively (Ghattas & Al-Abdallah, 2020; Lim et al., 2016).

There are many options in the market for electronic products that satisfy consumer needs, including for diverse consumers with different opinions and preferences. In general, the purchase behavior of consumers depends on features like brand name, price, quality, and awareness of innovation, mixed with other choices, besides impulsiveness (Leo et al., 2005; Abou-Moghli et al., 2012). Rahim et al. (2016) evaluated the factors influencing purchasing intention among young consumers, focused on smartphones among university students. They administered 367 questionnaires to diploma students studying at the University Teknologi-MARA, Malaysia. The results showed that product features, brand name, and social influence significantly influence purchasing intentions. The question arises of how consumers know about these factors, which is where UGC can play an important role.

2.2 Online Communities

The rapid proliferation of internet access, e-commerce, and social media platforms since the mass popularization and dissemination of personal computing and internet access during the 1990s has obliterated traditional geographical boundaries to communication and trade, and technology has enabled communities to extent physical contact and access to goods and services within the online realm of the internet (Feenberg & Barney, 2004). An online community is made up of individuals who interact socially to satisfy their own needs or perform special roles with a shared purpose, whose interactions are guided by tacit and explicit policies, using computer systems to support and mediate social interaction (Preece, 2004). Such communities can be founded by consumers or companies. Successful online communities are based on cooperation and trust; vibrant communities create and promote conversations that can lead to the growth and advancement of business (Taprial & Kanwar,

2012). Online communities provide companies and customers with additional communication channels, through which they can interact with each other. These communities help companies create connections with dedicated users, which is very pertinent to UGC.

2.3 User Generated Content

Researchers and marketers have long been aware of the power of word of mouth (WOM) and its influences on customer purchase decisions. In the context of e-commerce and internet communication, this traditional concept is referred to as UGC; albeit the latter has several characteristics that are distinct from traditional (personal) WOM, in most essential respects it is the same (Al-Abdallah & Bataineh, 2018; Cheung & Thadani, 2012). The internet has expanded consumer options for exploring information on a product by including other consumer comments online, allowing consumers to pose their advice through participating in UGC. Hennig-Thurau et al. (2004) define UGC as any positive or negative statement made by potential, actual, or former customers about a product or company, which is shared with many people and institutions via the internet. Customers always review the experiences of other customers online before purchasing electronic products. Because of that, UGC is among the most powerful and sensitive tools in e-marketing, and it has consequently spread rapidly, widely, and effectively. Online communities and social media in general allow customers to write their recommendations that influence potential customers (Lee et al., 2008). Park and Stoel (2005) believed that the inability to physically examine products in online shopping caused a consumer preference for products with positive UGC. Alkailani (2016) studied the effect of UGC on consumers' decisions to buy products and services with a sample of 1600 undergraduate students, and found that message source credibility, level of product involvement and message content were found to play a crucial role in UGC acceptance and effectiveness. According to the Nielsen Group (2015) Global Online Consumer Survey, 71% of consumers in the Middle East trust consumer's opinions posted online.

Compared to traditional channels, UGC has the benefit of distributing information expansively, immediately, instantly, in vast volumes, in savable formats, and anonymously (Hennig-Thurau et al., 2004). UGC enables comprehensive transfers of new ideas in many ways, including discussions, stories, interchanges, and common interactions of products and services. Satisfied customers will potentially continue to purchase the product and inform others about its positive features, while displeased customers will only express the weaknesses of the product by passing on the negative impression to others (Richins, 1983). Before buying a product or a service, consumers search for information about the opinions and experiences of previous customers, to feel confident when committing to the purchase (Pitta & Fowler, 2005).

2.4 Post-Purchase Experience

After sales services help produce remarkable revenue in almost every business sector, but effectiveness requires strong follow-up and skilled technical staff to fix customer complaints, besides constantly upgrading internet services (Bundschuh & Dezvane, 2003). PPS has become a key factor for all companies today, giving each company the power to integrate many marketing and promotion mixes in various ways to enhance customer loyalty and satisfaction (Alabdallah & Abou-Moghli, 2012). PPS functions as a company's guarantee of ongoing support for consumers, which plays a crucial role in attracting the attention of potential customers within the market (Al-Abdallah & Ahmed, 2018; Chien, 2005). According to Goffin (1999), there are seven major elements of PPS that should be provided to the customer: installation, product warranty, online assistance, repair service, user training, documentation, and post-purchase support arrangements. PPS elements are essential for customer satisfaction and retention and can spread the company's products via positive UGC (Choudhary et al., 2011). PPS starts from the distribution stage (Alabdallah et al., 2014b). There is a positive relationship between PPS and between electronic products, because such products are more prone to require regular follow-up and maintenance, due to the technical complexity of electronics and the relatively poor technical skills of most consumers, and the long product lifespan in usage with consumers, which can offer avenues for prolonged and mutually beneficial relationships between consumers and brands (Murali et al., 2016). The company can create and improve its reputation by providing excellent PPS, such as rapid response to customer complaints, replacement of the defective products, or full refunds in case customers are unsatisfied with the provided products they received (Nasir et al., 2014).

The Midea Group, a Chinese electrical appliance manufacturer, has developed an after-sales service plan that provides a free lifetime warranty in China for commercial air conditioners and electronic home appliances like refrigerators, microwave ovens, washing machines, vacuum cleaners, and dishwashers. Once customers purchase one of their products and receive it, they will find a gold card for a lifetime warranty of the product purchased. When a product fails, customers submit warranty claims to the retailer, then the company delivers the required service, which may require a full replacement or repair of some parts of the product, and the full cost of the warranty service is paid by the company (Xie & Ye, 2016).

Researchers agree that PPS plays a major role in satisfying customers as well as the increasing retention across industries (Al-Abdallah, 2021). Ahmed (2011) examined the impact of PPS on consumer buying behavior in Pakistan. Data was collected through a close-ended questionnaire of 250 customers. Results show that easy availability of spare parts, easy availability of technical mechanics, parts replacement warranties, and customization services have the most significant impacts on consumer-buying behavior.

Ladokun et al. (2013) investigated the impact of PPS on consumer satisfaction and retention for LG Electronics in Nigeria. The sample size for the study was 60 of LG sales force who were randomly selected from 10 LG electronics distributors, and 50 of their customers. The results indicated that product delivery, installation, and warranty significantly affect customer satisfaction and retention. Oroh et al. (2019) compared the influences of product, price, after sales services, and advertising on consumer purchase intention of the Suzuki Ertiga MPV automobile. The research was conducted in Manado, Indonesia, collecting primary data from 100 respondents. The study found that price and after sales service had no significant influence on consumer purchase intention compared to product and advertising. In most industries, most companies offer their customers PPS. However, these services are necessary for electronic products to be delivered, installed, and taken from a specialized technician's instructions of use, and they usually require periodic maintenance to achieve customer satisfaction and build brand equity.

2.5 User Generated Content and Purchase Intention

In the past few years, UGC has become an increasing source of information for consumers to help them in their purchase intention Michelle (2018). The relationship between UGC in general and purchase intention has been reviewed in several previous studies. Erkan and Evans (2016) investigated the influence of UGC in online conversations in social media on consumer purchase intentions. A conceptual model was developed based on the integration of the Information Adoption Model (IAM) and related components of the Theory of Reasoned Action (TRA). The resultant Information Acceptance Model (IACM) was validated through structural equation modelling (SEM) based on questionnaires administered to 384 university students who used social media. The results assure that quality, credibility, usefulness, and adoption of information, needs of information, and attitude towards information are the key factors of UGC that influence consumer purchase intentions. The IACM claims that the influence of UGC information not only depends on the characteristics of UGC information, such as quality and credibility of information, but also on consumer behavior towards UGC information. Zhung (2017) examined the influence of UGC on consumer purchase intention with data from 200 questionnaires from different cities in Malaysia. The results showed that UGC positively influenced the consumer behavior regarding purchase intention. Mediation effect analysis was conducted to further understand how brand loyalty acts as a mediator and influence the purchase intentions indirectly. The findings highlighted the importance of positive UGC in leaving a positive impression on consumers and increasing brand engagement with them. Michelle (2018) examined the influence of UGC on young consumer purchase intention in the Philippines, focusing on six factors and the way they influence customer purchasing decisions: consumer reviews, characteristics of the reviewer, characteristics of the website presented the reviews, interpersonal influence, product review characteristics, and environment influence. The data was collected from 337 college students of Surigao del Sur State University, Philippines. The results revealed that there was a positive impact of the factors of UGC on young consumers' purchase intention. Moreover, consumer reviews were the main dominant factor that influenced young consumer purchase intention. Based on these studies, the following hypothesis is posited:

H₁: *There is a statistically significant direct impact of user generated content on the purchasing intentions of young consumers.*

2.6 Traditional Reference Groups

According to Dhurup et al. (2013), the reference group can be defined as a person or group of people who have a great impact on individuals' behaviors within the context of a social circle, including friends, family members, peer groups, and colleagues, etc., whose opinions are important and instrumental in individuals' decisions, including consumer-related choices. From the point of view of marketing, a reference group is a group that is a reference basis for an individual in determining purchase or consumption decisions, to reduce inappropriate product selection. Traditional reference groups include the consumer's family, friends, social organizations, and professional and trading institutions, which crucially influence the choice of specific brands. Traditional reference groups generally affect the value and behavior of others (Kotler & Keller, 2006). Schiffman and Kanuk (2000) identified four types of reference groups: contractual, aspirational, disclaimant, and avoidance groups. In a contractual group one holds membership or has regular face-to-face contact, and approves of its values, attitudes, and standards. In an aspirational group one does not hold membership or have face-to-face contact, but one aspires to be a member of that group. In a disclaimant group one holds membership or has face-to-face contact, but disapproves of the group's values, attitudes, and behavior. In an avoidance group, one does not hold membership and does not have face-to-face contact, and one disapproves of its values, attitudes, and behaviors.

2.7 Traditional Reference Groups and Purchase Intention

Kembau and Mekel (2014) examined the impact of traditional reference groups on young consumer behavior towards purchase intentions of luxury fashion brands, aiming to determine social factors that have the most important influences on young consumers' behaviors. A random sample of 100 respondents was recruited from Manado users, and the study revealed that reference teams and families have significant impacts on young customers' purchase intentions for luxury fashion brands. Chaudhary (2018) examined the effect of the reference group and roles and status on the consumer buying behavior, with data collected from 100 respondents each from two Indian cities, Jalandhar and Ludhiana. The results indicated that the reference

group affected consumer behavior more than roles and status. Interestingly, homemakers and respondents from service backgrounds were found to be the most affected by traditional reference groups, while students and young consumers were the least affected. Thus, we posit the following hypothesis:

H₂: *There is a statistically significant direct impact of traditional reference groups on the purchasing intentions of young consumers.*

3. Research Methodology

This research used a descriptive analytical methodology and a quantitative approach, utilizing survey techniques to analyze the impact of UGC and traditional reference groups on purchasing intentions to buy electronic products among young consumers in Jordan. An online personally administered, five-point Likert scale questionnaire was used to collect primary data.

3.1 Research Population and Sample

The research population consisted of young consumers in Jordan aged between 18 and 24 with active social media accounts. The best places to locate such consumers are colleges and universities. According to the Ministry of Higher Education and Scientific Research's (2019) *Annual Report, 2017-2018*, there are an estimated 374,000 higher education students in Jordan, comprising 342,000 in public and private universities, and 32,000 in public and private community colleges. The vast majority of students have active social media and online accounts, and the 18-24-year-old age cohort in Jordan are considered to enjoy near-ubiquitous access to ICT, and their accessibility has been steadily increasing over recent years (Al-Dwairi, 2017). Non-probability sampling technique was found more applicable for this research, and a convenience sample (accidental sample) was applied. Prospective participants were approached at the major universities and colleges in Jordan. 450 copies of the questionnaire were distributed to students and the research team received a response from 414 students. However, after screening and filtration, only 400 questionnaire response forms subsequently underwent statistical analyses. The sample profile is presented in Table 1.

Table 1

Sample profile

| Variable | Category | Frequency | Percent |
|--|----------------------------|------------|-------------|
| Gender | Male | 218 | 54.5% |
| | Female | 182 | 45.5% |
| | Total | 400 | 100% |
| Educational level | Bachelor Degree | 364 | 91% |
| | Diploma | 36 | 9% |
| | Total | 400 | 100% |
| Daily social media usage | 1-2 hours | 63 | 15.8% |
| | 2-4 hours | 118 | 29.5% |
| | More than 4 hours | 219 | 54.8% |
| | Total | 400 | 100% |
| Electronic products previously purchased | Mobile phones and tablets | 145 | 36.3% |
| | Cameras | 32 | 8.0% |
| | Computers (PC)/ laptops | 62 | 15.5% |
| | Home electronic appliances | 161 | 40.3% |
| | Total | 400 | 100% |
| Most preferred social media platform | Facebook | 265 | 66.3% |
| | Twitter | 21 | 5.3% |
| | YouTube | 24 | 6.0% |
| | Instagram | 90 | 22.5% |
| | Total | 400 | 100% |

3.2 Research Instrument

The data was collected using a questionnaire built based on previous studies (Appendix A), with a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Two screening questions were used about whether the respondent had an active social media account and had bought electronic products in the past few months; only those who answered yes to both questions could fill in the remainder of the questionnaire, which consisted of three parts: (1) the cover letter and consent form, (2) demographic information about the respondents, and (3) data on the dependent variable (purchase intentions) and independent variables (UGC and traditional reference groups).

The face validity of the questionnaire was assessed by presenting it to a panel of academic marketing professors in local Jordanian universities and the reliability of the questionnaire was established through Cronbach Alpha test, as shown in Table 2, which indicates a high degree of stability for all questionnaire questions in all variables, where all variables results were higher than (0.7) indicating high reliability (Taber, 2018).

Table 2
Cronbach's alpha results

| Variable | Cronbach's Alpha |
|------------------------------|------------------|
| UGC | 0.855 |
| Traditional Reference Groups | 0.782 |
| Purchase Intentions | 0.783 |
| Total Questionnaire | 0.947 |

4. Results

4.1 Statistical Analysis

A set of tests was conducted to verify the validity and suitability of the data obtained from the study tool. The moderation of data distribution for the study models were tested using Kolmogorov-Smirnov test, and the test results were as shown in Table 3. These results can be judged by the moderation of data distribution in the study model. The probability value (Sig) for all variables increased from (0.05), indicating that all study variables have normal distribution (Fang & Chen, 2019).

Table 3
Normal distribution test results

| Variable | Sig | Statistic (K-S) |
|-----------------------------------|-------|-----------------|
| UGC | 0.074 | 0.102 |
| Traditional Reference Groups | 0.068 | 0.098 |
| Purchase Intentions of e-Products | 0.079 | 0.120 |

The prediction ability of the study models was also examined to ensure that there were no self-correlation problems, and that there was no linear interference problem between the dimensions of using social media in the presence of traditional reference groups as a moderating variable. The results of multicollinearity testing are presented in Table 4. Variance inflation factor (VIF) is used to determine interference between variables and the general rule of VIF. There is inflation according to this indicator when the value is greater than 10, thus the regression coefficients are poorly determined due to increased inflation between independent variables in the presence of the moderating variable (Kraha et al., 2012). As shown in Table 4, all values were less than 10 in relation to the inflation coefficient. The tolerance coefficient, which is used to detect any problem of survival of the variable within the study model that should be tested, determines self-correlation problems if the tolerance factor value is less than 0.10 (Salmerón et al., 2019). As shown in Table 4, all values were greater than this threshold in relation to the inflation coefficient. Accordingly, all study variables exceeded these two indicators, which means that there is no problem of linear interference in the study model. Autocorrelation testing was conducted using the Durbin-Watson test. According to Field (2013), autocorrelation problems arise when the contiguous values of the variables are correlated, which affects the validity of the model due to unrealistic impacts (due to such correlation). Durbin-Watson test scores range from 0.0 to 4.0, with 1.5-2.5 indicating an appropriate range; the optimal value is the median point of 2.0, which indicates that there is no autocorrelation between the contiguous values of the variables (Lee, 2016). It can be seen from Table 4 that the calculated D-W value of the study model is 1.725, within the appropriate range, indicating that there is no autocorrelation problem to undermine the validity of the model. Based on these test results, the data is suitable to use to test the studied hypotheses.

Table 4
Validity of the study data for statistical analysis

| Variable Type | Variables | Multicollinearity | |
|-----------------------|------------------------------|-------------------|-------|
| | | Tolerance | VIF |
| Independent Variables | UGC | 0.581 | 1.721 |
| | Traditional Reference Groups | 0.551 | 1.816 |
| Durbin-Watson = 1.725 | | | |

4.2 Hypotheses Testing

Simple and multiple linear regressions were used to test the research hypotheses. The results are presented and discussed the following two sub-sections.

4.2.1 Testing the first main hypotheses

H₁: *There is a statistically significant direct impact of UGC on the purchase intentions of young consumers.*

Simple linear regression was used to test the first main hypothesis; the results are presented in Table 5, which shows that the F value is greater than the critical f value, indicating a significant relationship between the independent variable UGC and the dependent variable purchase intentions. The R value (0.702) shows the strength of the impact, which in this case can be described as "strong and positive", as the value is close to 1. The R² value (0.493) shows the relative importance of UGC to the purchase intentions. The t statistic shows that a linear relationship exists between UGC and purchase intentions. The t

value is significant (sig. value is less than 0.05), indicating the importance of this variable to purchase intention. This importance is clearly quantified by the R^2 value given. The beta coefficient reflects the degree of change in the outcome variable for every 1-unit of change in the predictor variable. Based on the results shown in Table 5, H1 is accepted.

Table 5

Simple regression test results for the first main hypothesis

| Variable | R | R ² | F | Sig F | β | T | Sig T | Hypothesis Decision |
|----------|-------|----------------|---------|-------|---------|-------|-------|---------------------|
| UGC | 0.702 | 0.493 | 228.205 | 0.000 | 0.604 | 15.12 | 0.000 | Accept |

Critical f at 0.05 level = 3.89 (degree of freedom 1 & 251)

4.2.2 Testing the second main hypothesis

H₂: *There is a statistically significant direct impact of traditional reference groups on the purchasing intentions of young consumers.*

Simple linear regression, was used to test the second main hypothesis; the results are presented in Table 6, which shows that the F value is greater than the critical f value, indicating a significant relationship between the independent variable traditional reference groups and the dependent variable purchase intentions. The R value (0.351) shows the strength of the impact, which in this case can be described as “weak and positive”, as the value is close to 0. The R^2 value (0.123) shows the relative importance of traditional reference groups to the purchase intentions. The t statistic shows that a linear relationship exists between traditional reference groups and purchase intentions. The t value is significant (sig. value is less than 0.05), indicating the importance of this variable to purchase intention. This importance is clearly quantified by the R^2 value given. The beta coefficient reflects the degree of change in the outcome variable for every 1-unit of change in the predictor variable. Based on the results shown in Table 6, H2 is accepted.

Table 6

Simple regression test results for the second hypothesis

| Variable | R | R ² | F | Sig F | β | T | Sig T | Hypothesis Decision |
|------------------------------|-------|----------------|---------|-------|---------|------|-------|---------------------|
| Traditional Reference Groups | 0.351 | 0.123 | 114.103 | 0.000 | 0.302 | 10.7 | 0.001 | Accept |

Critical f at 0.05 level = 3.89 (degree of freedom 1 & 251)

4.2.3 Comparing Both Independent Variables

Both independent variables are significantly affecting the purchase intentions of young consumers when tested separately. In order to compare the nature of their effect combined, Multiple linear regression, particularly hierarchical linear regression, was used and the results are presented in Table 7, which shows that the F value (41.158) is significant (Sig. F = 0.001), which means that the independent variables, combined, have significant impact on the purchase intention of young consumers. The beta coefficient reflects clearly that UGC has significantly higher impact than traditional reference groups. It is true that traditional reference groups, alone, have a higher significant impact on purchase intentions of e-products among young consumers, but when combined with the UGC, the results reflect low levels of impact.

Table 7

Simple regression test results for the second hypothesis

| Model Variables | β | T | Sig T | R ² | F | Sig F |
|-----------------------------|---------|--------|-------|----------------|--------|-------|
| UGC | 0.581 | 14.023 | 0.000 | 0.433 | 41.158 | 0.001 |
| Traditional Reference Group | 0.215 | 8.870 | 0.000 | | | |

4.3 Summary

The undertaken statistical analyses reveal that there is a statistically significant impact of UGC on the purchase intentions among young consumers to buy e-products. In addition, the analyses reveal that there is a statistically significant impact of traditional reference groups on the purchase intentions among young consumers to buy e-products. However, the statistical analyses also indicate that UGC has a significantly higher impact than traditional reference groups on the purchase intentions of e-Products among young consumers.

5. Discussion and Conclusion

5.1 Main Findings

The rapid proliferation of modern ICT, smartphones, and e-commerce are increasingly proliferating the Middle East and North Africa, and related activities and the importance of these developments are increasingly apparent in Jordan. Social media sites have become an important part of the lives of many individuals in the country, making social media a major entry point for

entrepreneurs to market their products and services and develop businesses (Abou-Moghli & Al-Abdallah, 2019). Young consumers are within the age group most likely to use technology, which explains the prominent reason for the purchase intentions of e-products by them. This result is consistent with the findings of previous studies which reported that UGC significantly affects purchase intention (Alkailani, 2016; Ansari et al., 2019; Balakrishnan et al., 2014; Iblasi et al., 2016; Mustikasari & Widaningsih, 2018; Zhung, 2017). In this study, the results specifically indicate that post-purchase UGC has an impact on the purchase intentions of young consumers when it comes to buying e-products.

This outcome is consistent with the findings of Ahmed (2011), who found that post-purchase experience has a significant impact on buying intentions, but this outcome is contrary to the more recent findings of Oroh et al. (2019), who reported that post-purchase experience had an insignificant impact on buying intentions. The nature of the examined product category can explain this discrepancy, as Oroh et al. (2019) examined the intention to buy cars, which is a major purchase decision, requiring more complex deliberation and consideration of other impotent factors. In addition, aside from warranty-related issues, most car owners end up doing their regular car maintenance with private mechanics, because the latter are generally found to be more cost-effective. This might explain why post-purchase experience is not significant. However, this is not the same as for e-products, where PPS is an important influence affecting consumer interest in buying, as many products are considered poor quality by consumers just because of the poor after-sale services provided by the manufacturers/agents. In this sense, evidence shows that UGC influences buyers, since e-product reviews and comments are a good way to assess products before they are purchased. Traditional reference groups have historically played a significant role in shaping consumer decisions to buy products. Whether through relatives, friends, or other social organizations, prospective consumers typically consider the views and advice on the quality and price of goods and services. However, due to the wide use of digital technologies and the spread of specialized online communities, the impact of the traditional reference groups is declining, as consumers can turn to more specialized and expert opinions on any product or topic they can think of. Accordingly, the influence that traditional reference groups used to have is generally decreasing, and the influence of online communities is increasing. Online communities can be viewed as new forms of reference groups called e-reference groups (Al-Abdallah & Bataineh, 2018), where consumers can share long-term interests and exchange opinions based on their experience and knowledge over the different online platforms. This notion calls for a new classification of reference groups in theory.

5.2 Research Recommendations

Based on the results of this research, it is recommended that e-product companies should pay attention to post-purchase experience, aiming to enhance PPS as much as possible, and they need to highlight such services in the different digital and online platforms. They should encourage consumers to reflect on their positive experiences through incentives and loyalty programs. It is also important that they follow up any negative online comments and try to address the reasons behind them. Companies should pay attention to reviews, responses, and comments related to their products and take any necessary corrective measures quickly. Since online communities are the main sources of UGC, it is important to provide such communities with enough information about their offerings and what kinds of services to expect when buying any of their e-products, including unique post-purchase elements, which should help spreading the word and improve the overall sales of the product. Encouraging satisfied and delighted customers to share their positive genuine experiences would be very effective in influencing future sales.

5.3 Research Limitations

The research encountered some limitations, including the inability to determine the total number of young consumers who have an intention to buy e-products, and the use of Google Forms to distribute the questionnaire to the study sample, due to the COVID-19 pandemic and lockdown policies.

5.4 Future Research

Future research can undertake a comparative analysis of different factors affecting the purchase intentions of young consumers, to determine the relative importance of different elements. The same methods could also be used to study other markets and products, to compare the results and to understand variations (if any) based on market features and product categories.

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Appendix

The Source of the Questionnaire Statements

| Variable Type | Variable | Source |
|---------------|------------------------------|---|
| Independent | UGC | Akyüz (2013), Erkan and Evans (2016), Murali et al. (2016), Sha-harudin et al. (2009), Zhung (2017).Arora and Sharma (2013), Efendioğlu (2019), Tritama and Tarigan (2016). |
| | Traditional reference groups | Chaudhary (2018), Jin and Punpanich (2011), Kembau and Mekel (2014), Yang et al. (2007). |
| Dependent | Purchase intentions | Alamgir et al. (2010), Efendioğlu (2019), Hasan (2008), Jin and Punpanich (2011), Shabrin et al. (2017), Wilimzig (2011), Xie (2012), Yang et al. (2007). |



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