Which consumer attributes influence South African consumers to shop online

KM Makhitha L van Scheers C Mogashoa

Department of Marketing Management, College of Economic and Management Sciences University of South Africa, South Africa

Keywords

Online consumer shopping behaviour, convenience, perceived usefulness, security, South Africa, frequency of purchase

Abstract

Technology advances such as Internet have changed consumers shopping behaviour and increased South Africa consumers online shopping in the last few years. The purpose of this research paper was to determine the consumer attributes that influence online shopping behaviour of South African consumers. The paper determines whether consumer attributes influencing online shopping differ across consumer demographic factors and frequency of purchase. Online shopping has been a topic of interest for many researchers in SA and globally. As online shopping gain momentum among consumers, it is important for online retailers to understand what influence consumers to shop online. This is more important for developing countries such as SA.

The population for the study was SA consumers who have internet access. A convenience sampling method was used to reach 104 respondents in SA. Data was analyzed using SPSS version 24. Various statistical analysis such as descriptive statistics, factor analysis and Anova were used. The findings of the study revealed that consumers attributes: perceived ease of use, perceived usefulness and security have an influence on their online shopping behaviour. The conducted research also established that age of consumers, significantly influence on online shopping while gender, income and education level have no significant influence towards online shopping consumer behaviour. The attributes differ across the frequency of purchase with those frequently buying attaching more value to perceived ease of use and perceived usefulness of online shopping.

Corresponding author: Khathutshelo Makhitha

Email addresses for the corresponding author: makhikm@unisa.ac.za

First submission received: 23rd October 2018 Revised submission received: 18th February 2019

Accepted: 22nd April 2019

Introduction

Since its introduction in the early 1990s, the concept of online shopping has revolutionized how consumers shop (Rudansky-Kloppers, 2016) and therefore there is a need to understand how online consumer behave (Fayad & Peper, 2015). Globally consumers differ; as a result, their behaviour towards online shopping similarly varies. Furthermore, KPMG (2017:1) suggested that the frequency of online purchases varies from one country to another. Particularly developed countries such as UK, USA and China who are considered the leaders of online shopping (Mpinganjira, 2017:1). Although the use of internet technology in Africa is on the rise (Mpinganjira, 2017:1), the challenge remains that online shopping in developed worlds has advanced in contrast to developing countries like South Africa (SA) and much of the African continent (KPMG, 2017:1). Much of this lag in online shopping is attributed, among other factors, to a lack of internet access (Kempen & Kasambala, Toerien, 2015). However, although internet penetration in SA has risen remarkably (StatsSA, 2013; StatsSA, 2017), this has not translated into online shopping. This is further emphasised by Mpinganjira (2017:1) who stated that not everyone with internet access is a potential customer for online retailers. Although internet is considered

the driving force behind online purchasing (Mcallum, 2017:1), there is still a need to get South Africans to shop online (Kempen & Kasambala, Toerien, 2015).it is therefore the purpose of this study to determine which consumer attributes influence consumers online shopping.

Consumers' exhibit different behaviour when shopping in a brick-and-mortar store compared to when shopping online. An understanding of consumer buyer behavior when shopping online will enable online retailers to formulate appropriate marketing strategies targeted at these consumers. This would require that markets determine the attributes that consumers consider when deciding whether to shop online or not. Online shopping in SA lag behind those of other countries due to slow adoption of online shopping. There are more than 2 000 shopping centres in South Africa (Busitech, 2015) which create competitive pressures for online retailers since consumers have to choose whether buying online or from the brick n mortar stores located in shopping centre. Online retailers need to understand the attributes that consumers use to evaluate online retailers to ensure that they offer products and services that match the requirements of online consumers and to lure them away from brick and mortar stores.

Many scholars from have investigated online shopping across the globe. However, few research papers focus on South African online consumer. South Africa is a developing country with people of diverse backgrounds in terms of ethnic groups and other demographic factors that requires research focusing on the country since online shopping adoption has been on the increase in the country. Existing research in online shopping in SA focused on online banking (Brown, Cajee & Strobel, 2003), job seeking (Brown, 2010), online shopping framework (Dlodlo, 2014), online buying satisfaction (Rudansky-Kloppers, 2014) and online shopping interactivity (Mpinganjira, 2014) and consumer attitude towards online shopping (Mpinganjira, 2016). There is a need for more research on online shopping for marketers to understand what influence consumers to shop online and specially attributes that influence consumers to shop online.

The main objective of this research is to determine the attributes online shoppers use to evaluate whether to shop online. Furthermore, the research will also investigate whether attributes differ across demographic factors and frequency of online purchases.

Literature review

Consumer online shopping in South Africa

Globally, consumer online shopping continues to grow rapidly centred around advances in internet technology. In South Africa, the general household survey (GHS) indicated that the percentage of internet connectivity rose significantly between the years 2013 and 2016, growing from 40.9% to 59.3% respectively (StatsSA, 2014, StatsSA, 2017). Furthermore, a reported 21 million South Africans used the internet in 2016 with this number expected to grow to 22.5 million in 2017 (Worldwide worx, 2017). With the rising increase in internet use, online shopping in South Africa has similarly increased in recent years (KPMG, 2013). In 2015 a reported 3.225 million South Africans shopped online (Worldwide Worx, 2016), which was an increase from at R2.26 billion in 2012. South African consumers who shop online have reported high levels of satisfaction with their purchases. In contrast, 87% of consumers who reported to be satisfied with their purchases in 2012 to increase to 97% in 2017 (MasterCard, 2013). Online sales increased from R2.26 billion in 2012 (Pillay et al., 2012) to R37 billion in 2017 and is estimated R53 billion in 2018 due to increasing numbers of consumers who are shopping online (Fin24, 2017). There are channels available to make online purchases. There are various devices used to make online shopping, for SA top three devices are the desktop, which dominates most of online purchases at 60%, while mobile phones and tablets are at 55% and 38% respectively (Eshopworld, 2017:1). 55% of South African online shoppers use mobile phones while 38% opted to make online purchases through tablets. Due to the high rates of mobile penetration in South Africa, online shoppers are increasingly opting to make purchases on their mobile devices, which resulted in an estimated 65% growth in online spend via mobile devices (smartphone or tablet) between 2015 and 2016 (Moneyweb, 2017).

The trend in South Africa is that majority of consumers browse online and then make their purchases in the store (SACSC, 2016). This means that for most consumers, the search for information about a product begins on the retailer's website while the actual purchase happens in-store. The conclusion was that in the search for information, consumers value the internet as an information source

but not a place to transact; as a result, the physical store remains an important element for consumers when making the purchase. For electronic products, 47% of consumer's research about them online but only 60% purchase the products ins-tore (PWC, 2017; Begg, 2017). Other items frequently purchased online range from travel bookings, ticket for events (movies) through to fashion items and books (Gernon, 2017; PWC, 2017).

The most purchased online products in SA is clothing, followed by books, electronics, DVDs, electrical appliances, homeware and the least bought was groceries (SACSC, 2016). Although the range of products purchased online is diverse, a significant number (57%) of South African consumers did not purchase their groceries online (PWC, 2017). Although there are over 200 online retailers in SA, the top 5 leading retailers in 2013 were, in order most visited sites, Kalahari.com, amazon.com, bidorbuy.co.za, groupon.co.za and takealot.com (BusinessTech, 2014). However, Takealot is the largest online shop in SA in terms of market share. This is due its wide selection of products across several categories, as well as its range of delivery options (Mybroadband, 2017). Brick and mortar retailers such as Pick n Pay, Woolworths, and, Edcon Holdings, the operator of retailers such as Edgars, Jet, Jet Mart and CNA, are among the apparel and grocery retailers to have taken up e-commerce seriously (Mahlaka, 2016).

Online shopping consumer attributes

Consumers who seek convenience, value and a variety of choice characterize the online shopping space in South Africa (Begg, 2017). The top three reasons for which consumers shop online are considered to be convenience shopping, the ability to compare prices and better value (KPMG, 2017). In the South African context, reasons to shop online differ slightly from trends outlined previously. Figure 1 below depicts reasons consumers shop online in SA.

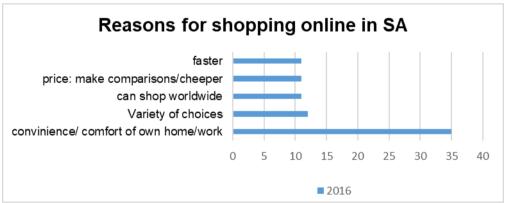


Figure 1: Reasons for shopping online in SA Source: SACSC, 2016:4.

Figure 1 highlights that convenience is the top reason for online shopping among South Africans, this is followed by the ability to choose from variety of options. Next was the ability to shop across borders, compare items based on value and receiving items on time (SACSC, 2016). Another study by Rundansky- Kloppers (2016) revealed the three most important factors for purchasing online in South Africa is convenience, delivery and saving time. Convenience is the major reason that people purchase online. This trend is not only visible in SA but also globally (KPMG, 2017)

However, reasons to buy online differ based on the type of product purchased. For instance, people who buy entertainment products value lower price, while people who buy books value ease of website use and those who buy tickets value convenience Rundansky- Kloppers (2016). A study found that consumers are likely to purchase from a website with the lowest price, followed by one with delivery options and lastly intact return policies. These are the three important factors when making online purchases (Begg, 2017). Price or promotions was the biggest factor that drove online purchasing decisions in South Africa and among other countries such as Canada, Belgium, Australia, France and Newzeland (KPMG, 2017). Despite the advantages of online shopping and its increase in South Africa, most customers may not have shopped online (Lee & Barners, 2016). According to Worldwide Worx (2016),

South Africans are still cautious of online shopping, based on the uncertainty of whether online is secure or not. This lack of trust is one of the factors that hinder the growth in online shopping in SA (Mahlaka, 2016).

It is important for online sellers to have a trusted website in order to drive online purchases. This is an important factor that affects consumer's intentions to buy online (KPMG, 2017). Consumer's intentions/ acceptance of online shopping is broadly explained through the technology acceptance (TAM) model (Ha & Stoel, 2009; Lee & Barnes, 2016). It prescribes people's two core beliefs in relation to using/adapting to a particular technology are perceived usefulness and perceived ease of use. The perceived usefulness and perceived ease of use are the utilitarian factors proposed by the TAM (Vijayasarathy, 2004). The utilitarian factors are goal-oriented factors which envision that consumers consider product-related information prior to purchase and differs from the hedonic factors which reflect the experience and entertainment factors of online shopping (Babin, Dardin & Griffin, 1994). Utilitarian factors include an assessment of functional benefits, such as economic value, convenience, time savings (Teo, 2001) and also convenience and accessibility, selection, availability of information and lack of sociality (Wolfinbarger and Gilly, 2001).

Other utilitarian factors influencing online shopping are security and privacy (Khare *et al.*, 2012; Ha & Stoel, 2009; Lian & Lin, 2008; Vijayasarathy, 2004) and convenience (Jen-Hung & Yi-Chun, 2010; Childers *et al.*, 2001). Perceived usefulness refers to the fact that a user believes in the existence of a positive use-performance relationship while the perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort (Childers *et al.*, 2001; Davies, 1989). Online shopping is considered useful by consumers since they can obtain product information and compare alternative products online (Bhatnagar & Ghose 2004). Convenience refers to time savings and effort savings that include the physical and mental effort (Jen-Hung & Yi-Chun, 2010). Shoppers attaching more importance to convenience minimize their search cost as much as possible to save time or energy for activities other than shopping Delafrooz, Paim, Haron, Sidin & Khatibi (2009).

Vijayasarathy (2004) investigates attributes that influence consumer attitude towards online shopping. The ease of use, usefulness and compatibility were reported to have a strong influence on intention to shop online. The attributes influencing online shopping differ across types of products and across (Lian & Lin, 2008). Yang and Lester (2004) listed convenience, efficiency, anxiety/inconvenience and effort/inconvenience attributes influencing online shopping.

Security is defined as the extent to which consumers believe that making online purchases is secure (Vijayasarathy, 2004) and is closely related to privacy risks, which are concerned with the ease with which consumers' personal information, their browsing and shopping habits can be captured online and the possibility for the misuse of information (Vijayasarathy, 2004). Park and Kim (2003) observe that security concerns to affect consumer attitude towards online shopping and they will shop less. Hasslinger, Hodzic and Opazo (2007) also maintained that trust and security factors are a major influence for the consumers when considering a potential purchase on the Internet platform.

Behavioural intention to purchase online is resulted from people's attitude (Ha & Stoel, 2008). Attitude is, therefore, a behavioural factor that positively or negatively affects the intention to shop online (Chang, Cheung & Lai, 2005). A further confirmation by Kempen et al (2015) indicate that both positive and negative attitudes towards online shopping influenced people's intentions to shop online.

Demographic factors and attributes influencing online shopping

The consumers that buy online also differ greatly in age. Older consumers participate in online shopping in contrast to the younger consumers. Rudansky-Kloppers (2016) found that the age groups that participated in online shopping were the older generation, 48.6% were between the 30 to 49 years followed by 21.6%. 50 to 64 years and the least were the younger Generation at 19.8% between 18 and 19 years. According to Begg (2017) the older Generation X, that is born between the years 1966 and 1981, made more online purchases than the technologically savvy Millennial generation that is born between the years 1982 and 2001. Much of the age contribution/differences in online purchases is on economic stability of the respective Generations. Whereby Generation X is financially and economically stable in contrast to Millennials who might still be in the early stage of career advancements.

Previous studies found no significant difference between online shoppers and non-shoppers in terms of gender were found that men make more purchases (Slyke, Comunale & Belanger, 2002; KPMG, 2017) and spend more money online (Venkatesh & Morris, 2000) than women. Women were found to be emotionally less satisfied with online shopping, and consequentially make fewer online purchases as compared to their male counterparts (Jen-Hung & Yi-Chun, 2010; Hanson, 2010; Rodgers & Harris, 2003). Earlier research also suggested that men have more positive attitudes towards online shopping, and therefore, are more likely to purchase products online (Hanson, 2010). On the other hand, women prefer to examine shopping products physically, as well as enjoying group shopping and window-shopping (Chou, Wu & Chen, 2010).

Studies that investigated the impact of income and education level presented conflicting findings. For example, Richa (2012) investigated the demographic impact on online shopping. The findings revealed that income and education level do not influence online shopping. Kanchan and Kumar (2015) found that income and education level do influence online shopping frequency. Other studies found the frequency of purchase as having influence towards online shopping (Overby & Lee, 2006)

Methodology

This study aims to explore the consumer attitudes of online shoppers to determine what shoppers are looking for in terms of online shopping. A survey method was deemed appropriate for this research to explore the attributes online shopping consumers in South Africa use to evaluate online retailers. Data were collected online and targeting consumers over the age of 18 years who have internet access. The sampling frame of shoppers who purchased at supermarkets was a purposive sample gathered by the researchers. This sample frame was used as a database and each individual was invited to take part in an online survey via Survey Monkey. A convenience sampling method was used to target 562 online shoppers, of whom 104 responded, that is, a response rate of 18.5%. Online surveys have a low response rate, which could be as a result of non-delivery of e-mail (Cooper & Schindler 2011:249). The questionnaire was developed using the variables of prior research studies (Khare et al., 2012; Khare & Rakesh, 2011; Vijayasarathy, 2004; Kim, 2004; Childers et al., 2001; Davies, 1989) to investigate the factors that influence SA consumers to shop online. There were eight demographic questions. The factors influencing consumers were measured using 20 statements. Respondents were expected to rate each of the factors on a scale from one to five, with one indicating strongly disagree and five indicating strongly agree. The data was analysed using Statistical Package for Social Sciences (SPSS) version 24 for Windows. Various statistical analyses were conducted including the descriptive study, factor analysis, the independent samples t-test and Anova analysis.

Research results

Demographic factors

Table 1 provides the profile of respondents. This study comprised of a sample of 116 respondents. The demographic variables used in this study are depicted in table 1.

Table 1: Demographic composition of respondents

		Frequency	Percentage %
Age	18-21 years	1	0.9%
	22-25 years	8	7.3%
	26-30 years	22	20.0%
	31-35 years	25	22.7%
	36-45 years	22	20.0%
	46-54 years	15	13.6%
	55-60 years	6	5.5%
	61+ years	11	10.0%
	TOTAL	110	100%
Gender	Male	52	46.4%
	Female	60	53.6%
	TOTAL	112	100%

_			
Race	African	36	32.4%
	White	48	43.2%
	Asian	9	8.1%
	Coloured	12	10.8%
	Other	6	5.4%
	TOTAL	116	100%
Monthly Income	0 - R2500	5	4.6%
	R2501 - R5000	5	4.6%
	R5001 - 7500	10	9.3%
	R75001 - R10000	7	6.5%
	R10001 - R12500	4	3.7%
	R12501 - R15000	6	5.6%
	R15001 - 17500	7	6.5%
	R17501 - R20000	10	9.3%
	R20001 - R22500	9	8.3%
	R22501+	45	41.7%
	TOTAL	108	100%
Highest Qualification	Did not complete	1	0.9%
_	grade 12		
	Completed grade 12	24	21.4%
	Diploma	27	24.1%
	Degree	20	17.9%
	Post grad degree	40	35.7%
	TOTAL	112	100%

Table 1 indicates that the respondent's age ranged from 18 to and 61 years and over. Table 1 further indicate that almost two thirds of respondents (62.7%) were between 26 to 45 years. With the highest number of respondents between age 31-35 years (22.7%) followed by respondents between 26 - 30 years and 36-45 as the second highest respondents (both at 20%). Females (53.6%) were better represented in the sample than Male respondents (46.4%). White (43.2%), Africans (31.0%), and Coloured (10.3%) were the most represented race in the sample. Majority of respondents (41.7%) fell under the highest income bracket of R22501+. With education, there was a reasonable distribution among respondent's level of education.

The survey also tested respondent's general use of the internet in relation to access and length of exposure (in year terms) to internet technology. A total of 113 respondents indicated that they had access to computer (113). 98.2% of respondents indicated to have access to internet and 96.5% of them have been accessing internet more than 4 years. With 77.2% reporting to assess the internet on a daily basis. These results are synonymous with recent report that suggested internet usage among mong South Africans is on the rise (StatsSA, 2014; StatsSA, 2017). Furthermore, the general internet usage among respondents was measured. Table 2 represents internet usage behaviour among respondents.

Table 2: General internet usage

	Responses	Count	Percentage%
Where do you access the	Work	81	28.4%
internet			
	Private (cell phone)	52	18.20%
	Home- 3G or 4G	46	16.10%
	technology		
	Home- wireless	46	16.10%
	Home ADSL	32	11.20%
	University	17	6.00%
	Internet café	6	2.10%
	Other	5	1.80%
	TOTAL	285	100%
The main purpose of	Seeking information	94	18.0%

accessing internet			
decessing internet	Work	91	17.4%
	Communication	84	16.10%
	Education	76	14.50%
	Entertainment	67	12.80%
	Pleasure	57	10.90%
	Online shopping	50	9.60%
	Other	4	0.80%
	TOTAL	523	100%
Do you buy online	I never buy online	21	18.4%
, , ,	Yes, I buy online	57	50.0%
	I seldom buy online	36	31.6%
	TOTAL	114	100%
How often do you buy	Weekly	4	4.0%
online	Ž		
	Monthly	18	18.2%
	Two-three times a month	8	8.1%
	Once every 3 months	31	31.3%
	Once every 6 months	18	18.2%
	Once a year	20	20.2%
	TOTAL	116	100%

Table 2 indicates that respondents used the internet for the purposes of seeking information on products op their work laptop. These results could be explained by the fact that a large percentage of respondents (28.4%) reported to access the internet from the workplace. Online shopping was the least purpose for accessing the internet. On the contrary, majority of respondents (81.6%, n=93) participate in online purchasing as shown by those who buy online and those that seldom buy online. These results could be explained by the fact that instore shopping in SA often begins with an online search for product information on the internet (SACSC, 2016). The internet thus plays a significant role as an information source for SA consumers. Of the respondents that buy online, majority of them (31.2%, n=31) buy once every three months followed by those who buy once in a year (20%, n=20.3).

Figure 1 depicts the attributes online consumers use to determine whether to buy online or not. Consumers value the attribute 'I can shop from a distant places (M=4.24) more followed by 'I can purchase products at any time of the day', (M=4.20) and I can shop online without any need for assistance', (M=4.06). Consumers also believe that online shopping is valuable since they can save time driving from one store to another (M=4.05) and that they can easily compare prices over the internet while shopping (M=4.02). The attributes that consumers find least attractive is 'it is suitable for all types of products' (M=3.14), 'I can make better purchase decision when shopping online' (M=3.25) and 'it is safe to buy online' (M=3.36).

Figure 1: Online shopping attributes



Factor analysis

Exploratory Factor Analysis (EFA) was conducted on scaled 23 items to identify any incorrectness with the measurements of online shopping attitude. EFA led to twenty items that represented components of online shopping attitudes. This further lead to the exclusion of three items that double- loaded on one or more factors. Subsequent to EFA, three factors were established, the first factor was convenience. Nine variables loaded under convenience factor, an indication that this factor was strongly linked to the attitudes towards online shopping. The second factor was perceived usefulness with eight variables. The third factor was risk (security) with the least variables of three. Table 3 provides the outcome of EFA with items measuring each individual factor.

Table 3: EFA outcomes

Factor	Factor Loading (EFA)	% of variance	Cronbach Alpha	SD	M
Component 1: Convenience					
I think internet shopping requires less effort on my part	.917				
I can shop online without any need for assistance	.872				
I think online shopping is easy to use	.863				
Delivery of goods is fast	.829				
Online shopping enables me to do my shopping quickly	.696				

I can order products from distance places	.693				
Online shopping saves time driving from store to store	.675				
I can purchase products at any time of the day	.664				
Online shopping is a good idea	.622				
		54.40	0.954	.9127	3.93
Component 2: Perceived usefulness					
I am more in touch with latest trends	.855				
Online shopping makes it easy to compare various products and brands	.845				
I can compare prices easily via internet	.803				
I can get better prices	.790				
I will use online shopping in future	.704				
I can make better purchase decisions with online shopping	.696				
I can find greater variety of products and models online	.643				
I often consider shopping online	.611				
		10.39	0.922	.8846	3.72
Component 3: Risk (Security)					
My personal information may not be safe when shopping online	.869				
My credit card information may be stolen	.867				
It can be difficult to return the defective products	.608				
-		6.85	0.713	.8428	3.59

As indicated in table 3 the factor analysis established three variables namely, convenience, perceived usefulness and security (risk) that will be discussed next. With reference to the variable convenience, nine variables were loaded, and the conducted research confirmed that the respondents consider convenience of online shopping, requires less effort and the fast delivery as important factors. A previous study by Rundansky- Kloppers (2016) confirmed that the three most important factors for purchasing online in South Africa is convenience, delivery and saving time. The variable perceived usefulness, the respondents indicated that they can be in touch with latest trends and comparison of products and brands is easier. This research finding confirm the findings of Vijayasarathy (2004) in which they consider perceived usefulness and perceived ease of use are the utilitarian factors proposed by the TAM. The last factor, namely: risk (security) the respondents highlighted the safety of personal information and the fear of credit card information stolen important considerations, which is confirmed by Vijayasarathy (2004).

Previous research studies focused on personal perceived values as the underlying dimensions for online shopping involving items that encapsulated perceived danger, perceived convenience, perceived website quality, as well as perceived benefits studies (Liang, 2009; O'Cass & Fenech, 2003; Childers, et al., 2001 and Eastin, 2002) and the conducted research confirms the factors. While many studies found the ease of use and usefulness to be the most important attributes influencing online shopping, this study established that online consumers are influenced strongly by convenience (M=3.93) followed by perceived usefulness (M=3.72) and security (M= 3.59). Rodansky- Kloppers (2014) also found Security and Price experience have an effect on overall online buying experience.

Demographic factors and attributes influencing online shopping

The Impact of demographic factors such as gender, age, income and education level on attitude towards online shopping was determined through ANOVA and t-test.

The independent samples t-test was used to determine if gender had an effect on perceived ease of use, perceived usefulness and security. The results show that gender had no significant effect on the extent to which perceived ease of use, perceived usefulness and security play a role in their online shopping. The non-parametric Mann-Whitney U test was used to validate the findings of the t-test and it also found that Gender does not have an effect. This findings support existing research in online shopping that found that found no significant difference between online shoppers and non-shoppers in terms of gender (Chiu, Lin & Tang, 2005; Brashear *et al.* (2010), men were found to make more purchases (Slyke, Comunale & Belanger, 2002) and spend more money online (Venkatesh & Morris, 2000) than women. Hanson (2010) also found that men have more positive attitudes towards online shopping, and therefore, are more likely to purchase products online and that women prefer to examine shopping products physically, as well as enjoying group shopping and window-shopping (Chou, Wu & Chen, 2010). Contrary to this finding, Khare and rakesh (2011) found that males and females differed in their attitude toward online shopping.

One-way ANOVA test revealed that age has a significant influence on the extent to which perceived usefulness (F = 4.30; p < .01) and security (F = 5.180; p < .01) plays a role in online shopping behaviour. The specific differences were that respondents between 18 – 30 years (M = 4.03, n = 31) tend to attach value to perceived usefulness during online shopping more than respondents between 36 – 45 years (M = 3.66, n = 22). The conducted research findings compare well with the findings of Begg (2017). In addition, respondents between 18 – 30 years (M = 3.67, n = 31) tend to attach value to perceived components of security during online shopping as opposed to respondents between 31 – 35 years (M = 3.08, n = 25). Previous study (Rudansky-Kloppers, 2016) indicated that respondents between 18 – 30 years seemed to be not so financial stable as the respondents between 36 – 45 years, which explain the younger generations' tendency to buy less online.

While respondents between 31 - 35 years (M = 3.0800, n = 25) attach less value to the perceived security during online shopping than the 46+ year group (M = 3.90, n = 31). A Krusakal-Walls test was conducted. The test corroborates the results of the ANOVA. In addition, it also found that age influences the perceived ease of use (H = 99.201; P<.05). A post hoc test using Mann- Whitney test was used to compare age groups.

The Mann- Whitney test results that shows the 18 – 30-year group (MR = 949.00; n = 30) attach more value to perceived ease of use of online shopping than the 36 – 45-year group (MR = 949.00; n = 30). While the 18 – 30-year group (MR = 144.50; n = 31) tend to attach value to perceived ease of use of online shopping more than the 46+ year group (MR = 808.50; n = 31). The 31 – 35 year old group (MR=842.00, n=25) tend more than the 46+ year old group (MR=254.00, n=31) to attach value to the perceived ease of use - experienced by doing online shopping (Z=21.38, p<30).

Xu & Paulines (2005) reported that young adults are more familiar with the Internet and are more likely to shop online (Johnson., Lennon, Jasper, C., Damhorst, M.L. and Lakner, H.B. (2003) views' are similar to those of Khare, Khare and Singh, 2012:167) who found significant differences among different age groups and attitude towards online shopping. However, Kim (2004:60) found that consumers in different age groups possess similar attitudes towards online shopping.

The one-way ANOVA test revealed that income has no significant influence on the extent to which perceived ease of use, perceived usefulness and security plays a role in their online shopping behaviour (p > .05). The findings are consistent with those of Richa (2012) who found no significant influence of income towards online shopping attributes while contradiction Kachan and Kumar (2015) findings that revealed that income and education level do influence online shopping.

The one-way ANOVA test also revealed that education level has no significant influence on the extent to which perceived ease of use, perceived usefulness and security plays a role in their online shopping behaviour. (p >.05). Richa (2012) also found no significant influence of education towards online shopping attributes. However, compared to the previous study of Kanchan and Kumar (2015) the results of the conducted study contrasted with their findings as they established that education levels do influence online shopping frequency.

Frequency of purchase and attributes influencing online shopping

The independent samples t-test was used to determine whether shopping online or not, has an effect on the extent to which perceived ease of use, perceived usefulness and security plays a role in their online shopping behaviour. Whether they shop online or not has a significant effect on the extent to which perceived ease of use, perceived usefulness and plays a role in their online shopping behaviour.

The non-parametric Mann-Whitney U test was used to validate the findings of the t-test and it also found that buying online or not does not have an effect regarding perceived ease of use and perceived usefulness. Of those 93 respondents who shop online, one third (33.3%, n=31) tend to buy online once every 3 months.

The one-way ANOVA test was used to determine whether shopping frequency has a significant effect on the extent to which ease of use, perceived usefulness and Security play a role in their online shopping behaviour. Previous research findings by Begg (2017) established that the older Generation X that is born between the years 1966 and 1981 made more online purchase than the technologically well-informed millennial generation. The results established that shopping frequency has a significant effect on the extent to which perceived usefulness (F=6.637, p<.001) and ease of use (F=7.340, p<.001) plays a role in their online shopping behaviour. These results are echoed by the findings of Kanchan and Kumar (2015) but, contrasted with the findings of Richa (2012).

Specifically, it found the following differences:

The monthly or more frequently group (M=4.300, n=30) tend more than the once every 6 months group (M=3.590, n=18) and the once a year group (M=3.345, n=14) to attach value to perceived usefulness advantages experienced during online shopping.

The monthly or more frequently group (M=4.526, n=30) tend more than the once every 6 months group (M=3.796, n=18) and the once a year group (M=3.492, n=14) to attach value to perceived ease of use during online shopping. Kanchan and Kumar (2015) and Overby & Lee, 2006) established that income and education level do influence online shopping frequency but unfortunately they did not established whether the once a year group buying group attach more value to perceived ease of use during online shopping as the more frequent buying group as the current results indicated.

Recommendations

Although online shopping in South Africa is still in its growth stage, there is a need to understand what online shoppers look for in terms of the online shopping factors. This study focused on convenience, perceived usefulness and security (risk) as the components that affect attitude towards online shopping. The perceived ease of use was found to have more influence towards online shopping followed by perceived usefulness and security. This implies for markets to ensure that online shopping is convenient and that consumers find it useful for them. The attractive layout of the Web page must be integrated to the flexibility, ease-of-use, and perceived usefulness attributes to enable product search and comparisons (Khare & Rakezh, 2011). Marketers should also ensure that online transactions are secure so as to attract those consumers who are concerned about security when shopping online. Specific credit card issues such as fraud and theft must be addressed in market offerings, and particularly on the websites of online retailers. Furthermore, adequate security, trustworthiness of information, and privacy should be emphasized in all advertisements and websites (Rudansky-Kloppers, 2014).

The results show that the perceived ease of use is valued differently by various age groups. The younger respondents placed more value to perceived ease of use of online shopping than the older age groups. It is important for marketers to emphasise the convenience and perceived ease of use of online shopping when targeting younger market groups.

Similarly, the younger age groups attached value to perceived usefulness associated with online shopping; marketers could intensify promotions that are only online as opposed to in-store promotions to entice the online purchases from these individuals. Market can also emphasis the time savings consumers can experience when shopping online compared to when shopping in a birck and mortar store. Security (risk) still remains a constraint for retailers get customers to adopt online shopping. Risk associated with online shopping in this study pertained to concerns about theft of personal information, the nature of the

retailer's return policies and the quality of products. The 31 – 35 age group were less concerned with security risks associated with online shopping. For marketers this could be a drawback in getting customers to shop online, as such the impact of this factor can be reduced by introducing alternative means to entice customers to shop online.

Since consumers who frequently shop online value perceived ease of use and perceived usefulness of shopping online, marketers must continue emphasising these attributes in their marketing strategy to keep these consumers.

Conclusions and limitations

The results of this study revealed that there is a high internet usage among respondents, however whether this behaviour translates into online shopping remains a question that require further investigation. Majority of respondents also access the internet from work seeking information and for work purposes. The majority of consumers also shop online which can be explained by the fact that the target population was consumers with internet access. Attributes for online shopping were found to differ across age groups but did not differ across gender, income and education level. The online shopping attributes were also found to differ by frequency of purchase with those purchasing frequently attaching more value to perceived ease of use and perceived usefulness.

Limitations of this study are that it was done on a small sample, a follow-up study could investigate by broadening the sample size. furthermore, other studies could investigate if the emerging market consumers shop online and which attributes influence them to shop online.

References

- Anderson, A. (2017). South Africans take to online delivery services. *BusinessLive*. [Online] Available from: https://www.businesslive.co.za/bd/companies/retail-and-consumer/2017-08-30-south-africans-take-to-online-delivery-service/ [Accessed 20 June 2017].
- Babin, B.J., Dardin, W.R., and Griffin, M. (1994). Work or fun: measuring hedonic and utilitarian shopping value. *Journal of consumer research*, 20: 644 – 656.
- Bhatnagar, A & Ghose, S. (2004). Segmenting consumers based on the benefits and risks of Internet shopping. Journal of Business Research 57 (12): 1352–1360.
- BusinessTech. (2014). Top online retailers in South Africa. [Online] Available from:
 - https://businesstech.co.za/news/internet/36703/top-online-retailers-in-sa/ [Accessed 13 December 2017].
- BusinessTech. (2015). SA has the 6th highest number of shopping malls in the world. [Online] Available from: https://businesstech.co.za/news/lifestyle/99950/sa-has-the-6th-highest-number-of-shopping-malls-in-the-world/ [Accessed 13 December 2017].
- BusinessTech. (2017). The state of South Africa's mobile market vs the rest of Africa. [Online] Available form: https://businesstech.co.za/news/internet/36703/top-online-retailers-in-sa/ [Accessed 13 December 2017].
- Brashear, T., Kashyap, V., Musante, M. & Donthu, N. (2009). A profile of the Internet shopper: evidence from six countries. *Journal of Marketing Theory and Practice*, 17(3), 267-289.
- Brown, I. (2010). Factors influencing the adoption of the World Wide Web for job seeking in South Africa: original research. *South African Journal of Information Management*, 12 (1):1-9.
- Brown, I; Cajee, Z; Davies, D & Stroebel, S. (2003). Cell phone banking: predictors of adoption in South Africa—an exploratory study. *International journal of information*, 23 (5): 381-394.
- Chiu, Y. B., Lin, C. P. & Tang, L. L. (2005). Gender differs assessing a model of online purchase intentions in e-tail services. *International Journal of Service Industry Management*, 16(5), 419-435.
- Chou, C., Wu, H.-C. & Chen. C.-H. (2010). Re-visiting college students' attitudes toward the Internet-based on a 6-T model: gender and grade level difference. *Computers and Education*, 56(1), 939-947.
- Davies, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS. Quarterly.* 35: 982 1003.
- Delafrooz N., Paim, L.H., Haron, S.A., Sidin, S.M & Ali Khatibi. (2009). Factors affecting students' attitude toward online shopping. African Journal of Business Management Vol. 3 (5): 200-209.
- Dlodlo, N. (2014). Developing an online shopping value framework for consumers of non-store fashion brands. *International Business and Economics Research Journal*, 13(6),1359-1373.
- Eshopworld. (2017). South African Ecommerce Insights. 24.79 million online shoppers by 2021. [Online] Available from: https://www.eshopworld.com/blog-articles/south-africa-ecommerce-insights-2017/ [Accessed 25 May 2017].

- Fayad, R and Peper, D. (2015). The technology acceptance model e-commerce extension: a conceptual framework. Procedia economics and finance 1000-10006. [Online] Available from:
- https://www.sciencedirect.com/science/article/pii/S2212567115009223 [Accessed 25 May 2017].
- Financial24. (2017). SA e-commerce growing by leaps and bounds. *Financial24*. [Online] Available from: https://www.fin24.com/Companies/Retail/sa-e-commerce-growing-by-leaps-and-bounds-20170222 [Accessed 13 December 2017].
- Gernon, D. (2017). Online retailing in SA has plenty of room for growth: A Nielsen survey indicates that SA consumers are open to the idea of online shopping, with online grocery shopping still the holy grail of retailers. *Business day* [Online] Available from: https://www.businesslive.co.za/bd/companies/retail-and-consumer/2017-05-09-online-retailing-in-sa-has-plenty-of-room-for-growth/ [Accessed 13 December 2017].
- Ha, S., and Stoel, L. (2009). Consumer e-shopping acceptance: Antecedents in technology acceptance model. *Journal of business research*.
- Hanson, B. (2010). Exploring gender differences in online shopping attitude. *Computers in Human Behavior*, 26(1), 597-601.
- Hasslinger, A., Hodzic, S., and Opazo, C. (2007). Consumer behavior in online shopping. Kristianstand University. Department of business studies. [Online] Available from:
- http://www.diva-portal.org/smash/get/diva2:231179/FULLTEXT01 [Accessed 13 December 2017].
- Hung-Joubert, Y., and Van Huyssteen, N., (2016). Searching, browsing and buying exploring the devices preferred by South African consumers for online shopping. *Journal of contemporary management*.
- Jen-Hung, H., and Yi-Chun, Y. (2010). Gender differences in adolescent's online shopping motivations. African journal of business management, 4(6):849-857.
- Johnson, K.K.P., Lennon, S.J., Jasper, C., Damhorst, M.L. and Lakner, H.B. (2003). An application of Rogers' innovation model: Use of the internet to purchase apparel, food, and home furnishing products by small community consumers, Clothing and Textiles Research Journal, 21(4),185-96.
- Jusoh, Z.M.D & Ling, G.H. (2012). Factors influencing consumers' attitude towards e-commerce purchases through online shopping. *International Journal of Humanities and Social Science*, 2(4): 223-230.
- Kanchan, U & Kumar, N. (2015). A Study about Impact of Customer Characteristics on Online Purchase Behavior in Indian Context. *American Journal of Economics and Business Administration*, 7 (3): 130.138.
- Khare, A., Khare, A., & Singh, S. (2012). Attracting shoppers to shop online challenges and opportunities for the Indian retail sector. *Journal of Internet Commerce*, 11(2), 161-185.
- Khare A & Rakesh, S. (2011). Antecedents of Online Shopping Behavior in India: An Examination, Journal of Internet Commerce, 10(4): 227-244.
- KPMG. (2013). The growth of online shopping in South Africa. Available from:
- https://www.sablog.kpmg.co.za/2013/11/growth-online-shopping-sa/ [Accessed 23 May 2017].
- KPMG. (2017). *The truth about online consumers:* 2017 global online consumer report. [Online] Available from: https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/01/the-truth-about-online-consumers.pdf [Accessed 25 May 2017].
- Kempen, E, Kasambala, J. and Toerien, E. (2015). A conceptual framework of e-fashion shopping intent. *The retail marketing review* [Online] Available from
- http://journals.co.za/docserver/fulltext/irmr1/11/1/irmr1_v11_n1_a3.pdf?expires=1503498493&id=id&accname=5 8010&checksum=C28AD3E53B58037644A00C0D6A987638 [Accessed 20 May 2017].
- Lee, G.J. and Barnes, T. (2016) Factors driving online apparel shopping in South Africa [online] Available from: http://0-journals.co.za.oasis.unisa.ac.za/content/irmr1/12/1/EJC192127?fromSearch=true [Accessed 25 May 2017].
- Lian, J. and Lin, T. (2008). Effects of consumer characteristics on their acceptance of online shopping: Comparisons among different product types. *Computers in human behavior*, 24: 48-65.
- Mcallum, M. (2017). Online shopping trends in 2017. IT News Africa [Online] Available form:
- http://www.itnewsafrica.com/2017/06/online-shopping-in-2017/ [Accessed 10 June 2017].
- Mpinganjira. M. (2017). Here's why South Africa's online shoppers keep coming back for more. *The media online* [Online] Available from. http://themediaonline.co.za/2017/09/heres-why-south-africas-online-shoppers-keep-coming-back-for-more/ [Accessed 25 May 2017].
- Mpinganjira, M. (2015a). An Investigation of Perceived Service Quality in Online Shopping: A Hierarchical Approach. *The Journal of Applied Business Research*, 31(1):115-130.
- Mpinganjira, M. (2015b). The influence of online store interactivity on customers' shopping experience: an empirical investigation. *Journal of Contemporary Management*, 11 (1): 593 612.
- Mahlaka. R. (2014). Online shopping: is SA ready for it? Moneyweb. [Online] Available from:
- https://www.moneyweb.co.za/archive/online-shopping-is-sa-ready-for-it/[Accessed 23 May 2017].

- Mahlaka, R. (2016). Online shopping: shifting purchasing realms. *Moneyweb* [Online] Available from: https://www.moneyweb.co.za/news/tech/online-shopping-shifting-purchasing-realms/ [Accessed 23 May 2017].
- MasterCard. (2013). South Africans highly satisfied with online shopping-MasterCard survey. Online. Available from: https://newsroom.mastercard.com/press-releases/south-africans-highly-satisfied-with-online-shoppingmastercard-survey/ [Accessed 23 May 2017].
- Moneyweb. (2017). Growth in mobile e-commerce 'immense' opportunity for retailers. Moneyweb [Online] Available from: https://www.moneyweb.co.za/news/tech/big-growth-in-online-shopping-in-sa/ [Accessed 25 May
- Mybroadband. (2017). Biggest online shops in South Africa. Mybroadband [Online] Available from: https://mybroadband.co.za/news/business/207168-biggest-online-shops-in-south-africa.html [Accessed 13 December 2017].
- Overby, J.W & Lee, E. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions Journal of Business Research 59:1160-1166.
- PWC. (2017). SA retailers and consumer goods companies face digital disruption. [Online] Available from: http://www.pwc.co.za/en/press-room/digital-retail-release.html [Accessed 20 May 2017].
- Richa, D. (2012). Impact of demographic factors of consumers on online shopping behaviour: a study of consumers in India. International Journal of Engineering and Management Sciences, 3(1) 2012: 43-52.
- Rodgers, S. and Harris, M. (2003). A gender and e-commerce: an exploratory study. 43(3): 322 329.
- Rudansky-Kloppers, S. (2016). Key factors influencing the online buying decision when purchasing products in specific product categories. African journal of science, technology, innovation and development.9: 43-45.
- Rudansky-Kloppers, S. (2014). Investigating Factors Influencing Customer Online Buying Satisfaction in Gauteng, South Africa. International Business & Economics Research Journal 13(5): 1187-1198.
- Slyke, C., Comunale, C.L., and Belanger, F. (2002). Gender differences in perceptions of Web-based shopping. Communications of the ACM. 45 (7), 82 - 86.
- South African Council of Shopping Centers (SACSC). (2016). Online vs In-store shopping: convenience, experience, price. [Online] Available from: http://urbanstudies.co.za/wp-content/uploads/2016/11/SACSC-Research-Report-Urban-Studies-Online-VS-In-Store-Sho...-2.pdf [Accessed 13 December 2017].
- Statistics South Africa (STATSSA). (2014). General household survey 2013. [Online] Available from: http://beta2.statssa.gov.za/publications/P0318/P03182013.pdf [Accessed 23 May 2017].
- Statistics South Africa (STATSSA). (2017). General household survey 2016. [Online] Available from: http://beta2.statssa.gov.za/publications/P0318/P03182013.pdf [Accessed 23 May 2017].
- Teo T (2001). Demographic and motivation variables associated with Internet usage activities. Internet Research 11: 125-137.
- Venkatesh, V. & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence and their role in technology acceptance and usage behaviour. MIS Quarterly, 24(1), 115-139.
- Vijayasarathy, L.R. (2004). Predicting consumer intentions to use online shopping: The case for an Augmented Technology Acceptance model. *Journal of information and management*. 20: 644 – 656.
- Wolfinbarger M & Gilly M (2001). Shopping online for freedom, control and fun. California Manage. Rev., 43: 34-55.
- Worldwide Worx. (2017). SA internet penetration to reach 40% in 2017. [Online] Available from
 - http://www.worldwideworx.com/internet2017/ [Accessed 13 December 2017].
- Worldwide Worx. (2016). SA online retail to pass 1% of total retail in 2016. [Online] Available from: http://www.worldwideworx.com/retail2016/ [Accessed 13 December 2017].