

Pentz, Christian D.; Du Preez, Ronel; Swiegers, Liezel

## Article

# To bu(Y) or not to bu(Y): Perceived risk barriers to online shopping among South African generation Y consumers

Cogent Business & Management

## Provided in Cooperation with:

Taylor & Francis Group

*Suggested Citation:* Pentz, Christian D.; Du Preez, Ronel; Swiegers, Liezel (2020) : To bu(Y) or not to bu(Y): Perceived risk barriers to online shopping among South African generation Y consumers, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 7, Iss. 1, pp. 1-25,  
<https://doi.org/10.1080/23311975.2020.1827813>

This Version is available at:

<https://hdl.handle.net/10419/244971>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

## To bu(Y) or not to bu(Y): Perceived risk barriers to online shopping among South African generation Y consumers

Christian D. Pentz, Ronel du Preez & Liezel Swiegers |

To cite this article: Christian D. Pentz, Ronel du Preez & Liezel Swiegers | (2020) To bu(Y) or not to bu(Y): Perceived risk barriers to online shopping among South African generation Y consumers, Cogent Business & Management, 7:1, 1827813, DOI: [10.1080/23311975.2020.1827813](https://doi.org/10.1080/23311975.2020.1827813)

To link to this article: <https://doi.org/10.1080/23311975.2020.1827813>



© 2020 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 26 Oct 2020.



Submit your article to this journal [↗](#)



Article views: 1794



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 3 View citing articles [↗](#)



Received: 11 June 2020  
Accepted: 18 September 2020

\*Corresponding author: Christian D. Pentz, Business Management, Stellenbosch University, South Africa  
E-mail: [cdpentz@sun.ac.za](mailto:cdpentz@sun.ac.za)

Reviewing editor:  
Pantea Foroudi, MBT, Middlesex University, London United Kingdom

Additional information is available at the end of the article

## MARKETING | RESEARCH ARTICLE

# To bu(Y) or not to bu(Y): Perceived risk barriers to online shopping among South African generation Y consumers

Christian D. Pentz<sup>1\*</sup>, Ronel du Preez<sup>2</sup> and Liezel Swiegers<sup>3</sup>

**Abstract:** In South Africa the adoption and growth of online shopping is relatively slow. The primary objective of this study was to investigate possible perceived risk barriers that might influence the online shopping behaviour of technologically enabled Generation Y South African consumers. Perceived risk was investigated by means of an online questionnaire in the context of high-involvement products (clothing), and low-involvement products (books). Consideration was also given to experienced and inexperienced online consumers. Results indicate that, for experienced online shoppers, the dimensions of perceived risk that showed significant relationships with their online repurchase intention were psychological risk and social risk (both retailer reputation and social influences), for clothing and books. Time risk was furthermore significant for experienced consumers in terms of books. For inexperienced online shoppers, results showed that financial risk and social risk (retailer reputation), had a significant relationship with online purchase intention for

## ABOUT THE AUTHORS

Christian D. Pentz earned his PhD in Marketing at Stellenbosch University. He is a senior lecturer in Marketing at Stellenbosch University and specialises in Marketing Strategy, Global Marketing and Retail Management. His research interests include wine marketing, consumer ethnocentrism and the online purchase environment. Chris has published papers on these topics in national and international journals and has participated in local and international academic conferences.

Ronel du Preez holds a PhD in Industrial Psychology with specialization in Consumer Psychology. She held a C3 grading from the National Research Foundation of South Africa. Ronel has published in both national and international journals and has delivered numerous papers on academic platforms. She serves as subject editor (Consumer Psychology) for the South African Journal of Industrial Psychology. Her research interests include consumer decision making and perception. The online purchase environment has drastically impacted on these themes, resultant in a focus towards online purchase behaviour.

Liezel Swiegers holds a Master's degree in Marketing and is employed in the insurance industry.

## PUBLIC INTEREST STATEMENT

A growing percentage of consumers worldwide have engaged in online shopping, however a significant number of consumers have not (especially in South Africa). The objective of this study was to investigate perceived risk barriers that might influence the online shopping behaviour of technologically enabled Generation Y South African consumers. Put differently, why do some consumers that can shop online, refrain from doing so? We investigated perceived risk and previous online shopping experience as possible answers to this question, within the product categories of clothing and books.

Our findings point to the influence of psychological, social risk (in terms of retailer reputation and social influences) and time risk on purchasing again. For inexperienced online shoppers, financial risk and social risk (retailer reputation and social influences) were most influential.

The insights gained can be used to develop more focused and effective marketing strategies to grow online shopping.

clothing and books. In addition, an equal size multi group analysis between the experienced and inexperienced online consumers for books, indicated no significant differences in the relationship between all the perceived risk dimensions and purchase/repurchase intent. For clothing significant differences were found for the relationships between financial risk and psychological risk and purchase/repurchase intent. The insights gained from the findings can be used by South African online retailers to improve their understanding of technologically enabled consumers and develop more focused and effective marketing strategies to grow online shopping.

**Subjects:** Consumer Psychology; Marketing; Retail Marketing;

**Keywords:** Online shopping; perceived risk; high-involvement products; low-involvement products; South Africa

## 1. Introduction

The rapid development of the Internet and increased use of mobile devices are key factors that drive online consumer shopping. Online-shopping, in turn, is an important form of e-commerce. Retailers have promising and innovative opportunities to respond to changes in consumer behaviour, leading to the exponential growth in online browsing and buying (Nguyen et al., 2018). In doing so, online retailers in the South African market can capitalise on the potential loss of R34-billion per annum (representative of the abandonment an online purchase) as indicated by The 2019 South African Digital Consumer Report (Rogerwilco, 2019).

Support for the upsurge in the e-commerce industry is evident in the figures. Fabre and Malauzat (2019), for instance, report that the e-commerce industry exceeded 10 per cent of all global retail sales in 2017, and that the industry was expected to reach a turnover of 2.2 USD trillion in 2019. Further calculations indicate that the e-commerce industry is expanding at an annual growth rate of 24 per cent, four times faster than the total global retail sector. Fabre and Malauzat (2019) further argue that e-commerce is becoming a significant driver of growth for global retail sales and that the contribution to global retail sales has risen from 7 per cent in 2012 to 39 per cent in 2017. The expectation is that e-commerce sales will exceed the 50 per cent mark of global retail sales by 2020.

Makhitha et al. (2019) highlight the fact that countries in the developed world (such as the US, and the UK) have seen a rapid increase in the adoption and use of online shopping, whereas it seems that their developing counterparts (such as South Africa and many other countries on the African continent) have been slow to adopt and engage in online shopping. A closer investigation of the South African market, for example, reveals that online shopping is a growing phenomenon, but that it is in its early stages of development (Febel, 2015). This observation is justified by figures that show that online retail sales accounted for only 1 per cent of overall retail sales in South Africa in 2016. In 2019, an estimated 18.43 million e-commerce users in South Africa made online purchases to the value of only R14 billion or 1.4% of all retail sales in the country, whilst it is projected that online retail purchases will increase to only 2 per cent of the total retail sales in South Africa by 2022 (Rogerwilco, 2019; World wide worx, 2018).

The Technology Acceptance Model (TAM) model together with the theory of perceived risk offers insights as to why consumers refrain from adopting technology such as online shopping platforms (Davis et al., 1989; Gareeb & Naicker, 2015; Pappas, 2016). Scientific research in the public domain on online consumer behaviour and the slow adoption of online shopping in South Africa is, however, scant and published studies seem to focus on online consumer behaviour for consumers from mainly the US, Malaysia and India.

As researchers have argued that many online retail failures can be attributed to the under estimation of perceived risk (Coker et al., 2011) the decision was made to focus this paper on the

theory of perceived risk to gain insights as to why or why not South African consumers might participate in online shopping. A potentially lucrative market for online retailers is the cohort of Generation Y consumers. As consumers in this cohort are generally technologically able to purchase online a sound knowledge of the perceived risk barriers that might inhibit this market from shopping online will be invaluable to both the retail industry and companies that are interested to grow their online market share. Marinelli et al. (2014), however, argue that it must be noted that the Generation Y cohort includes a wide age range (born between 1980 and 2000) making the applicability of research results for the entire cohort, not ideal. Subsequently, several researchers (e.g., Martin & Turley, 2004; Noble et al., 2009) have focused their research initiatives on a subset of the Generation Y cohort, namely college and/or university students. This segment is arguably an attractive market for businesses as they are often seen as trendsetters and early adopters who are expected to attain a high standard of living after graduation (Wolburg & Pokrywczynski, 2001). Muller (2016) posits that it is generally recognised that there is a positive correlation between a tertiary degree and a higher future income capacity and societal status. Therefore, due to the exploratory nature of this study, the decision was made to firstly focus on this segment, namely South African university students (as members of Generation Y).

There is, however, a dearth of research in the public domain of the perceived risk barriers that South African Generation Y consumers experience. For South Africa, even less is known of the possible differences in the online shopping behaviour between experienced and inexperienced consumers and between different product involvement categories. The theoretical contribution of this study lies in the fact that two groups of South African Generation Y university students were investigated namely experienced online consumers (purchased online before) and inexperienced online consumers (browsed online before, but who had not made purchases). We assessed and compared repurchase and purchase intention over two products types, namely clothing (a high-involvement product) and books (a low-involvement product), to investigate the possible influence of product involvement on online consumer behaviour. It was expected that consumers would have different online purchase behaviour and risk perceptions for different types of product categories, whilst it was also expected that there would be differences in the relationship between perceived risk and online shopping behaviour for consumers with different levels of online shopping experience. The results contribute to our understanding of online shopping in South Africa, whereas the managerial implications can expand the ability of retailers to grow online shopping revenue.

## 2. Literature review

Perceived risk is one of the key elements of consumer behaviour that has been found to be prevalent in most purchasing decisions, and even more so in an online shopping context (Pappas, 2016). The concept of perceived risk was first proposed in 1960 by Bauer, who defined it as “the unpredictable results that consumers perceive when they engage in purchasing behaviour; these results may have a negative influence on the consumer” (Hsieh & Tsao, 2014). Consumers generally perceive more risks when shopping online compared to traditional shopping channels such as brick-and-mortar stores (Hong & Yi, 2012). Apart from its negative effect on consumers’ attitudes towards online shopping, perceived risk can also exert a negative influence on consumers’ willingness and intention to purchase online (Hsieh & Tsao, 2014). Although the influence of perceived risk has been investigated in many studies, the findings are inconsistent. Some studies report a negative relationship between perceived risk and purchase intention (Dai et al., 2014), whereas others report no such link (Liao & Cheung, 2001). These inconsistencies may be due to the difference between examining comprehensive perceived risk compared to a more delineated conceptualisation of the risk construct (i.e. by only focusing on one dimension of risk, for example, financial risk). The product type, level of consumer involvement or online experience, along with a myriad other variables (e.g., satisfaction with previous online purchases, time pressure, availability of delivery and payment options), could further add to the complexity of online shopping and contribute to inconsistent and incomparable findings.

Coker et al. (2011), argue that despite previous studies making advancements in the understanding of online consumer behaviour, several researchers such as Bhatnagar et al. (2000), Miyazaki and Fernandez (2001), Park et al. (2005), Cunningham et al. (2005), and Ariffin et al. (2018), have measured general perceptions of risk towards online shopping and ignored the possibility that risk perceptions may differ among individuals and towards products. For example, a consumer may claim that the Internet is a risky shopping channel, but the same consumer could frequently purchase books or movie tickets online. Coker et al. (2011) therefore propose that due to the notion that perceived risk differs for various product types, perceived risk should be measured at product level. Dillon et al. (2014) subsequently studied perceived risk for digital (music) and non-digital (apparel) product types and reported differences over these product categories.

When studying online consumer behaviour, a distinction is often made between high-level consumer involvement and low-level consumer involvement (Constantinides, 2004). O'Cass (2000) views the construct of involvement as the interaction between a consumer and a product, and defines involvement as the relative strength of the consumer's cognitive structure related to a focal object (i.e. the product), whereas Dholakia (2001) explains involvement as "an internal state that indicates the amount of arousal and interest induced by a product". Extant literature shows that the more involved a consumer is with the purchase of a product, the higher the level of perceived risk is likely to be (Dholakia, 2001). For example, the purchase of clothing usually requires more consumer involvement in both the product itself and the purchasing process, given that clothing is often bought for its symbolic meaning, image reinforcement and the psychological satisfaction (Hong, 2015) it gives to the consumer. More recent research for example, Han and Kim (2017) state significant differences in perceived risk perception for high involvement (e.g., laptop) products and low involvement products (e.g., highlighter pen).

In an online shopping environment it can be argued that for a clothing item, which is not generic due to differences in, for example, fit, fabric and aesthetic appeal, consumers tend to perceive more risk when shopping online than they would perceive in a physical store. In contrast, a book purchase probably requires less involvement from consumers, as books are standard items that can be bought through various distribution channels.

Another aspect that can have a significant effect on a consumer's online purchasing behaviour is previous purchase experience. The shopping behaviour of consumers who have previously purchased online and those consumers who have never been shopped online, is expected to differ (Hernandez et al., 2011). Consumers who have previously made online purchases and are familiar with the characteristics of this retail channel can be referred to as 'experienced' online shoppers (Hernandez et al., 2011). Although they can still perceive risks when shopping online, these risks should not significantly affect their Internet patronage behaviour as they are familiar with the online shopping process. Consumers who do not have previous experience with online shopping but who might be interested in browsing for products and shopping online, can be termed 'inexperienced' online shoppers. Due to the lack of experience of these consumers it can be assumed that perceived risk might play an important role in their decision to engage in online shopping or not to. In their study on online risk perception of a group of undergraduate college students, Dillon et al. (2014) found that for six types of perceived risk (product, financial, privacy, time, psychological and source risk) there was a difference in risk perception between respondents that have previously shopped online and those that had not. The respondents that had not shopped online before supposedly perceived higher levels of risk with online shopping because of their unfamiliarity with shopping via this retail channel.

It is important to reiterate that perceived risk is a multidimensional construct including financial risk, psychological risk, performance risk, time risk, social risk and physical risk (Jacoby & Kaplan, 1972). For the purpose of this study, physical risk was excluded as the possibility that online shopping is harmful to the individual's health is unlikely. The remaining dimensions of perceived risk and their related research hypotheses formulated for this study will be discussed next.



### 2.1. Financial risk

Financial risk, often also known as 'economic risk', is defined as the "likelihood of suffering a financial loss due to hidden or replacement costs as a result of the lack of warranty or a faulty product" (Kiang et al., 2011). Price is the product element that has been reported to play a significant role in a consumer's purchasing decision and as the monetary value of a product increases, so does the perceived financial risk associated with the purchase (Pappas, 2016).

When purchasing products online, the fundamental financial risk that consumers perceive is often said to be related to security and privacy concerns (Pantano, 2014). Concerns regarding security aspects (such as credit card fraud) increase the reluctance of consumers to make online payments. Many Generation Y consumers are cautious to shop online or to provide their personal information online, due to fears of a lack of privacy and the possibility that their information will be misused (Visa, 2012). A study involving more than 18 000 South African online consumers found that 48 per cent of respondents are hesitant to share their credit card details with online companies (Rogerwilco, 2019).

To investigate the perception of financial risk in an online shopping environment for a cohort of Generation Y South African consumers, the following research hypotheses are posed:

**Hypothesis 1A:** There is a relationship between perceived financial risk and purchase intention when shopping online for clothing.

**Hypothesis 1B:** There is a relationship between perceived financial risk and purchase intention when shopping online for books.

**Hypothesis 1 C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between financial risk perception and online purchase behaviour for books.

**Hypotheses 2A:** There is a relationship between perceived financial risk and repurchase intention when shopping online for clothing.

**Hypothesis 2B:** There is a relationship between perceived financial risk and repurchase intention when shopping online for books.

**Hypothesis 2 C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between financial risk perception and online purchase behaviour for clothing.

### 2.2. Psychological risk

Jacoby and Kaplan's seminal research (Jacoby & Kaplan, 1972) defines perceived psychological risk as "the possibility that consumers suffer stress due to their purchasing behaviours." If a user finds a website complicated, cannot find the desired product or is confused about how to use the website, the consumer will typically exit the website. When consumers perceive a website to be easy to navigate and use, their future purchase intention should be positively affected (Lee et al., 2011). The inability of a consumer to examine and evaluate a product before purchasing it, is another major factor that might increase the complexity and perceived psychological risk of online shopping. This is compounded by the absence of physical contact with sales staff to, for example, further clarify product information (Pappas, 2016). Thus, physical distance and the lack of personal contact intensify consumers' anxiety and risk perceptions of online shopping. As a result, psychological risk has been found to affect consumers' online purchasing decisions and explains why many consumers purchase a product online only after first examining it in-store (Pappas, 2016). Tangible products that are sold online are often

perceived as intangible, as consumers have no direct contact with the products being purchased (Nepomuceno et al., 2014). Consumers can easily perceive online shopping to be more complex and difficult to use than traditional shopping and be hesitant to engage with it. Not all consumers are comfortable with purchasing a product before physically examining it, and some may consequently perceive more psychological risk with online shopping than others. Thus, due to the perceived complex nature of online shopping, consumers inherently perceive more psychological risk when purchasing a product online than those consumers who buy in traditional brick-and-mortar stores.

Against this background, the following:

**Hypothesis 3A:** There is a relationship between perceived psychological risk and purchase intention when shopping online for clothing.

**Hypothesis 3B:** There is a relationship between perceived psychological risk and purchase intention when shopping online for books.

**Hypothesis 3C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between psychological risk perception and online purchase behaviour for books.

**Hypothesis 4A:** There is a relationship between perceived psychological risk and repurchase intention when shopping online for clothing.

**Hypothesis 4B:** There is a relationship between perceived psychological risk and repurchase intention when shopping online for books.

**Hypothesis 4C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between psychological risk perception and online purchase behaviour for clothing.

### 2.3. Performance risk

Performance risk is defined by Mitchell (1999) as “the potential loss occurred by the failure of a product to perform as expected.” Performance risk associated with online shopping in particular involves the performance of the product and/or the website. Product risk is defined as “the loss experienced by consumers when their expectations of a product do not realise after purchasing it” (Forsythe & Shi, 2003). In the online environment, product risk is largely attributed to the consumer’s inability to physically examine products before purchasing it or because of limited product information being available. The fact that consumers cannot accurately evaluate the quality of a product prior to purchase, makes product risk an important element of perceived performance risk (Hsieh & Tsao, 2014).

Secondly, the perceived performance risk of online shopping is further influenced by website factors such as usability, the time spent on searching for information, the uncertainty regarding after-sales service and the difficulty of website navigation (Pappas, 2016). Website usability includes the ability to find one’s way around a website, to locate the required information, to know what to do next and to do so with minimal effort (Constantinides, 2004).

The quality of a website’s system is an essential element of website usability and ultimately the purchase intention of consumers. A website’s system quality includes, for example, the usability (ease of use and ease of navigation) of the website; the website’s availability, reliability and suitability; website atmospherics (conscious design of web environments to create a positive



effect to increase favourable responses) and a website's response time (e.g., long or instant loading times) (Chang & Chen, 2008; Dailey, 2004; Lee et al., 2011; Richard & Habibi, 2016). A study focusing on South African online consumers found that 20 per cent of respondents noted that the online sites of companies were difficult to navigate, 34 per cent believed that online sites are slow, whilst 39 per cent they found it difficult to get customer support in an online environment (Rogerwilco, 2019). To investigate the possible influence of perceived performance risk on online shopping behaviour, the following hypotheses are put forward:

**Hypothesis 5A:** There is a relationship between perceived performance risk and purchase intention when shopping online for clothing.

**Hypothesis 5B:** There is a relationship between perceived performance risk and purchase intention when shopping online for books.

**Hypothesis 5C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between performance risk perception and online purchase behaviour for books.

**Hypothesis 6A:** There is a relationship between perceived performance risk and repurchase intention when shopping online for clothing.

**Hypothesis 6B:** There is a relationship between perceived performance risk and repurchase intention when shopping online for books.

**Hypothesis 6C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between performance risk perception and online purchase behaviour for clothing.

#### **2.4. Time risk**

In an online shopping context, time risk has been defined as the potential loss of time and effort, which includes issues related to website navigation, waiting time for the receipt of products, the time spent returning incorrect items as well as processing and delivery delays (Aghekyan-Simonian et al., 2012). The successful functionality of a website emulates the reliability of an online retailer, decreases the time risk perceived by consumers (Goode & Harris, 2007) and can fruitfully be used to attract new consumers and to retain existing ones. For example, a user should be able to navigate a website quickly and the website should be without broken links. When consumers have to deal with a website that hosts failed java scripts, missing graphics and long loading times, they will often leave the website frustrated (Lee et al., 2011). Furthermore, as online shopping entails remote transaction, consumers who purchase online are unable to use or consume the product immediately and have to wait for the product to be delivered (Liao & Keng, 2013). Consumers may experience dissatisfaction, low repurchase intentions or intentions to complain as a result of a delay from the purchase to actual receipt and consumption (Liao & Keng, 2013). A study focusing on South African online consumers found that 26 per cent of respondents complained about the online shopping delivery issues (Rogerwilco, 2019).

The information quality available on shopping websites also has a considerable impact on the shopping decisions of consumers. The intangibility of online shopping increases the uncertainty experienced by consumers and as a consequence, perceived time risk increases when limited information is provided about a product, resulting in consumers having low self-confidence regarding the purchase evaluation (Pappas, 2016). When shopping online, consumers want an efficient transfer of information, interaction with others and an abundance of immediate and customised

information (Hsieh & Tsao, 2014). A consumer who is more informed about a product, is likely to perceive less time risk when purchasing online (Nepomuceno et al., 2014). Therefore, the following:

**Hypothesis 7A:** There is a relationship between perceived time risk and purchase intention when shopping online for clothing.

**Hypothesis 7B:** There is a relationship between perceived time risk and purchase intention when shopping online for books.

**Hypothesis 7C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between time risk perception and online purchase behaviour for books.

**Hypothesis 8A:** There is a relationship between perceived time risk and repurchase intention when shopping online for clothing.

**Hypothesis 8B:** There is a relationship between perceived time risk and repurchase intention when shopping online for books.

**Hypothesis 8C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between time risk perception and online purchase behaviour for clothing.

## 2.5. Social risk

In an online shopping context, social risk can be linked to the social influences consumers are exposed to when deciding to purchase online (Constantinides, 2004; Hassan et al., 2006) and the reputation of online retailers they buy from (Aghekyan-Simonian et al., 2012; Gotsi & Wilson, 2001; Radomir et al., 2014). Consumers might therefore decide not to engage in online shopping as they fear they might be rejected or isolated by society because of the type of product they might buy or the online retailer that they might use. Hassan et al. (2006) therefore posit that online purchases might result in social concerns for certain consumers as social interactions are at play. However, the interactivity of the Internet enables retailers to enhance the online shopping experience in that they can offer consumers personalised services and facilitate interaction with other online consumers who are willing to share their experiences and suggestions (e.g., by rating products or writing reviews). Interactivity can therefore underpin the very basic element of the Internet, namely networking (Constantinides, 2004). Interactive elements can thus contribute to a positive online shopping experience by reducing consumer uncertainty. A study by The Nielsen Company (2010) found that while consumers often consult websites, they trust the opinions of friends and family the most (The Nielsen Company, 2010).

As a result of networking effects and socialising of online consumers, the reputation of online retailers can increase or decrease the social risk perceived by online consumers. Accordingly, a retailer's reputation and image has gained interest among academics and marketing practitioners, given its major influence on the success of companies (Radomir et al., 2014).

Many contradictory views exist regarding the constructs of reputation and image. Some researchers consider these constructs to be synonymous and use them interchangeably, whereas others treat the constructs as distinct, but related (Gotsi & Wilson, 2001). In their pivotal research on the relationship between reputation and image, Gotsi and Wilson (2001) differentiate between two schools of thought, namely the analogous school of thought and the differentiated school of thought. The analogous school of thought does not distinguish between image and reputation and uses the terms interchangeably. By contrast, the differentiated school of thought draws

a distinction between image and reputation but considers the two constructs interrelated (Gotsi & Wilson, 2001). The differentiated school of thought includes three perspectives. Firstly, image and reputation are entirely distinct constructs, given that image may reflect a view that does not correspond to reality, but instead to a false reality. The second and third perspectives treat image and reputation as interrelated constructs where the second perspective alludes to the notion that reputation has an impact on image and is one of its dimensions, whereas the third perspective denotes that reputation is considered a result of a stakeholder's perception of a retailer's image.

The current study's investigation into the influence of a retailer's reputation on perceived social risk follows the differentiated school of thought, namely that a retailer's image and reputation are distinct but related constructs. According to Hess (2008), retailer reputation is defined as "consumers' perceptions of how well a retailer takes care of its consumers and concern for their welfare." A well-established reputation offers multichannel firms an advantage against start-up retailers in terms of consumer loyalty and purchase intention. A sound reputation will contribute to consumers who buy from a retailer's physical store to easily use the retailer's online store as well, reducing the consumers' demand for credibility and integrity credentials as a way to decrease perceived social risk (Constantinides, 2004). It can be argued that the retailer image and reputation can be managed and influenced by the retailer themselves (e.g., through campaigns) or it can be influenced by significant reference groups (e.g., opinions of friends and family) (Aghekyan-Simonian et al., 2012).

As noted previously, consumers perceive greater risk in the online shopping environment, especially where the physical examination of products before purchase is important (e.g., in the case of clothing) and therefore the risk-reducing role of an online retailer's image and reputation as well as social influences on purchase intention may be significant (Aghekyan-Simonian et al., 2012). As a result, a consumer's image of an online retailer together with information from social groups may significantly influence their product evaluations when they cannot physically examine the product. Previous studies on retailer image and its relationship with consumers' purchase intentions showed mostly a positive relationship between retailer image and consumers' purchase intentions, and a negative relationship between retailer image and consumers' perceived risk (Aghekyan-Simonian et al., 2012).

As online shopping is a relatively new phenomenon in South Africa, it is expected that many consumers will be influenced by the image and reputation of the online retailer as well as the opinion of their social circles about whether they should shop online and where to shop online. To investigate the possible influence of perceived social risk on the online shopping behaviour of a cohort of South African Generation Y consumers, the following:

**Hypothesis 9A:** There is a relationship between perceived social risk (retailer reputation) and purchase intention when shopping online for clothing.

**Hypothesis 9B:** There is a relationship between perceived social risk (retailer reputation) and purchase intention when shopping online for books.

**Hypothesis 9C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between social risk (retailer reputation) perception and online purchase behaviour for books.

**Hypothesis 10A:** There is a relationship between perceived social risk (retailer reputation) and repurchase intention when shopping online for clothing.

**Hypothesis 10B:** There is a relationship between perceived social risk (retailer reputation) and repurchase intention when shopping online for books.

**Hypothesis 10 C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between social risk (retailer reputation) perception and online purchase behaviour for clothing.

**Hypothesis 11A:** There is a relationship between perceived social risk (social influences) and purchase intention when shopping online for clothing.

**Hypothesis 11B:** There is a relationship between perceived social risk (social influences) and purchase intention when shopping online for books.

**Hypothesis 11C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between social risk (social influences) perception and online purchase behaviour for books.

**Hypothesis 12A:** There is a relationship between perceived social risk (social influences) and repurchase intention when shopping online for clothing.

**Hypothesis 12B:** There is a relationship between perceived social risk (social influences) and repurchase intention when shopping online for books.

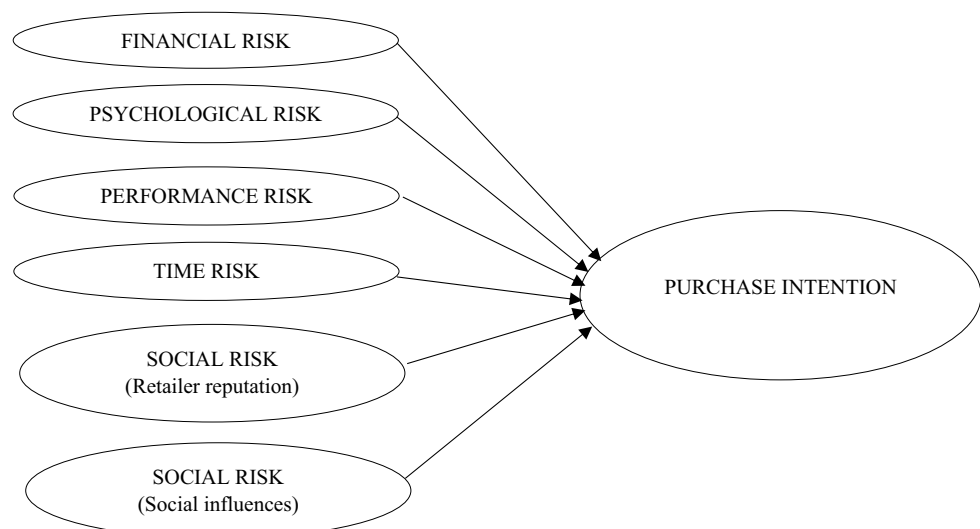
**Hypothesis 12C:** Experienced and inexperienced online consumers show significant differences in the strength of the relationship between social risk (social influences) perception and online purchase behaviour for clothing.

A proposed conceptual framework, which illustrates the relationship between the investigated dimensions of perceived risk and online purchase intention and online repurchase intention, is shown in Figures 1 and 2, respectively. For the purposes of this study, the framework was empirically tested in the context of a high-involvement product (clothing) and a low-involvement product (books).

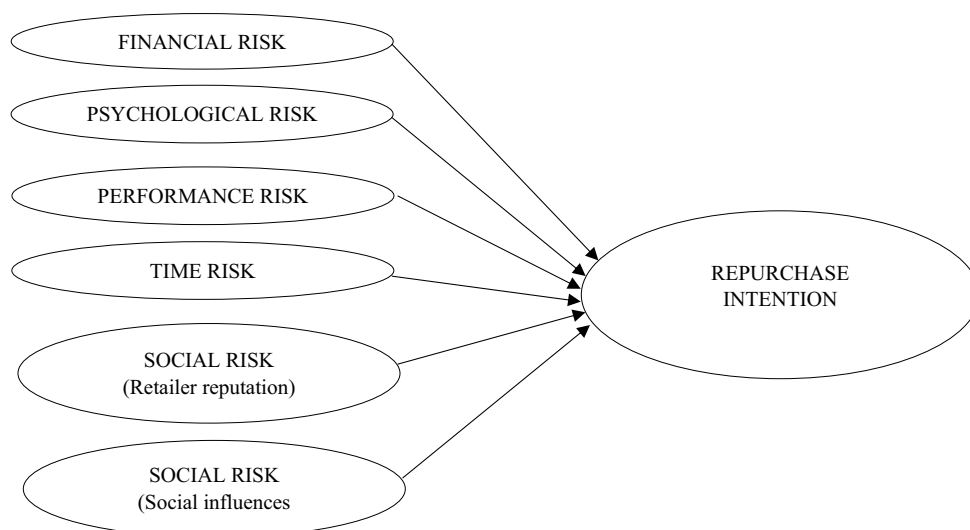
### 3. Research methodology

This exploratory study included both qualitative and quantitative phases to collect data.

**Figure 1. Conceptual framework of the relationship between perceived risk dimensions and purchase intention.**



**Figure 2. Conceptual framework of the relationship between perceived risk dimensions and repurchase intention.**



### 3.1. Qualitative phase 1: focus group

A focus group consisting of 25 respondents was conducted to obtain insight into the respondents' perceived risk barriers to online shopping, the type of products they bought online, and their technology usage. The respondents had to be South African citizens and Generation Y university students who were between 18 and 26 years old. A question route was developed from the literature review to guide the discussions. The information collected from the focus group provided guidance to develop a questionnaire and specifically to determine the choice of products that was used as a reference point for the empirical study.

When examining online consumer behaviour, the type of product under investigation is important as a distinction is often made between high-level and low-level involvement products (Constantinides, 2004). To investigate the possible influence of the level of product involvement on consumer behaviour, both purchase intention and repurchase intention were measured in Phase 2 of this study, for two product types that were identified by the focus group, namely clothing (a high-involvement product) and books (a low-involvement product). The focus group did not indicate a specific type of book (e.g., textbooks or novels) nor a specific style of clothing (e.g., evening wear or leisure wear), thus no item type specification was given to respondents. It was expected that consumers would show different online purchasing behaviour for books and clothing (representative of low and high involvement).

### 3.2. Quantitative phase 2: online survey

#### 3.2.1. Measurement instrument

For this second phase, a self-administered questionnaire was developed from insights gained from the literature review and the focus group. The questionnaire items were obtained from previously applied measurement instruments that yielded acceptable psychometric properties (Javadi et al., 2012; Khare et al., 2012; Nepomuceno et al., 2014; Lian & Yen, 2014; Hsieh & Tsao, 2014). Some items were slightly adapted for the purposes of the current study. Changes were primarily made with regard to language use and the insertion of a specific product category (e.g., 'I am unable to touch and feel the products' to 'When shopping online for books/clothing, I do not like the fact that I am unable to touch and feel the items').

The questionnaire included dichotomous screening questions to determine if respondents adhered to the participation criteria, namely whether they were a university student with

South African citizenship and whether they fell in the age category of Generation Y. The data collection took place during 2017 thus the typical university student would have been born between 1997 and 2000. Section A on technology usage included 26 items to investigate how and when the respondents used Internet technologies in their daily lives. Item numbers 1 to 17 assessed the general Internet usage of respondents (e.g., how and how often they accessed the Internet).

The responses to item number 18 divided the respondents into two sample groups: Sample group one contained respondents who had purchased online before. These respondents were regarded as experienced online consumers whose online repurchase intention could be measured. Questions were asked about their online shopping behaviour, including from which websites they had purchased before and which payment options they had used. Sample group two consisted of participants who were new to online shopping and who were thus regarded as inexperienced online consumers whose purchase intention could be measured. All the respondents were asked to answer all the statements for both books and clothing. The results from section A of the questionnaire were used to compile and describe the technology usage profile of the sample of South African Generation Y university students. These results are not discussed in detail here, but will be reported on in a separate, comprehensive paper.

The items measuring the dimensions of perceived risk and online purchase intention and repurchase intention followed in section B. Perceived risk was measured with a seven-point Likert-type scale ranging from strongly disagree to strongly agree. A middle point was included for those respondents who had a neutral response.

The social risk scale is reported as two scales given the theoretical justification by Aghekyan-Simonian et al. (2012), who reported that retailer reputation and social influences are two key dimensions of perceived social risk. Further support is found in the work of Hess (2008) and Gotsi and Wilson (2001) pointing to the importance of retailer reputation (and by implication also the retailer image) in the perception of risk. Online purchase intention and repurchase intention (each having five items) were also measured using a seven-point Likert-type scale. The final questionnaire was converted into an electronic version using the platform SUNSurvey.

#### Sample and ethical considerations

After ethical clearance was obtained from the Research Ethics Committee of a South African university (SU-HSD-002893), approximately 20 000 students were invited (via email) to participate in the study. Participation was voluntary and those who agreed to participate were given the option to withdraw from the study at any point in time. To motivate recipients to participate, coffee gift vouchers were given to a random sample of respondents. A total of 606 usable questionnaires were retained for data analysis purposes.

#### 4. Results and discussion

The data analysis process included both descriptive and inferential data analyses. The hypothesised relationships between the dimensions of perceived risk and online purchase intention and repurchase intention were assessed for both respondents with online shopping experience and those who were new to online shopping. Two types of products were assessed, namely books (low involvement) and clothing (high involvement) (see Figure 1). Given the exploratory nature of this study, the Partial Least Squares Structural Equations Modeling (PLS-SEM) technique was employed. Further justification for using the PLS-SEM technique for the current study lies in the fact that it is recommended for predictive models and studies with smaller samples (Hair et al., 2017). The PLS analyses determined the significance, direction and strength of the relationships.

#### 4.1. Descriptive findings: technology usage profile of respondents

Table 1 provides a summary of the technology usage profile of all the respondents. The table shows that all the respondents (100%) were aware of online shopping websites, whereas the vast majority of the respondents were technologically enabled (99%); used a smart phone to access the Internet (97%); had browsed online before (96%); used a computer/laptop to mostly purchase online (85%) and had friends who purchased online (82%). Sixty-nine per cent (69%) of the respondents had previously purchased online of whom 60% indicated that they had purchased products in a low-priced category (less than R 500 per month).

#### 4.2. Reliability and validity

A reliability analysis was conducted to ensure that all items displayed evidence of internal consistency and could be retained for statistical analyses. The models were initially fitted on all items, however results indicated some low average variance extracted (AVE), and non-significant item loadings. The item loadings were inspected across all four models, and those items that consistently indicated “low” loadings, were removed from all four models subsequently fitted, so that the

**Table 1. Summary of respondents’ technology usage profile**

No.	Item	Most prevalent answers and reasons	Percentage
1.	Do you have access to the Internet?	Yes	100
2.	How often do you have access to the Internet during a day?	At all times	52
3.	Do you have access to the Internet at home?	Yes	92
4.	From where do you mostly access the Internet?	Home	73
5.	With which device do you mostly access the Internet?	Mobile phone	51
6.	Which type of mobile phone do you mostly use to access the Internet?	Smartphone	97
7.	Do you have limited Internet access?	Yes	66
8.	How much data do you typically use per month for Internet access?	Less than 5GB	42
9.	How much data do you typically use per month on your mobile phone for Internet access?	Less than 1GB	50
10.	Why do you use the Internet?	Academic-related	95
11.	Who pays for your Internet access?	Myself and my parents	46
12.	During which time of the day do you usually access the Internet?	18:00–23:00	55
13.	How much time do you usually spend on the Internet per day for all Internet activities?	<5 hours per day	64

(Continued)



**Table 1. (Continued)**

No.	Item	Most prevalent answers and reasons	Percentage
14.	Would you consider yourself to be “technologically enabled?”	Yes	99
15.	Are you aware of online shopping websites?	Yes	100
16.	Have you browsed online before?	Yes	96
17.	Which websites have you previously used for online browsing?	Gumtree	79
18.	Have you purchased online before?	Yes	69
19.	Which websites have you previously used for online purchases?	Computicket	60
20.	How often do you purchase products online?	Yearly	60
21.	With which device do you mostly purchase online?	Computer/laptop	85
22.	Which type of products do you usually purchase online?	Electronics	50
23.	Do you own a credit card?	No	61
24.	How do you usually pay for online purchases?	Credit card	48
25.	How much do you usually spend on online purchases per month?	<R500	81
26.	Do your friends purchase online?	Yes	82

measurement components of the models were identical. The adjusted models and the comprehensive models yielded similar results. The adjusted model's results are reported.

Table 2 indicates the results of the Cronbach alpha reliability analyses for the two groups. The findings are reported separately for the two groups to verify item reliability in the context of the products involved (clothing and books). Nunnally and Bernstein (1994) state that in the early stages of construct or predictive validation research, it may be sufficient to include scales with a reliability score of 0.70. Table 2 shows that the Cronbach alpha scores for all scales are satisfactory and above the value of 0.70, except for perceived social risk (retailer reputation and social influences) where Cronbach alpha scores below 0.70 were recorded. Due to the theoretical support for these items and the exploratory nature of this study, all items were retained for further analysis. The composite reliabilities (CR) and average variance explained (AVE) were calculated and are included in Table 2 in brackets. According to Fornell and Larcker (1981) the values of the AVE and CR are acceptable as all the CR values are above 0.75 and AVE values are above 0.4.

#### **4.3. Structural model assessment**

The PLS technique was furthermore used to assess the proposed model and investigate the relationships between the dimensions of perceived risk and online purchase intention and

Table 2. Reliability: group one (experienced online consumers) and group two (inexperienced online consumers)				
Variable scale	No. of items	Experienced online consumers (Group one) n = 416		Inexperienced online consumers (Group two) n = 190
		Clothing n = 416 ( $\alpha$ ) (AVE; CR)	Books n = 416 ( $\alpha$ ) (AVE; CR)	Clothing n = 190 ( $\alpha$ ) (AVE; CR)
Financial risk	7	0.84 (0.50; 0.88)	0.83 (0.50; 0.87)	0.80 (0.47; 0.86)
Psychological risk	7	0.83 (0.49; 0.87)	0.84 (0.51; 0.88)	0.78 (0.43; 0.84)
Performance risk	6	0.88 (0.62; 0.91)	0.88 (0.63; 0.91)	0.89 (0.63; 0.91)
Time risk	6	0.84 (0.56; 0.88)	0.83 (0.54; 0.87)	0.74 (0.42; 0.81)
Social risk (retailer reputation)	3	0.63 (0.57; 0.80)	0.55 (0.51; 0.75)	0.60 (0.54; 0.78)
Social risk (social influences)	2	0.61 (0.71; 0.83)	0.54 (0.67; 0.80)	0.47 (0.65; 0.79)
Online purchase/repurchase intention	10	0.93 (0.78; 0.95)	0.91 (0.74; 0.93)	0.89 (0.70; 0.92)
				0.77 (0.43; 0.83)
				0.77 (0.43; 0.84)
				0.87 (0.57; 0.88)
				0.73 (0.41; 0.80)
				0.54 (0.52; 0.76)
				0.36 (0.61; 0.75)
				0.87 (0.66; 0.91)

repurchase intention. First, the structural model was assessed for collinearity; secondly, the coefficient of determination ( $R^2$ ) was assessed to judge the predictive power of each model and finally, the significance and relevance of the structural model relationships were assessed.

#### 4.4. Assessment of collinearity

Collinearity occurs when two or more predictor variables in a multiple regression model are highly correlated, making it very difficult to assess the effect of the independent variables on the dependent variable(s) (Hair et al., 2017). To detect possible problems with collinearity, the variance inflation factor (VIF) was calculated. The guideline for VIF is that it should be below five (Hair et al., 2017). For this study, all variables (of both groups) displayed VIF values below five, therefore collinearity was not a concern for the dataset.

#### 4.5. Assessment of the coefficient of determination ( $R^2$ )

The coefficient of determination ( $R^2$ ) is an important measure to assess a structural model (Henseler et al., 2009). The  $R^2$  value indicates the percentage of variance in the dependent variable(s) that is explained by the independent variables of the specific model (Lowry & Gaskin, 2014).

From Table 3 it is evident that the perceived risk dimensions that were measured in this study only accounted for some variance in the purchasing behaviour of experienced and inexperienced online consumers of books and clothing items. Evidently, perceived risk was not the only variable that influenced the online purchase intention and repurchase intention of the respondents. This result points to the complexity of consumption behaviour and confirms that other variables such as consumer innovativeness, perceived benefits, attitude and intention (Sivakumar & Gunasekaran, 2017) may also influence the online purchase intention and repurchase intention of Generation Y consumers.

#### 4.6. Assessment of the path coefficients and hypotheses

To assess the various paths between the variables in the conceptual framework, the standardised regression weights were examined. Table 4 presents the path coefficient statistics for each group and indicates which proposed paths are significant, as well as the strength of those relevant paths. Table 4 also depicts the multi group analysis results when comparing experienced and inexperienced consumers repurchase and purchase intent for books and clothing. The multi group analysis was performed on equal size groups, by randomly selecting 190 respondents from the experienced group (original group size ( $n = 416$ )) and comparing them with the respondents from the inexperienced group ( $n = 190$ ). Based on the results reported in Table 4, hypotheses  $H_{1A}$ ,  $H_{1B}$ ,  $H_{2C}$ ,  $H_{4A}$ ,  $H_{4B}$ ,  $H_{4C}$ ,  $H_{8B}$ ,  $H_{9A}$ ,  $H_{9B}$ ,  $H_{10A}$ ,  $H_{10B}$ ,  $H_{12A}$  and  $H_{12B}$  were supported while no support was found for the remaining hypotheses  $H_{1C}$ ,  $H_{2A}$ ,  $H_{2B}$ ,  $H_{3A}$ ,  $H_{3B}$ ,  $H_{3C}$ ,  $H_{5A}$ ,  $H_{5B}$ ,  $H_{5C}$ ,  $H_{6A}$ ,  $H_{6B}$ ,  $H_{6C}$ ,  $H_{7A}$ ,  $H_{7B}$ ,  $H_{7C}$ ,  $H_{8A}$ ,  $H_{8C}$ ,  $H_{9C}$ ,  $H_{10C}$ ,  $H_{11A}$ ,  $H_{11B}$ ,  $H_{11C}$  and  $H_{12C}$ .

#### 4.7. Perceived risk: clothing (experienced online consumers)

The results for the online repurchase intention of clothing by the experienced online consumers indicated that perceived psychological risk and social risk (retailer reputation and social influences) significantly influenced their online repurchase intention for this product. Perceived psychological risk and social risk (social influences) were negatively related to repurchase intention, implying that if an experienced online consumer perceived increased psychological or social risk (social influences), their

**Table 3. Coefficient of determination ( $R^2$ ) results**

	Clothing ( $R^2$ )	Books ( $R^2$ )
Group one (experienced online consumers)	0.41	0.42
Group two (inexperienced online consumers)	0.29	0.38

**Table 4. Path coefficient and multigroup analysis for books: experienced and inexperienced online consumers**

	Experienced		Inexperienced		MGA: Difference between equal size groups	
Path	Path coefficient	p-value	Path coefficient	p-value		MGA p-value
Financial risk → (Re) purchase intention	−0.07	0.27	−0.17	0.04*	−0.374	0.00*
Psychological risk → (Re) purchase intention	−0.41	0.00*	−0.04	0.69	0.548	0.00*
Performance risk → (Re) purchase intention	0.07	0.23	0.03	0.72	0.054	0.69
Time risk → (Re) purchase intention	−0.09	0.24	−0.09	0.36	−0.159	0.29
Social risk → (Re) purchase intention (Retailer reputation)	0.36	0.00*	0.43	0.00*	0.079	0.45
Social risk → (Re) purchase intention (Social influences)	−0.23	0.00*	−0.11	0.15	0.140	0.21

**Note:** \*Significant at the  $p < 0.05$  level.

online repurchase intention of a high involvement product (in this case clothing) should decrease. However, a significant positive relationship was found between social risk (retailer reputation) and repurchase intention. In other words, should the level of social risk a consumer perceived in terms of retailer reputation increase, the consumer would probably continue or even buy more clothing online. This positive relationship was not expected. An explanation for this finding could lie in the words of Hess (2008) who argued that a positive firm reputation could act as a 'buffering effect' protecting the business from negative consequences of service failures. It therefore seems that should an online firm selling high involvement products (in this case clothing) have a strong and positive reputation, this reputation could act as a risk reliever in the sense that should a service failure occur, the consumer will revert to the imbedded memory of the firm's reputation and continue to purchase clothing from them. Perceived psychological risk was identified as the variable with the largest influence on online repurchase intention with a path coefficient of −0.41.

The remaining three dimensions of perceived risk, namely financial risk, performance risk and time risk, had p-values of 0.27, 0.23 and 0.24 respectively. These dimensions did not significantly influence the online repurchase intention of clothing for this group.

#### **4.8. Perceived risk: books (experienced online consumers)**

As was the case with clothing, perceived psychological risk and social risk (retailer reputation and social influences) also showed significant relationships with the online repurchase intention of books

( $p < 0.05$ ) among the group of experienced online consumers. Perceived social risk (retailer reputation) had the largest influence on the online repurchase intention of this group with a path coefficient of 0.45. Similar to the context of clothing, perceived social risk (retailer reputation) was positively related to online repurchase intention in the case of books. The stronger the reputation of an online retailer, the more likely a consumer will be to continue purchasing online. Time risk had a negative relationship with the online repurchase intention of books, implying that the lower the time risk, the greater the repurchase intention for books.

As expected, perceived psychological risk and social risk (social influences) were negatively related to the repurchase intention of this group. In other words, the higher the level of psychological or social risk (in terms of social influences) an experienced online consumer perceived, the less likely they will be to continue purchasing online for books. Financial risk ( $p = 0.23$ ) and performance risk ( $p = 0.53$ ) were not significantly related to this group's repurchase intention of books. The implication of this finding is that, for experienced online shoppers, these risks do not have a significant influence on their repurchase intention of books.

#### **4.9. Perceived risk: clothing (inexperienced online consumers)**

The results for inexperienced online consumers showed that perceived financial risk and social risk (retailer reputation) had a significant influence on this group's online purchase intention for clothing. With a path coefficient of 0.43, perceived social risk (retailer reputation) had the strongest effect on online purchase intention. A negative relationship was found between perceived financial risk and online purchase intention ( $p = -0.17$ ). This result was not unexpected because the higher the level of financial risk a consumer perceives, the less likely the online purchase intention of that consumer will be. However, a positive relationship was found between perceived social risk (retailer reputation) and online purchase intention. These social risk items pertain more to retailer reputation (rather than risk) thus the finding confirms that the higher the level of retailer reputation a consumer perceives, the more likely a consumer is to purchase online.

The remaining dimensions of perceived risk (psychological risk, performance risk, time risk and social risk (social influences) did not significantly influence this group's online purchase intention for clothing.

#### **4.10. Perceived risk: books (inexperienced online consumers)**

Perceived financial risk and perceived social risk (retailer reputation) again significantly influenced the online purchase intention of this group. Perceived social risk (retailer reputation) had the largest influence on online purchase intention with a path coefficient of 0.50. A significantly negative relationship was found between perceived financial risk and purchase intention of books. Therefore, an increase in perceived financial risk should result in a decrease in online purchase intention. A positive relationship was again found between perceived social risk (retailer reputation), and online purchase intention. The stronger the reputation of a retailer, the more likely a consumer will be to purchase online from that retailer.

Yielding insignificant p-values, perceived psychological risk ( $-0.18$ ), performance risk ( $0.04$ ), time risk ( $0.02$ ) and social risk (social influences) ( $-0.11$ ) did not significantly affect the online purchase intention of this group.

#### **4.11. Differences in perceived risk for experienced and inexperienced consumers: books**

For books, as a low involvement product, no significant differences in perceived risk were evident when comparing experienced and inexperienced consumers. Although both respondent groups perceived some risk in terms of shopping for books online, it seems that respondents with previous online shopping experience does not necessarily perceive significantly different levels of perceived risk than respondents who have never shopped online before.

#### **4.12. Differences in perceived risk for experienced and inexperienced consumers: clothing**

Results indicated that experienced and inexperienced respondents differed significantly in terms of financial risk ( $p = 0.00$ ) and psychological risk ( $p = 0.00$ ) perception for the purchase or repurchase intent for clothing. The results suggest that although both groups of respondents' perceived risk in terms of the online shopping for clothes, the inexperienced group perceived significantly higher levels of financial risk than experienced online shoppers. For experienced consumers, it seems that lower levels of psychological risk perception will lead to higher re-purchase intention. Experienced online consumers have engaged in online shopping before—and therefore they do not perceive the same levels of financial and psychological risk as inexperienced consumers.

The results partially support Dillon et al. (2014) who report significant differences in risk perception for respondents who had shopped online for music products before, and those who had not. It could be argued that music could be regarded as a high involvement product (similar to clothing). Dillon et al. (2014) furthermore indicated that significant differences in risk perception (except for time risk) between experienced and inexperienced consumers for the online purchase of clothing. In this study, significant differences were only evident for financial and psychological risk between experienced and inexperienced consumers of clothing.

### **5. Managerial implications and conclusions**

It is clear from the descriptive results that the sample of Generation Y respondents had almost uninterrupted access to the Internet and that the current study cannot blame the slow growth of online shopping in South Africa to a lack of Internet access. Most respondents also reported that although they had previously browsed online for certain products, they continued to purchase in-store. In addition, all respondents indicated that they were aware of online shopping websites, and most of them considered themselves to be technologically enabled. This outcome offers a promising opportunity for retailers, especially online retailers with an established in-store presence, to attract consumers to their online platforms.

It is also apparent that most respondents did not need to be introduced to the phenomenon of online shopping but needed to be motivated to use online shopping and bridge the intention–purchase gap. From the results it can be deduced that the need for motivation partially stems from the risks that consumers perceive of the online shopping process.

#### **5.1. Perceived risk and online repurchase intention of experienced consumers**

The dimensions of perceived risk that had a significant relationship with online repurchase intention were psychological risk and social risk (both retailer reputation and social influences), for both clothing and books. In addition, time risk had a significant negative relationship with the online repurchase intention of books. Experienced online consumers do not have to be convinced to shop online, but instead should be encouraged to continue to shop online. Online retailers should therefore continuously employ risk-relieving strategies to reduce the risk perceptions of experienced online consumers when they purchase high-involvement products (clothing) and low-involvement products (books). As it is less expensive for retailers to retain existing consumers than to acquire new ones—also in the online context (Wu, 2013)—online retailers in South Africa need to ensure that their existing consumer base does not diminish, but instead expands. This could be achieved by minimising the perceived psychological, social and time risk associated with online repurchasing intention.

To reduce the psychological and time risk that experienced online consumers might perceive, it is important for online retailers to present the online shopping experience as easy and effortless. When the perception develops that online shopping is difficult and frustrating, even experienced online consumers might be tempted to abandon online shopping and return to traditional shopping methods or switch to competing online platforms. It is thus recommended that online retailers pay careful attention to the positioning of both their products and product information on their websites and that a user-friendly online shopping experience is ensured. Online retailers should furthermore design and implement effective information-search and browsing processes to

expediate online shopping and ensure a seamless transition between browsing and checkout thus narrowing the purchase intention gap. Clear product descriptions, simple payment instructions and accurate delivery information, all contribute to an enhanced online shopping experience and overcome the intangibility and perceived risk that online shopping presents.

Another risk reduction strategy for 'pure' online retailers is to expand into brick-and-mortar or 'pop-up' shops where products can be physically examined. Two prime examples of companies that followed this approach is the online retailer Yuppiechef and Amazon (Amazon, n.d.). The inability to interact with the product and the lack of interpersonal contact on online platforms are factors that enhance the perceived psychological risk for consumers. Interactive web tools such as chat bots, live chat, and online assistants can increase interactivity with consumers and improve the online shopping experience. Reference group interaction presents consumers with further opportunities to mitigate perceived psychological and social risk as they interact with others who are willing to share their experiences, product ratings and suggestions. These comments will affect the perceived reputation of the retailer and to ensure a positive reputation, online retailers must purposefully manage electronic word-of-mouth about their brand.

Strategic management of electronic word-of-mouth is imperative as negative content could influence consumers to refrain from shopping from a specific online retailer. To decrease the perceived social risk, it is recommended that online retailers monitor and proactively manage online platforms that consumers use to share information. This enables online retailers to provide appropriate responses to both positive and negative comments (to safeguard and enhance their retailer reputation) with the use of machine learning affordances (see Vermeer et al., 2019). Furthermore, it could be argued that retailers that invest in the enhancement of an excellent reputation, could use their reputation as a buffer to decrease the perception of other risk types. In other words, a consumer purchasing from an online retailer that has an excellent reputation would expect that this reputation has been obtained from the retailer's ability to mitigate the other types of risk such as financial risk, psychological risk, performance risk, social risk and time risk.

Although it is crucial for online retailers to continuously satisfy experienced online consumers by strengthening their retailer reputation, the only way in which online shopping in South Africa can thrive, is if more consumers adopt online shopping. Therefore, an understanding of the effect of perceived risk on the online purchase intention of inexperienced online consumers is vital. Some insights in this respect are shared next.

### **5.2. Perceived risk and online purchase intention of inexperienced consumers**

The only dimensions of perceived risk that had a significant effect on online purchase intention, were financial risk and social risk (retailer reputation), for both clothing and books. For online retailers to grow their market segment they must ensure that inexperienced online shoppers are convinced to purchase online. This could be done through risk-reducing strategies. Inexperienced consumers are often unaware of the benefits that online shopping offer. Therefore, it is recommended that risk-reducing and marketing strategies focus on creating awareness and making inexperienced online consumers more knowledgeable and able to engage with online shopping. The results of this study show that specific attention should be given to financial and social (retailer reputation) risks. As mentioned previously, enhanced efforts to develop a strong retailer reputation could mitigate the other forms of risk experienced and focussed strategies on building retailer reputation could go far to overcome the purchase intention gap of inexperienced online shoppers.

The safety and security of financial details are a major concern for many consumers in South Africa who have not taken the leap to shop online. To decrease perceived financial risk, online retailers should implement and clearly communicate processes to ensure the safety of consumers' financial details. This could be done with website security, passwords, and direct payment options. Furthermore, online retailers should ensure transparency in their policies and procedures along



with compliance with financial regulations. This includes transparency about contact details, terms and conditions, privacy and return policies.

To reduce the social risk that inexperienced online consumers might perceive, retailers must develop a positive and trustworthy reputation. Building a strong reputation and encouraging consumers to spread positive word-of-mouth about the retailer, are useful ways to mitigate consumers' concerns about the retailer. Online platforms (e.g., blogs, discussion forums and social media) are also central ways of building retailer reputation and attract new consumers to purchase online. Through these channels, inexperienced consumers will become aware of online brands and can review other consumers' recommendations and experiences, before conducting their own purchases.

### **5.3. Do experienced and inexperienced consumer groups differ?**

Experienced and inexperienced online consumers did not significantly differ in their risk perception when purchasing or intending to purchase low involvement product such as books. This finding implies that, even though risk might be perceived when shopping online for low involvement products, the risk factors are not significantly different between experienced and inexperienced shoppers. Retailers could rather focus their risk perception mitigation strategies on high involvement product categories such as clothing, where significant differences do exist between consumers groups. In this study, differences were evident between the groups for perceived financial and psychological risk. Mitigation of these perceived risks could contribute to bridging the intention-purchase gap and grow the online consumer market.

In conclusion, it can be argued that if online retailers operating in the South African market implement appropriate risk-mitigating strategies, specifically focussing on the technologically enabled consumer segment, online sales figures might see a steady increase in the future. Furthermore, the results point to the importance of a positive retailer reputation that could serve as a buffer effect for the perception of other types of perceived risk. Employing risk reduction strategies in especially high involvement product categories contribute to bridging the intention-purchase gap.

Perceived risk remains a significant influencer of both online purchase and repurchase intention and online consumer behaviour in general. Whether an excellent retailer reputation is indeed the one variable that mitigates perceived risks as we understand it, remains to be determined. Retailer reputation could be the key variable to capitalise on the substantial revenue growth opportunities in e-commerce.

### **6. Limitations and directions for future research**

Owing to the limited resources and time constraints, this study used a convenience sample. The sample included a group of Generation Y students from one South African university only and therefore the results cannot be generalised to the rest of the South African Generation Y population.

The rephrased measurement items could have contributed to measurement error. The choice of books and clothing (as representative of low and high involvement purchases) could have been interrogated further by including an additional empirical phase to determine product choice.

Future research can focus on expanding the sample to represent more South African consumers, compare different generations risk perceptions and include more product categories. Geographical clustering could assist in the identification and development and/or establishment of growth regions throughout South Africa for pop up stores and online pick up sites. The possibility of having a specific item and/or online retailer in mind whilst answering the questionnaire, rather than investigating the overall online shopping experience (as was the case in the current study), could add focussed practical value for a particular retailer, for example, Takealot.com. Cross-retailer comparisons (both strong and poor reputation retailers) could also confirm the possible buffer effect of retailer reputation for other perceived risk factors, such as time risk and performance risk.

## Funding

The authors received no direct funding for this research.

## Author details

Christian D. Pentz<sup>1</sup>  
 E-mail: [cdpentz@sun.ac.za](mailto:cdpentz@sun.ac.za)  
 Ronel du Preez<sup>2</sup>  
 E-mail: [rdp@sun.ac.za](mailto:rdp@sun.ac.za)  
 Liezel Swiegers<sup>3</sup>

<sup>1</sup> Department of Business Management, Stellenbosch University, Room 416, Schumann Building, Stellenbosch, South Africa.

<sup>2</sup> Department of Industrial Psychology/Vice-Dean (Learning and Teaching), Stellenbosch University, Room 701, Schumann Building, Stellenbosch, South Africa.

<sup>3</sup> Department of Business Management, Room 416, Schumann Building, Stellenbosch, South Africa.

## Citation information

Cite this article as: To bu(Y) or not to bu(Y): Perceived risk barriers to online shopping among South African generation Y consumers, Christian D. Pentz, Ronel du Preez & Liezel Swiegers, *Cogent Business & Management* (2020), 7: 1827813.

## References

- Aghekyan-Simonian, M., Forsythe, S., Kwon, W. S., & Chattaraman, V. (2012). The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. *Journal of Retailing and Consumer Services*, 19(3), 325–331. <https://doi.org/10.1016/j.jretconser.2012.03.006>
- Amazon. (n.d.). Amazon physical stores locations. (Online). Retrieved July 26, 2019, from <https://www.amazon.com/find-your-store/b/?node=17608448011>
- Ariffin, S. K., Mohan, T., & Goh, Y.-N. (2018). Influence of consumers' perceived risk on consumers' online purchase intention: An international journal. *Journal of Research in Interactive Marketing*, 12(3), 309–327. <https://doi.org/10.1108/JRIM-11-2017-0100>
- Bhatnagar, A., Misra, S., & Rao, H. R. (2000). On risk, convenience, and Internet shopping behavior. *Communications of the ACM*, 43(11), 98–105. <https://doi.org/10.1145/353360.353371>
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention, trust and perceived risk as mediator. *Online Information Review*, 32(6), 818–841. <https://doi.org/10.1108/14684520810923953>
- Coker, B. L. S., Ashill, N. J., & Hope, B. (2011). Measuring Internet product purchase risk. *European Journal of Marketing*, 45(7/8), 1130–1151. <https://doi.org/10.1108/03090561111137642>
- Constantinides, E. (2004). Influencing the online consumer's behavior: The Web experience. *Journal of Internet Research*, 14(2), 111–126. <https://doi.org/10.1108/10662240410530835>
- Cunningham, L. F., Gerlach, J. H., Harper, M. D., & Young, C. E. (2005). Perceived risk and the consumer buying process: Internet airline reservations. *International Journal of Service Industry Management*, 16(4), 357–372. <https://doi.org/10.1108/09564230510614004>
- Dai, B., Forsythe, S., & Kwon, W. (2014). The impact of online shopping experience on risk perceptions and online purchase intentions: Does product category matter? *Journal of Electronic Commerce Research*, 15(1), 13–24. <http://ez.sun.ac.za/login?url=https://www-proquest-com.ez.sun.ac.za/docview/1509202973?accountid=14049>
- Dailey, L. (2004). Navigational web atmospherics: Explaining the influence of restrictive navigation cues. *Journal of Business Research*, 57(7), 795–803. [https://doi.org/10.1016/S0148-2963\(02\)00364-8](https://doi.org/10.1016/S0148-2963(02)00364-8)
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003. <https://www.jstor.org/stable/2632151>
- Dholakia, U. M. (2001). A motivational process model of product involvement and consumer risk perception. *European Journal of Marketing*, 35(11), 1340–1362. <https://doi.org/10.1108/EUM000000000006479>
- Dillon, S., Buchanan, J., & Al-Otaibi, K. (2014). Perceived risk and online shopping intention: A study across gender and product type. *International Journal of E-Business Research*, 10(4), 17–38. doi: 10.4018/ijebr.2014100102
- Fabre, C., & Malauzat, A. (2019.) *E-commerce in MENA: Opportunity beyond the hype*. (Online). Retrieved July 18, 2019, from <https://www.bain.com/insights/ecommerce-in-MENA-opportunity-beyond-the-hype/>
- Febel, D. (2015). *E-commerce lags in South Africa says expert*. Timeslive. (Online). Retrieved February 7, 2015, from <http://www.timeslive.co.za/scitech/2015/06/27/E-commerce-lags-in-SouthAfrica%E2%80%999A-says-expert>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement. *Journal of Marketing Research*, 18(1), 39–50. <http://www.jstor.org/stable/3151312>
- Forsythe, S., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research*, 56(11), 867–876. doi:10.1016/S0148-2963(01)00273-9
- Gareeb, P. P., & Naicker, V. (2015). Determinants of South African SMEs to adopt broadband Internet technologies. *The Electronic Journal of Information Systems in Developing Countries*, 68(5), 1–24. <https://doi.org/10.1002/j.1681-4835.2015.tb00491.x>
- Goode, M. M. H., & Harris, L. C. (2007). Online behavioural intentions: An empirical investigation of antecedents and moderators. *European Journal of Marketing*, 41(5/6), 512–536. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1108%2F03090560710737589>
- Gotsi, M., & Wilson, A. M. (2001). Corporate reputation: Seeking a definition. *Corporate Communications: An International Journal*, 6(1), 24–30. <http://dx.doi.org/10.1108/13563280110381189>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (Ed.). (2017). *A primer on partial least squares structural equation modelling (pls-sem)*. sage.
- Han, M. C., & Kim, Y. (2017). Why consumers hesitate to shop online: Perceived risk and product involvement on Taobao.com. *Journal of Promotion Management*, 23(1), 24–44. <http://www.tandfonline.com/action/showCitFormats?doi=10.1080/10496491.2016.1251530>
- Hassan, A. M., Kunz, M. B., Pearson, A. W., & Mohamed, F. A. (2006). Conceptualisation and measurement of perceived risk in online shopping. *Marketing Management Journal*, 16(1), 138–147. <http://search.ebscohost.com.ez.sun.ac.za/login.aspx?direct=true&db=buh&AN=21517925&site=ehost-live&scope=site>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In Sinkovics, R.R. and Ghauri, P. N. (Eds.) *New challenges to international marketing* (pp. 277–319). Emerald Group Publishing Limited.

- [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Hernandez, B., Jimenez, J., & Martin, M. J. (2011). Age, gender and income: Do they really moderate online shopping behaviour? *Online Information Review*, 35(1), 113–133. doi: [10.1108/14684521111113614](https://doi.org/10.1108/14684521111113614)
- Hess, R. L. (2008). The impact of firm reputation and failure severity on customers' responses to service failures. *Journal of Services Marketing*, 22(5), 385–398. doi: [10.1108/08876040810889157](https://doi.org/10.1108/08876040810889157)
- Hong, I. B. (2015). Understanding the consumers' online merchant selection process: The roles of product involvement, perceived risk and trust expectation. *International Journal of Information Management*, 35(3), 322–336. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.ijinfomgt.2015.01.003>
- Hong, Z., & Yi, L. (2012). Research on the influence of perceived risk in consumer online purchasing decision. *Physics Procedia*, 24(B), 1304–1310. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.phpro.2012.02.195>
- Hsieh, M., & Tsao, W. (2014). Reducing perceived online shopping risk to enhance loyalty: Website quality perspective. *Journal of Risk Research*, 17(2), 241–261. <https://doi.org/10.1080/13669877.2013.794152>
- Jacoby, J., & Kaplan, L. B. (1972). *The components of perceived risk*. Paper read at the Annual Conference of the Association for Consumer Research. Chicago, Illinois: 382–393.
- Javadi, M. H. M., Dolatabadi, H. R., Nourbakhsh, M., Poursaeedi, A., & Asadollahi, A. R. (2012). An analysis of factors affecting on online shopping behaviour of consumers. *International Journal of Marketing Studies*, 4(5), 81–98. doi: [10.5539/ijms.v4n5p81](https://doi.org/10.5539/ijms.v4n5p81)
- 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. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1080%2F15332861.2012.689570>
- Kiang, M. Y., Ye, Q., Hao, Y., Chen, M., & Li, Y. (2011). A service-orientated analysis of online product classification methods. *Journal of Decision Support Systems*, 52(1), 28–39. <https://doi.org/10.1016/j.dss.2011.05.001>
- Lee, C. H., Eze, U. C., & Ndubisi, N. O. (2011). Analysing key determinants of online repurchase intentions. *Asia Pacific Journal of Marketing and Logistics*, 23(2), 200–221. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1108%2F13555851111120498>
- Lian, J., & Yen, D. C. (2014). Online shopping drivers and barriers for older adults: Age and gender differences. *Journal of Computers in Human Behaviour*, 37(2014), 133–143. <https://doi.org/10.1016/j.chb.2014.04.028>
- Liao, T., & Keng, C. (2013). Online shopping delivery delay: Finding a psychological recovery strategy by online consumer experiences. *Journal of Computers in Human Behaviour*, 29(4), 1849–1861. <https://doi.org/10.1016/j.chb.2013.03.004>
- Liao, Z., & Cheung, M. T. (2001). Internet-based e-shopping and consumer attitudes: An empirical study. *Journal of Information and Management*, 38(5), 299–306. [https://doi-org.ez.sun.ac.za/10.1016/S0378-7206\(00\)00072-0](https://doi-org.ez.sun.ac.za/10.1016/S0378-7206(00)00072-0)
- Lowry, P. B., & Gaskin, J. (2014). Partial Least Squares (PLS) Structural Equation Modeling (SEM) for Building and Testing Behavioral Causal Theory: When to Choose It and How to Use It. *IEEE Transactions on Professional Communication*, 57(2), 123–146. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1109%2FTPC.2014.2312452>
- Makhitha, K. M., van Scheers, L., & Mogashoa, C. (2019). Which consumer attributes influence South African consumers to shop online. *Journal of Business and Retail Management Research*, 13(4), 312–325. <https://doi.org/10.24052/JBRMR%2FV13IS04%2FART-29>
- Marinelli, N., Fabbri, S., Sottini, V., Sacchelli, S., Bernetti, I., & Menghini, S. (2014). Generation Y, wine and alcohol. A semantic differential approach to consumption analysis in Tuscany. *Appetite*, 75(April), 117–127.
- Martin, C. A., & Turley, L. W. (2004). Malls and consumption motivation: An exploratory examination of older generation Y consumers. *International Journal of Retail and Distribution Management*, 32(10), 464–475. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1108%2F09590550410558608>
- Mitchell, V. W. (1999). Consumer perceived risk: Conceptualisations and models. *European Journal of Marketing*, 33(1), 163–195. <http://dx.doi.org/10.1108/03090569910249229>
- Miyazaki, A. D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *The Journal of Consumer Affairs*, 35(1), 27–44. <https://www.jstor.org/stable/23860070>
- Muller, C. A. (2016). *Perceptions of alcohol-consumption motives amongst Generation Y students* [Unpublished master's dissertation]. North-West University.
- Nepomuceno, M. V., Laroche, M., & Richard, M. (2014). How to reduce perceived risk when buying online: The interactions between intangibility, product knowledge, brand familiarity, privacy and security concerns. *Journal of Retailing and Consumer Services*, 21(4), 619–629. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.jretconser.2013.11.006>
- Nguyen, D. H., de Leeuw, S., & Dullaert, W. E. H. (2018). Consumer behaviour and order fulfilment in online retailing: A systematic review. *International Journal of Management Reviews*, 20, 255–276. <https://doi.org/10.1111/ijmr.12129>
- The Nielsen Company. (2010). *Global trends in online shopping*. (Online). Retrieved May 12, 2016, from <http://www.nielsen.com/us/en/insights/reports/2010/Global-Trends-in-OnlineShopping-Nielsen-Consumer-Report.html>
- Noble, S., Haytko, D., & Phillips, J. (2009). What drives college-age Generation Y consumers? *Journal of Business Research*, 62(1), 617–628. <https://doi.org/10.1016/j.jbusres.2008.01.020>
- Nunnally, J. C., & Bernstein, I. H. (ed.). (1994). *Psychometric theory*. McGraw-Hill.
- O'Cass, A. (2000). An assessment of consumers' product, purchase decision, advertising and consumption involvement in fashion clothing. *Journal of Economic Psychology*, 21(5), 545–576. [https://doi.org/10.1016/S0167-4870\(00\)00018-0](https://doi.org/10.1016/S0167-4870(00)00018-0)
- Pantano, E. (2014). Innovation drivers in retail industry. *International Journal of Information Management*, 34(3), 344–350. <https://doi.org/10.1016/j.ijinfomgt.2014.03.002>
- Pappas, N. (2016). Marketing strategies, perceived risks, and consumer trust in online buying behaviour. *Journal of Retailing and Consumer Services*, 29(1), 92–103. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.jretconser.2015.11.007>
- Park, J., Lennon, S. J., & Stoel, L. (2005). Online product presentation: Effects on mood, perceived risk, and purchase intention. *Psychology and Marketing*, 22(9), 695–719. <https://doi.org/10.1002/mar.20080>

- Radomir, L., Plaia, I., & Nistor, V. C. (2014). Corporate reputation, image and identity: Conceptual approaches. *Marketing from Information to Decision*, 7(2014), 219–229.
- Richard, M. O., & Habibi, M. R. (2016). Advanced modelling of online consumer behaviour: The moderating roles of hedonism and culture. *Journal of Business Research*, 69(3), 1103–1119. <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.jbusres.2015.08.026>
- Rogerswilco. (2019). *The R34bn opportunity cost of online cx.* (Online). Retrieved September 30, 2019, from <https://www.rogerswilco.co.za/blog/2019-south-african-digital-customer-experience-report>
- Sivakumar, A., & Gunasekaran, A. (2017). An empirical study on the factors affecting online shopping behavior of millennial consumers. *Journal of Internet Commerce*, 16(3), 219–230. <https://doi.org/10.1080/15332861.2017.1317150>
- Vermeer, S. A. M., Araujo, T., Bernitter, S. F., & van Noort, G. (2019). Seeing the wood for the trees: How machine learning can help firms in identifying relevant electronic word-of-mouth in social media. *International Journal of Research in Marketing*, 36(3), 492–508.
- Visa. (2012). *Connecting with Millennials.* (Online). Retrieved September 27, 2016, from [http://www.visaasia.com/ap/sea/mediacenter/pressrelease/includes/uploads/Visa\\_Gen\\_Y\\_Report\\_2012\\_LR.pdf](http://www.visaasia.com/ap/sea/mediacenter/pressrelease/includes/uploads/Visa_Gen_Y_Report_2012_LR.pdf)
- Wolburg, J. M., & Pokrywczynski, J. (2001). A psychographic analysis of generation Y college students. *Journal of Advertising Research*, 41(5), 33–52. doi:10.2501/JAR-41-5-33-52
- World wide worx. (2018). *Online retail reaches 1.4% of SA's total retail.* (Online). Retrieved July 8, 2019, from <http://www.worldwideworx.com/onlinetail2019/>
- Wu, I. L. (2013). The antecedents of customer satisfaction and its link to complaint intentions in online shopping: An integration of justice, technology, and trust. *International Journal of Information Management*, 33(1), 166–176. <https://doi.org/10.1016/j.ijinfomgt.2012.09.001>
- Yuppiechef. (n.d.). *About Yuppiechef retail stores.* (Online). Retrieved July 26, 2019, from <https://www.yuppiechef.com/stores.htm>



© 2020 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



***Cogent Business & Management* (ISSN: 2331-1975) is published by Cogent OA, part of Taylor & Francis Group.**

**Publishing with Cogent OA ensures:**

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

**Submit your manuscript to a Cogent OA journal at [www.CogentOA.com](http://www.CogentOA.com)**

