Millennials' adoption of omnichannel retailing – The roles of channel characteristics, product category and regulatory focus

Abstract

This study examines Millennials' adoption of omnichannel retailing and the underlying mechanism. Four studies were conducted to examine the moderating roles of product category and regulatory focus on Millennial's purchase intentions in omnichannel retailing. Study 1 and 2 findings show that Millennials adopt omnichannel retailing over pure brick-and-mortar and pure online retailing and that perceived convenience, enjoyment, and value determine the adoption of omnichannel retailing for shopping. Study 3 shows that product category influences Millennial's preference for omnichannel retailing. Finally, Study 4 offers support for the moderating role of Millennials' regulatory focus in determining their retail format choice for shopping.

Keywords: Millennials; omnichannel; convenience; purchase intentions; online retailing; enjoyment

1. Introduction

Millennials, the generational cohort born between 1980 and 2000 (Howe & Strauss, 2000), comprise about two billion young consumers worldwide and approximately 76 million in the USA (Fry, 2016). Millennials, also known as "digital natives" or "Generation Y," have a natural affinity towards technology and are highly dependent on it for interaction, entertainment and even for emotion regulation (Vodanovich, Sundaram, & Myers, 2010). They access technology on a daily basis (Mäntymäki & Riemer, 2014), which allows them to gather and exchange information quickly and purchase products and services anytime, anyplace, and in anyway. They are well connected with one another, technologically savvy, and crave real-time interaction and collaboration. Millennials have a greater aptitude for adopting new technologies and systems and are receptive to alternative forms of consumption. They view products they purchase as a reflection of their personalities and values (Akçayır, Dündar, & Akçayır, 2016). They are highly consumption-oriented and seek out a personalized and interactive experience (Sepehr & Head, 2017). Recent reports indicate that Millennials are expected to spend more than all other generations (Fleming, 2016) and command about $1.3 trillion in spending annually (Nelson, 2012). Given their size, greater spending power, and their socialization in the consumption process, Millennials have become an important and attractive consumer segment for firms.

With the advances in information technology and competitive pressures, many retailers are adopting omnichannel retailing, which facilitates the integration of numerous retail channels to offer an interchangeable and seamless retail shopping experience to consumers (Piotrowicz & Cuthbertson, 2014; Chou, Chuang, & Shao, 2016). For example, leading retailers such as Amazon and Walmart are adopting omnichannel strategies to cater to changing customer needs and further enhance customer experience (McCarthy, 2017). Specifically, retailers are increasingly wooing Millennials as they represent the largest shopping cohort in the world. However, Millennials are distinct from other generational cohorts in terms of motivations and behaviors (Thomas, Azmitia, & Whittaker, 2016). In particular, the Millennials' affinity for technology has reshaped their shopping needs and behaviors (Duffett, 2015) in that they expect a shopping ecosystem where they can interact with firms and brands consistently across multiple touchpoints on their shopping journey. They seek a quicker access to product information and a more personalized shopping experience at every point of their purchase. These make omnichannel retailing most appealing for Millennials for shopping. However, very few studies have explored consumer adoption of omnichannel retailing for shopping (Grewal, Roggeveen, & Nordfält, 2016; Ma, 2017; Piotrowicz & Cuthbertson, 2014). More specifically, limited attention has focused on the generational cohort group of Millennials in the context of omnichannel retailing for shopping (Bilgihan, 2016). The present research attempts to address these gaps. Specifically, how do Millennials' evaluate omnichannel retailing compared to pure brick-and-mortar and pure online retailing? What factors influence Millennials' adoption of omnichannel retailing?

This study draws upon Chou, Chuang, & Shao's (2016) and Herhausen et al.'s (2015) studies to explore the Millennials' adoption of omnichannel retailing for shopping. Specifically, this study examines the underlying mechanism by which Millennials adopt omnichannel retailing for shopping compared to brick-and-mortar and online channels. To obtain better insights into the Millennials' adoption process, this study draws from the literature on product category (Dhar & Wertenbroch, 2000) and motivation theory (Higgins, 1997) to examine the role of product type (utilitarian vs. hedonic) and regulatory focus (promotion focused vs. prevention focused) in intentions to purchase in omnichannel retailing. In doing so, four main studies and two follow-up studies with an MTurk sample and student sample collected in the behavioral lab were conducted. The Study 1 and 2 investigate the Millennials' adoption of omnichannel retailing for shopping compared to pure brick-and-mortar and pure online retailing. Furthermore, the underlying mechanism for Millennials' adoption of omnichannel retailing is examined. In Study 3, the moderating role of product category in the relationship between retail formats and purchase intentions is tested. In Study 4, the moderating role of regulatory focus in the relationship between retail formats and purchase intentions is examined.

This study makes several contributions to the literature. First, it examines young consumers such as Millennials in the context of retail shopping. Although Millennials have been considered an important consumer group (Mohammed & Norman, 2017; Mäntymäki & Riemer, 2014), few studies have explored what drives Millennials to engage in omnichannel retailing. This study provides key insights into Millennials' adoption of omnichannel retailing. Second, this study empirically examines the underlying mechanism driving the Millennials' adoption of omnichannel retailing. The study findings add insights into the channel characteristics of convenience, enjoyment, risk, and value as drivers of retail channel adoption among Millennials. Third, the findings regarding the moderating role of product category provides important theoretical and managerial implications for engaging Millennials in omnichannel retailing. Fourth, this study sheds light on the role of regulatory focus in Millennials' evaluation of omnichannel retailing for shopping. Significantly, the study findings will offer managers important strategic and effective approaches to managing omnichannel retailing for Millennials.

The rest of the paper is structured as follows. In the next section, a brief overview of omnichannel retailing, followed by a review of the relevant literature in developing the hypotheses related to Millennials' retail format choice are presented. The four studies that test the research model are presented next. Finally, the theoretical and managerial implications of the three studies, along with limitations and future research directions, are presented.

2. Theoretical Background

2.1. Omnichannel retailing

The emergence of omnichannel retailing has dramatically changed the retail landscape (Gao & Su, 2016b; Herhausen et al., 2015). Omnichannel retailing signifies the fact that retailers and consumers can interact with each other "through countless channels – websites, physical stores, kiosks, direct mail and catalogs, call centers, social media, mobile devices, gaming consoles, televisions, networked appliances, home services, and more" to do their shopping (Rigby, 2011,

p. 65). In particular, omnichannel retailing offer users a seamless cross-channel shopping experience through complete integration of various channels and devices that work as variations of each other (Huang, Lu, & Ba, 2016). There is no difference in products, price, and other aspects between various shopping channels. For example, consumers can search for a product on the retailer's mobile app, purchase the same product on the retailer's website, and pick it up at the retailer's physical store. Omnichannel retailing not only encompasses the delivery of goods across all channels but also involves an integrated backward distribution system in which products can be returned regardless of the channel through which they were bought (Kim, Park, & Lee, 2017). In summary, omnichannel retailing reflects an integrated shopping process that presents a unified view of a product or service to the consumer in terms of purchase, return, and exchange regardless of the channel.

Omnichannel retailing can be viewed as a logical evolution from multichannel retailing. However, it is different in that channels work independently in multichannel retailing, while omnichannel retailing signifies complete integration of marketing and operational activities across all channels (Cao, 2014). Unlike multichannel retailing, where channels work autonomously to deliver a fragmented shopping experience, omnichannel retailing involves the integration and organization of processes and technologies across all channels. Thus, it provides a consistent and reliable customer service across all shopping channels (Saghiri, et al., 2017). Although omnichannel retailing is a complex and challenging task, it offers numerous benefits to the retailer. Previous research studies show that omnichannel retailing can offer substantial cost savings, create competitive advantage through differentiation, provide value-added services, augment cross-selling, and increase trust towards retailers (Cao, 2014; Gallino, Moreno, & Stamatopoulos, 2016; Rodríguez-Torrico, Cabezudo, & San-Martín, 2017). Despite these advantages, the academic research on omnichannel retailing has started to grow recently. Table 1 presents a summary of select studies on omnichannel retailing.

[Insert Table 1 about here]

2.2. Generational Theory

Research on generational cohorts and their behaviors have been focus of research efforts in different domains such as information systems, marketing, organizational behavior, and psychology. The generational theory was popularized by Strauss and Howe (1999), who define a generation as an aggregate of all people roughly born in a particular period of time. Since each generation spans over 20-25 years in length, they share similar social events and external influences, and these create similar life experiences. The shared experiences and influences shape similar core values among the people in a generation which are expected to be consistent during the course of their life (Wang, Myers, & Sundaram, 2013). Extant literature has posited that an individual's personal values drive consumption behaviors. Although the values, behaviors and beliefs of a generation may not be uniform across all its members, it is posited that they may display similar consumption and behavioral patterns that are homogenous within a generation and distinct from other generations (Bilgihan, 2016). These distinctive beliefs and values of each generation has important implications on how they respond to public and social aspects.

As Millennials have been raised in an environment surrounded by technology, they are more sophisticated in their use of technology, internet, mobile phones and smart devices (Chau et al., 2013). They are comfortable with multi-tasking and prefer media that are rich in graphics and visual images (Shirish, Boughzala, & Srivastava, 2016). Millennials place greater emphasis on technology-enabled experiences. They are also distinctive in their shopping attitudes, values and behaviors when compared to other generations. Specifically, Millennials are characterized by a hedonistic shopping style in that they see shopping as a form of leisure and gratification (Mäntymäki & Riemer, 2014). They are impulsive and exhibit experiential and variety-seeking behaviors. Millennials show limited loyalty towards a retailer unless they offer a superior value (Parment, 2013). They place the utmost importance on quality and convenience in their shopping decisions. They have a lower preference for shopping in traditional retail stores (Sullivan & Heitmeyer, 2008) and expect to use different interactive technologies, channels, and touchpoints (Duffett, 2015). Millennials want to connect with others to seek advice and discuss about the products they want to buy. In summary, Millennials prefer a personalized shopping experience that is tailored to their personal needs. This study expands the body of knowledge in applying generational theory in Millennial's adoption of omnichannel retailing.

3. Hypothesis Development

3.1. Millennials and omnichannel retailing

The present study propose that Millennials are more likely to adopt omnichannel retailing for shopping than other retail formats such as pure brick-and-mortar and pure online retailing. Extant literature indicates that Millennials are characterized by distinct shopping values and behaviors such as convenience value, hedonistic shopping orientation, and personal shopping experience (Mäntymäki & Riemer, 2014; Parment, 2013). We propose that omnichannel retailing can meet the demands of Millennials regarding convenience, community, and interactive shopping experience. Specifically, the integration of channels in omnichannel retailing can offer Millennials consistency across various shopping channels and provide multiple touchpoints and opportunities for interactions with the retailer and the brand. In other words, omnichannel retailing reflects Millennials' notion of shopping as an integrated, interactive, and personalized experience. The availability of a wide range of channels and the ease in switching channels during shopping in omnichannel retailing meet the Millennials' variety-seeking behaviors more closely than other retail formats (Parment, 2013). In addition, as Millennials are creative in thought and innovative in action (Hershatter & Epstein, 2010), they like to try new and exciting approaches to achieve their goals. This innovativeness, coupled with the comfort and ability of Millennials in using technology for organizing their experience, might motivate them to use omnichannel retailing for shopping rather than traditional channels such as pure brick-and-mortar and pure online retailing. Thus, the following hypothesis is proposed:

> **H_1**: Millennials will show higher purchase intentions through omnichannel retailing than through pure brick-and-mortar and pure online retailing.

3.2. Mediating role of channel characteristics

Extant literature indicates that channel characteristics play an important role in determining consumer adoption (Chang, Cheung, & Lai, 2005; Wang et al., 2014; Yu, Niehm, & Russell, 2011). Specifically, previous researchers have noted that convenience, enjoyment, risk, and value as key channel characteristics influencing consumers' evaluation of different shopping formats (Chiu et al., 2009; Kim, Ferrin, & Rao, 2008; Liu, Zhao, Chau, & Tang, 2015). We particularly focused on these four channel characteristics as it allows us to compare adoption intentions across the channel modes. Prior research contends that channel characteristics differ across channels (Michaelidou, Arnott, & Dibb, 2005) Moreover, as Millennials value convenience in their shopping and are characterized by hedonic shopping orientation and variety seeking (Mäntymäki & Riemer, 2014; Parment, 2013), we considered channel convenience, enjoyment, risk, and value in examining the Millennials' adoption of omnichannel retailing than other retail formats for shopping.

Convenience refers to the consumers' time and effort perceptions related to the shopping process (Chen, Hsu, & Lin, 2010). Channel attributes such as ease of transaction and service, finding product information, product assortment, and order fulfillment determine customers' convenience with a specific shopping format (Zhou, Dai, & Zhang, 2007; Xiao, Guo, & D'Ambra, 2017). Perception of convenience allow consumers to organize their shopping in a secure and controlled way. We argue that the availability of same products across all channels in omnichannel retailing enhances the perception of convenience for Millennials as now they have greater options for searching and evaluating products. Also, the ability to exchange and return products regardless of the channel further enhances their perception of convenience. In contrast, Millennials may perceive restricted access and greater mortar effort when shopping through pure online and pure brick-and-mortar retailers respectively, which might result in lower shopping intentions.

Perceived risk is the consumers' overall assessment of uncertainty associated with the shopping process (Wu & Wang, 2005). The present study proposes that omnichannel retailing may reduce the uncertainty about different types of risk associated with different retail channel formats. This is because in omnichannel retailing all the channels are fully integrated, and this allows them to complement each other and reduce the risk associated with individual channels. For example, the ability to evaluate products in a brick-and-mortar store can reduce the process and product uncertainties associated with shopping at a pure online retailer. On the other hand, the online retailer can offer an expanded assortment of products and services and can be an efficient tool for screening various offers relative to brick-and-mortar stores (Gupta, Su, & Walter, 2004). This, along with Millennials' ease in using technology, enables them to more efficiently use new and unknown systems such as omnichannel retailing for shopping. Stewart (2003) demonstrates that customers perceived lower risk when an online store was associated with a brick-and-mortar store. Emrich, Paul, and Rudolph (2015) show that while full integration of channels reduces perceived risk, asymmetric channel integration leads to a greater perception of risk. This results in higher purchase intentions when shopping in omnichannel retailing than pure brick-and-mortar and pure online retailing.

Perceived enjoyment refers to the extent to which consumers find the shopping process fun and pleasant in its own right (Wu, Chen, & Chiu, 2016). Previous studies suggest that perceived enjoyment affects the customers' attitude towards retail shopping. For example, Verhoef, Neslin, and Vroomen (2007) show that perceived enjoyment affects both search and purchase attitudes in different channels including catalogs, stores, and online stores. More recently, Wang et al., (2014) demonstrate that perceived enjoyment is a significant factor influencing conventional consumers to choose the online shopping. As omnichannel retailing involves the integration of online and offline channels, it an offer Millennials greater enjoyment when shopping. This is because the brick-and-mortar store through its store atmosphere, product placement, and promotions, can make the purchase process entertaining and online channels can further enhance shoppers' enjoyment by offering more interactive options such as product comparison and displays. Moreover, as Millennials have a strong hedonic lifestyle orientation (Howe & Strauss, 2000), omnichannel retailing can offer them greater pleasure and entertainment when shopping than pure online and pure brick-and-mortar retailing.

The present study argues that Millennials are more likely to perceive greater shopping value with omnichannel retailing than with pure brick-and-mortar and pure online retailing. The availability of alternative channels and synergies resulting from the integration of channels will lead to an overall positive evaluation of omnichannel retailing. Schramm-Klein, Wagner, Steinmann, and Morschett (2011) find that evaluation of perceived integration of channels leads to a positive image and greater trust towards the retailer. Similarly, Kushwaha and Shankar (2013) propose that the combination of channels helps customers realize benefits from different channels, resulting in greater value and spending. Thus, we expect Millennials to evaluate omnichannel retailing as more valued for shopping than other channel models. Moreover, omnichannel retailing increases both convenience and enjoyment and reduces risk, and these counterbalancing effects enhance perceived shopping value. Thus, we propose that:

> **H_2**: For Millennials, perceived convenience, perceived risk, perceived enjoyment, and perceived value mediates the relationship between channel modes (pure brick-and-mortar vs pure online vs omnichannel) and purchase intentions.

3.3. Moderating role of product category

Product type has emerged as an important contextual variable in consumer evaluation of retail channel modes (Chiang & Dholakia, 2003; Dai, Forsythe, & Kwon, 2014). This study considers product categories of hedonic versus utilitarian in examining Millennials' adoption of omnichannel retailing. Hedonic products are characterized by dominant attributes such as affect, enjoyment, aesthetics, and experiential benefits, while utilitarian products contain dominant attributes such as functionality, cognition, practicality, and accomplishment of functional tasks (Dhar & Wertenbroch, 2000). Previous studies suggest that product category influences customer choice of channel modes for shopping. For example, Balasubramanian et al. (2005) propose that for hedonic products, consumers are likely to adopt brick-and-mortar stores given their ability to reflect experiential benefits. For functional products, as consumers base their decision on the trade-off between costs and benefits they are more likely to adopt online stores. Cheema and Papatla (2010) find that consumers are more likely to rely on online sources for purchasing utilitarian products than hedonic products. Kushwaha and Shankar (2013) demonstrate that for utilitarian products consumers find it highly efficient to shop in single channels such as catalog-only or web-only. For hedonic products, consumers adopt multichannel retailers as they provide them with greater experiential attributes. Shen, Cai, and Guo (2016) find similar results in that when additional offline channels are offered to online consumers they are more likely to shop online for hedonic products than utilitarian products.

The present study proposes that since hedonic products have salient experiential attributes, Millennials might want to try for themselves rather than solely rely on online sources for information and purchase. This would lead to a greater preference for buying hedonic products at a pure brick-and-mortar retailer than at a pure online retailer. However, as hedonic products are associated with goal ambiguity (Massara, Liu, & Melara, 2010), Millennials may engage in variety-seeking behaviors. Since omnichannel retailing can offer a wider assortment of products and services, Millennials are expected to choose omnichannel retailing for purchasing hedonic products rather than online and brick-and-mortar retailing. Also, the integration of channels in omnichannel retailing reduces the risk associated with online channels and offers greater enjoyment, pleasure, and value from interaction with multiple touchpoints, which are important for purchase behaviors commonly associated with hedonic products. In contrast, utilitarian products are characterized by goal-directed behaviors where consumers focus on the functionality and usability of the products. Thus, Millennials are more likely to closely scrutinize utilitarian products than hedonic products during the purchase process. Besides, as utilitarian products require greater cognitive efforts in the decision process, consumers are likely to value efficiency in their time and effort in their shopping process. Therefore, Millennials are more likely to adopt pure online retailing and omnichannel retailing as they both provide greater opportunities to compare the wide assortment of products. Furthermore, omnichannel retailing increases efficiency and value for consumers by offering an integrated shopping process. Thus, we propose that:

H_{3a}: For utilitarian product, Millennials will show greater purchase intentions in omnichannel and pure online retailing than in pure brick-and-mortar retailing.

H_{3b}: For hedonic product, Millennials will show higher purchase intentions in omnichannel retailing than in pure online and pure brick-and-mortar retail modes.

H_{4a}: For utilitarian products, perceived convenience and perceived value will mediate the relationship between omnichannel retailing and purchase intentions.

H_{4b}: For hedonic products, perceived risk, perceived enjoyment, and perceived value will mediate the relationship between omnichannel retailing and purchase intentions.

3.4. Moderating role of regulatory focus

Consumer decision-making stems from different motivations that can be explained by regulatory focus theory (RFT; Higgins, 1997). RFT posits that two distinct regulatory systems govern how people pursue goals: promotion focus and prevention focus. Promotion focus is oriented towards “achievement and aspirations, viewing desired goals and life events largely as a set of gains or nongains” (Arnold & Reynolds, 2009, p. 308) and shows greater concern towards the presence or absence of positive outcomes. Prevention focus is inclined towards “safety and vigilance, viewing goals and life events largely as a set of losses and nonlosses” (Arnold & Reynolds, 2009, p. 308) and is more sensitive towards preventing losses. Promotion-focused individuals are oriented more towards growth and progress and engage in exploratory and creative behaviors and think more in terms of abstraction. In contrast, prevention-focused individuals are inclined more towards security and protection and are more vigilant about an environment perceived as potentially threatening and problematic (Hsu, Wu, & Chen, 2013). This sensitivity towards gains and losses may affect the way in which consumers engage in decisions or choices. In this view, regulatory focus may affect how Millennials evaluate omnichannel retailing for shopping, as previous researchers have noted that consumers engage in shopping behaviors that are consistent with the regulatory focus they experience (van Noort, Kerkhof, & Fennis, 2007).

It is argued that promotion-focused Millennials may focus on pleasure and convenience during the shopping process. Particularly, they might to pay more attention to the potential benefits or outcomes (e.g. convenience, interactivity, enjoyment) they might derive from shopping in omnichannel retailing when compared to the relatively few benefits they would get from shopping in pure brick-and-mortar and pure online retailing. Thus, they are more likely to show greater motivation towards adopting omnichannel retailing for shopping. On the other hand, the integration of several channels in omnichannel retailing may be perceived as risky by prevention-focused Millennials since each channel brings its inherent risk into omnichannel retailing. Thus, prevention-focused Millennials may believe that their privacy may scatter across channels and perceive omnichannel retailing as risky and uncertain. Moreover, prevention-focused individuals have a stronger preference for maintaining the status quo than promotion-focused consumers (Chernev, 2004). As a result, prevention-focused Millennials tend to show weaker motivation towards adopting newer channels such as omnichannel retailing for shopping. Given the fun, convenience, and task-oriented behaviors of promotion-focused Millennials and risk avoidance, security, and preventive behaviors of prevention-focused Millennials, the following hypotheses are postulated:

H_{5a}: Promotion-focused Millennials are more likely to purchase from omnichannel retailing than pure online and pure brick-and-mortar retailing.

H_{5b}: Prevention-focused Millennials are more likely to purchase from pure brick-and-mortar and pure online retailing than omnichannel retailing.

4. Overview of the studies

Four studies empirically test the theoretical propositions regarding Millennials' adoption of omnichannel retailing for shopping. Table 2 presents the details of the four studies carried out.

[Insert Table 2 about here]

4.1. Study 1: Millennials' and non-Millennials' adoption of different retail formats for shopping

4.1.1.Method

Study 1 was carried out to see whether the predictions stated in the present study have any supporting evidence. An experiment was conducted to test Millennials' and non-Millennials' adoption of channel modes (pure brick-and-mortar, pure online, omnichannel) for shopping.

Pretest 1. A pretest ($n = 42$, 45% female, age: 20–59 years) measured product familiarity among Millennials and non-Millennials through a questionnaire via Amazon's Mechanical Turk (MTurk). Product-category familiarity was measured on a seven-point scale, ranging from '0' (unfamiliar) to '6' (very familiar). The one-sample t-test with a scale midpoint of 3 as test value reveals that mobile phones ($M = 5.3$, $p < 0.01$), accessories ($M = 4.76$, $p < 0.01$), apparel ($M = 4.43$, $p < 0.01$), digital cameras ($M = 4.05$, $p < 0.01$), sports and fitness products ($M = 3.93$, $p < 0.01$), and consumer electronics ($M = 4.50$, $p < 0.01$) are rated by respondents as more familiar than consumer durables ($M = 3.23$, $p = 0.43$), automobiles ($M = 3.55$, $p = 0.08$), and home furnishing ($M = 3.12$, $p = 0.66$). No significant difference was observed in familiarity between Millennials (18-35 years age) and non-Millennials (36 years or more) across the product categories.

Pretest 2. A follow-up pretest categorized the product categories on the utilitarian and hedonic attitudes. Fifty-nine respondents recruited through MTurk (54% male and age between 21–63 years) completed the pretest. Product attitude was measured on a single-item utilitarian (UTI) scale anchored by '0' (not at all utilitarian) and '6' (extremely utilitarian) and a single-item hedonic (HED) scale of '0' (not at all hedonic) to '6' (extremely hedonic) (Okada, 2005). The participants rated mobile phones ($M_{UTI} = 5.11$, $M_{HED} = 2.53$, $p < 0.01$) and consumer electronics ($M_{UTI} = 4.97$, $M_{HED} = 2.63$, $p < 0.01$) as more utilitarian products and accessories ($M_{UTI} = 2.62$, $M_{HED} = 4.82$, $p < 0.01$) as more hedonic products. The three neutral products digital cameras ($M_{UTI} = 3.17$, M_{HED}

= 3.55, p = 0.09), apparel (M_{UTI} = 3.67, M_{HED} = 3.91, p = 0.29), and sports and fitness products (M_{UTI} = 3.97, M_{HED} = 4.28, p = 0.25) are similarly rated on both utilitarian and hedonic attitude scales.

Sample and measures. One hundred and thirty-one usable responses were obtained through MTurk (56% male, age between 18–62 years). The sample consisted of 52% Millennials (n = 68, age = 18–35 years) and 48% non-Millennials (n = 63, age = 38–62 years). The Digital Native Assessment Scale developed by Teo (2013) was used to measure the attributes of Millennials and non-Millennials. This scale consists of four factors comprising of raised with technology, comfort with multi-tasking, reliant on graphics for communication, and thrive on instant gratification and rewards measured on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. Following this, the participants completed a filler task and then rated the most preferred retailer (e.g. Retailer 1: pure brick-and-mortar retailer; Retailer 2: pure online retailer; Retailer 3: omnichannel retailer) for purchasing each of the six products identified in the pretest 2.

4.1.2. Results

The findings show that Millennials and non-Millennials differ significantly on digital native scale. Specifically, we observed significant difference across the four factors where Millennials rated the four factors significantly higher compared to non-Millennials. This provides support for the generational theory that similar values and beliefs shared by Millennials are distinct from other generations.

The study findings provide initial support for our theoretical prediction that Millennials adopt omnichannel retailing over pure brick-and-mortar and pure online retailing across a wide range of products (see Figure 1a and 1b). In particular, Millennials preferred omnichannel retailing for shopping the six product categories (mobile phones: 51.5%; accessories: 67.6%; consumer electronics: 55.9%; apparel: 72.1%; sports and fitness equipment: 73.6%; digital cameras: 58.8%) than non-Millennials (mobile phones: 33.4%; accessories: 42.9%; consumer electronics: 22.3%; apparel: 38.1%; sports and fitness equipment: 47.6%; digital cameras: 41.3%). A significant difference between Millennials and non-Millennials in their adoption of omnichannel channel mode across the six product categories (mobile phones: $Z = 2.10$, $p < 0.05$; accessories: $Z = 2.85$, $p < 0.01$; consumer electronics: $Z = 3.93$, $p < 0.01$; apparel: $Z = 3.91$, $p < 0.01$; sports and fitness: $Z = 3.04$, $p < 0.01$; digital cameras: $Z = 2.01$, $p < 0.05$) was observed.

[Insert Figure 1a & 1b about here]

4.1.3. Discussion

The Study 1 findings provide initial insights into Millennials' evaluation of different retail formats for shopping. Notably, the results reveal that Millennials are more likely to adopt omnichannel retailing over pure brick-and-mortar and pure online retailing for purchasing a wide range of products (utilitarian, hedonic, and neutral products) than non-Millennials. This provides initial support for H_1. Study 2 was designed to further test this result and to examine the underlying mechanism for Millennials' adoption of omnichannel retailers for purchasing products.

4.2. Study 2: The effect of retail channel format and the underlying mechanism

4.2.1.Method

Design and manipulations. Study 2 used a three-cell (retail format: pure brick-and-mortar (BM) vs. pure online (ON) vs. omnichannel (OMC)) between-subjects design. The participants were randomly assigned to one of the three conditions and were asked to imagine purchasing a digital camera for themselves. A digital camera was chosen as the study stimulus given its familiarity and neutral product attitude as previous studies report that product category might influence retail format choice. A fictitious store name (CameTronics) was used to avoid confounding effects that can result from a reputed retailer.

Stimulus. As noted above, the participants were asked to imagine purchasing a digital camera from a retailer. The retailer description included either a "pure brick-and-mortar retailer" (CameTronics is a specialty digital camera store that operates only brick-and-mortar stores. If you must purchase a digital camera from CameTronics, you must go to its physical stores located in your city or town) or a "pure online retailer" (CameTronics.com is a specialty digital camera store that operates only Internet stores. If you must purchase a digital camera from this retailer, you can only use the retailer's website for information search and purchasing) or an "omnichannel retailer" (CameTronics is a specialty retailer selling digital cameras through both physical and online stores. These stores are fully integrated, and you can order online and pick up the product in their store.

Participants. One hundred and seven participants recruited through MTurk (46% female, age between 20–34) completed the questionnaire. The participants were randomly assigned to one of the three conditions. Due to missing data and incorrect attention check answers, three participants were excluded from the analysis, resulting in a final sample of 104 participants.

Measures. Perceived realism of the scenario was measured with three items: (a) retailer could exist in reality as described, (b) the purchase situation is realistic, and (c) easy for me to put myself into the purchase situation on a 7-point Likert scale ranging from "1-strongly disagree" to "7-strong agree" ($\alpha = 0.88$). One item "this retailer sells digital cameras through" anchored with "1 – only physical stores," "4 – both physical and online stores," and "7 – only online stores" was used as a manipulation check question for channel modes. As in the pretest, product attitude was measured on a two-item scale. Then, participants were asked: To what extent they would purchase the digital camera through the retailer? Using a seven-point semantic differential scale, participants responded to three items (unlikely/likely; improbable/probable; and impossible/possible, α = 0.94) adapted from Kwon and Sung (2012).

Perceived convenience was measured with five items adapted from Chiu et al. (2014) and Emrich et al.'s (2015) study: (a) Shopping (purchase and return) for the digital camera from this retailer would be convenient way to shop; (b) Shopping for digital camera using this retailer would allow me to save time; (c) I can shop for digital camera in a more controlled manner through this retailer; (d) it is the convenient to get information on digital camera through this retailer; and (e) it would allow me to shop for digital camera whenever I choose (α = 0.88). Perceived risk was measured using three items adapted from Im, Kim, & Han (2008): (a) purchasing a digital camera through the retailer has more uncertainties; (b) purchasing digital camera through this retailer would frustrate me; and (c) it is uncertain whether purchasing digital camera through this retailer would be as effective as I think (α = 0.87). Participants rated perceived enjoyment from purchasing a digital camera from the retailer on five items adapted from Xu, Benbasat, & Cenfetelli (2013): (a) using this retailer to shop for digital camera is enjoyable; (b) using this retailer to shop for digital camera was exciting; (c) using this retailer to shop for digital camera is interesting; (d) using this retailer to shop for digital camera is fun; and (e) using this retailer to shop for digital camera is pleasant (α = 0.89). Finally, participants indicated the perceived value of purchasing digital cameras from the retailer on three items adapted from Lin and Wang (2006): (a) is good value for money to shop for digital camera from this retailer; (b) is acceptable to shop for digital camera from this retailer; and (c) is a good buy to shop for digital camera from this retailer (α = 0.82). A seven-point Likert scale anchored by "1" – strongly disagree and "7" – strongly agree was used to measure perceived convenience, enjoyment, risk, and value.

4.2.2. Results

Manipulation and realism. The perceived realism of the scenarios was high ($M = 5.62$, $SD = 1.25$) and did not differ across the three cells ($F = 1.53$, $p = 0.22$). The one-way ANOVA of channel modes question reveals that the manipulations were successful ($M_{BM} = 1.92$, $M_{ON} = 6.24$, $M_{OMC} = 4.29$, $F = 73.76$, $p < 0.01$). Similar to the pretest results, the respondents rated the digital cameras as neutral in product attitude ($M_{UTI} = 3.69$, $M_{HED} = 3.91$, $p = 0.11$).

Hypotheses testing. The results of a one-way ANOVA show that omnichannel retailing increases Millennials' purchase intentions towards digital cameras ($M_{BM} = 4.17$, $M_{ON} = 4.01$, $M_{OMC} = 5.04$, $F = 4.29$, $p < 0.05$). Post hoc analysis reveals a significant difference in purchase intentions from omnichannel retailers compared to pure brick-and-mortar (mean difference (MD) $= 0.87$, $p < 0.05$) and pure online retailers ($MD = 1.02$, $p < 0.01$), supporting H_1. Table 3 presents the Millennials' evaluation of the different retail formats.

A similar one-way ANOVA on perceived convenience shows a significant difference between the three retailers ($M_{BM} = 3.72$, $M_{ON} = 4.74$, $M_{OMC} = 5.50$, $F = 10.09$, $p < 0.01$). Millennials perceive greater convenience with omnichannel retailers than with online retailers ($MD = 0.77$, $p < 0.05$) and pure brick-and-mortar retailers ($MD = 1.79$, $p < 0.01$). Millennials concluded that there was a greater risk with purchasing a digital camera through an online retailer ($M_{ON} = 4.41$) than through omnichannel ($M_{OMC} = 3.48$) and pure brick-and-mortar retailers ($M_{BM} = 2.66$), $F = 12.78$, $p < 0.01$. Specifically, a significant difference in perceived risk was observed between purchasing a product from an omnichannel retailer and a pure online retailer ($MD = -0.95$, $p < 0.05$) and not between an omnichannel retailer and a pure brick-and-mortar retailer ($MD = 0.81$, $p = 0.07$). The results of the one-way ANOVA show that Millennials perceive greater enjoyment from both omnichannel ($M_{OMC} = 5.01$) and online ($M_{ON} = 5.21$, $MD = 0.20$, $p = 0.44$) retailers than from pure brick-and-mortar retailers ($M_{BM} = 4.24$, $MD_{BM\text{-}OMC} = 0.77$, $p < 0.01$, $MD_{BM\text{-}ON} = 0.97$, $p < 0.01$) ($F = 8.73$, p

< 0.01). Finally, Millennials perceive greater value from omnichannel retailers ($M_{OMC} = 5.36$) than from online retailers ($M_{ON} = 4.56$, $MD = 0.80$, $p < 0.05$) and pure brick-and-mortar retailers ($M_{BM} = 4.40$, $MD = 0.95$, $p < 0.01$), $F = 5.49$, $p < 0.01$.

[Insert Table 3 about here]

Mediation test. Hayes' (2013) PROCESS (model 4) with 5000 bootstrap samples at 95% confident intervals was used to test the underlying mechanism by which retail format affects Millennials' purchase intention. The findings show that perceived convenience, enjoyment, and value drives the effect of retail format choice on purchase intentions (perceived convenience: $\beta = 0.24$, Lower CI (LCI) = 0.71, Upper CI (UCI) = 0.51; perceived enjoyment: $\beta = -0.11$, LCI = -0.29, UCI = -0.01; perceived value: $\beta = 0.22$, LCI = 0.07, UCI = 0.44). Perceived risk did not have a significant mediation role ($\beta = -0.08$, LCI = -0.21, UCI = 0.00) as the confidence intervals contained zero. Thus, perceived convenience, enjoyment, and value mediate the role of channel modes on purchase intentions for Millennails. This provides partial support for H_2.

4.2.3. Discussion

The results of Study 2 show that Millennials are more likely to adopt omnichannel retailing than pure brick-and-mortar and pure online retailing for shopping. Perceived convenience, enjoyment, and value mediate the effect of Millennials' retail format choice on purchase intentions. Importantly, for Millennials, omnichannel retailing offered higher levels of convenience and value with shopping than pure brick-and-mortar and pure online retailers. It is worth noting that Study 2 found that Millennials perceive lower risk with purchasing from omnichannel retailing than from online retailers. In contrast, online retailing offered greater enjoyment than omnichannel retailing. The results of the pretest and Study 2 offer support for Millennials' preference for omnichannel retailing for shopping.

4.3. *Study 3: The moderating role of product category and the underlying mechanism*

Study 3 aims to test the moderating role of product category in Millennials' evaluation of channel modes for shopping (H_{3a} and H_{3b}). Also, the underlying mechanism in the relationship between retail format choice and purchase intentions for utilitarian and hedonic products was tested (H_{4a} and H_{4b}).

4.3.1. Method

Design and manipulation. In Study 2 x 2 (product category: utilitarian product vs. hedonic product) x 3 (retail format: pure brick-and-mortar vs. pure online vs. omnichannel) between-subjects design was used. Based on the pretest results, mobile phones and accessories are used in this study as a utilitarian and hedonic product respectively. As in Study 2, participants were randomly assigned to one of the six experimental conditions and asked to imagine purchasing a mobile phone (or accessories) from a retailer (brick-and-mortar or online or omnichannel) for themselves.

Participants. A total of 275 U.S.-based Millennials (age between 18–35 years) from MTurk were recruited to participate in the study. The data from five respondents were excluded because of missing data and incorrect answers to attention check questions. This resulted in a usable sample of 270 respondents for this study among whom 65% were females and 53% had a bachelor's degree.

Measures. The purchase intentions ($\alpha = 0.94$), perceived convenience ($\alpha = 0.89$), perceived risk ($\alpha = 0.90$), perceived enjoyment ($\alpha = 0.90$), and perceived value ($\alpha = 0.95$) were assessed using the same items as in Study 2. Also, a three-item perceived realism scale, a two-item product attitude scale, and a one-item retailer characteristic scale as in Study 2 were used.

4.3.2. Results

Manipulation and realism. The perceived realism of the scenarios was uniformly high and did not differ significantly across the product category and retail format conditions. A MANOVA with product categories and retail formats as fixed factors and utilitarian and hedonic attitudes as dependent variables showed a significant main effect for only product categories (Wilks's lambda = 0.673, F = 64.00, $p < 0.01$). Specifically, respondents rated mobile phones as more utilitarian (M = 5.10) than hedonic (M = 3.52, $p < 0.01$) and accessories as more hedonic (M = 4.64) than utilitarian (M = 3.75, $p < 0.01$). Similarly, univariate analysis with retailer characteristic scale as dependent variable reveals a main effect for only retail format ($M_{BM} = 1.72$, $M_{ON} = 6.51$, $M_{OMC} = 4.30$, F = 341.95, $p < 0.01$, partial $\eta^2 = 0.72$). This confirms that manipulations were as intended.

Hypothesis testing. A two-way ANOVA with retail format and product category as fixed factors was used to evaluate Millennials' purchase intentions. A significant main effect of retail format (F = 45.54, $p < 0.01$, partial $\eta^2 = 0.16$) on purchase intentions was observed. Specifically, omnichannel retailing (M = 5.39) enhances Millennials' purchase intentions compared to pure brick-and-mortar (M = 4.01) and online (M = 5.02) retailing. Post hoc analysis reveals a significant difference in purchase intentions between omnichannel and pure brick-and-mortar retailing (MD = 1.38, $p < 0.01$). A marginal difference in purchase intentions was observed between omnichannel and online retailers (MD = 0.37, $p = 0.08$). This provides further support for H_1.

A significant two-way interaction effect of retail format and product category on purchase intentions (F = 4.17, $p < 0.05$, partial $\eta^2 = 0.03$) was observed. As hypothesized, for mobile phones (utilitarian product), pure brick-and-mortar retailing ($M_{BM} = 3.76$) leads to lower purchase intentions than both pure online ($M_{ON} = 5.29$, MD = 1.53, $p < 0.01$) and omnichannel ($M_{OMC} = 5.20$, MD = 1.44, $p < 0.01$) retailing. This support H_{3a}. For accessories (hedonic products), Millennials showed greater purchase intentions in omnichannel retailing ($M_{OMC} = 5.58$) than pure brick-and-mortar (M_{BM} = 4.73, MD = 1.32, $p < 0.01$) and pure online (M_{ON} = 0.85, MD = 4.26, $p < 0.01$) retailing. This supports H_{3b}. Table 4 presents the purchase intentions for two product categories across the three channel modes.

[Insert Figure 4 about here]

Mediation test. Hayes' (2013) PROCESS mediation (model 4) with 5000 bootstrap samples at 95% confident intervals was used to test the proposed mediation effect. This study focuses on the mediation test on the conditions of "utilitarian product" and "hedonic product." As theorized, for mobile phones (utilitarian product), perceived convenience (β = 0.14, LCI = 0.01, UCI = 0.21) and perceived value (β = 0.21, LCI = 0.07, UCI = 0.41) mediate the effect of channel modes on purchase intentions. Post hoc analysis reveals that Millennials perceive greater convenience with online retailers (M_{ON} = 5.61) than with brick-and-mortar retailers (M_{BM} = 3.40, MD = 2.21, $p < 0.01$) and omnichannel retailers (M_{OMC} = 4.76, MD = 0.85, $p < 0.01$) when shopping for utilitarian products, F = 49.28, $p < 0.01$. However, Millennials perceive greater value when shopping through both omnichannel retailers and online retailers (M_{OMC} = 5.19, M_{ON} = 5.34, MD = 0.16, p = 0.49) than pure brick-and-mortar retailers (M_{BM} = 4.26), F = 12.64, $p < 0.01$. Perceived risk (β = 0.02, LCI = -0.03, UCI = 0.08) and perceived enjoyment (β = 0.06, LCI = 0.00, UCI = 0.20) did not have a significant indirect effect as the confidence intervals included a zero. This provides support for H_{4a}.

Similarly, for hedonic products (accessories) perceived enjoyment (β = 0.15, LCI = 0.03, UCI = 0.32) and perceived value (β = 0.23, LCI = 0.10, UCI = 0.42) mediate the effect of retail format choice on purchase intentions. Post hoc analysis reveals that Millennials perceive greater enjoyment from omnichannel retailers (M_{OMC} = 5.19) than online retailers (M_{ON} = 4.74, MD = 0.45, $p < 0.05$) and brick-and-mortar retailers (M_{BM} = 4.69, MD = 0.49, $p < 0.05$), F = 2.97, p <

0.05. Similarly, perceived value was greater with omnichannel retailers (M_{OMC} = 5.70) for Millennials than both online retailers (M_{ON} = 5.01, MD = 0.69, $p < 0.01$) and brick-and-mortar retailers (M_{BM} = 4.58, MD = 1.12, $p < 0.01$), F = 13.46, $p < 0.01$. No significant mediation of perceived risk (β = 0.00, LCI = -0.01, UCI = 0.04) and perceived convenience (β = 0.00, LCI = -0.06, UCI = 0.04) was observed. This provides partial support for H_{4b}.

4.3.3. Discussion

This study examines the boundary condition of product category in Millennials adoption of omnichannel retailing over pure brick-and-mortar and pure online modes. The findings show that for utilitarian products, Millennials are more likely to purchase in both online and omnichannel retailing than in brick-and-mortar retailing. Contrastingly, only omnichannel retailing enhances Millennials' purchase intentions for hedonic products. Also, perceived convenience, perceived enjoyment, and perceived value were found to influence Millennials purchase intentions using omnichannel retailing. In particular, Millennials reported that online retailing offers greater convenience and omnichannel retailing offers greater value when shopping for utilitarian products. On the other hand, for hedonic products, Millennials perceive greater enjoyment and value from omnichannel retailers. The findings of Study 3 offer support for the moderating role of product category and the underlying mechanism by which channel characteristics influence Millennials' purchase intentions. However, as previous studies indicate that consumers' motivational goals may influence the retail format choice, Study 4 was conducted to test the role of regulatory focus in Millennials' evaluation of omnichannel retailing for shopping.

4.4. Study 4. The moderating role of regulatory focus and the underlying mechanism

Study 4 aims to test the moderating role of regulatory focus in Millennials' intentions to use omnichannel retailing for shopping.

4.4.1. Method

Design and manipulations. Study 4 was a 3 (retail format: pure brick-and-mortar vs. pure online vs. omnichannel) x 2 (regulatory focus: promotion vs. prevention) between-subjects design. Participants were randomly assigned to one of the six experimental conditions. The participants were first primed with one of the two regulatory focus conditions. Following Pham and Avnet (2004), the participants in the promotion focus condition were asked to think about their "current hopes and aspirations," and then write down any two of them. In the prevention focus condition, the participants were asked to think about their "duties, obligations, and responsibilities" and write down any two of them. Following this priming task, the regulatory focus manipulation was checked using a one-item scale: "What is more important for you to do?" Responses were recorded on a seven-point scale ranging from "1 – something I ought to" to "7 – something I want to" (Keller, 2006). Following this, participants were asked to imagine purchasing a digital camera from a retailer for themselves. The description of the retailer was similar to that used in Study 1. As product category (utilitarian or hedonic) may influence individuals' motivational orientations (Chernev, 2004), a neutral product category (digital camera) based on the pretest results was selected to control for the confounding effect.

Participants. A total of 85 participants were recruited through MTurk, among whom 54 percent were female and aged between 21 and 35 years.

Measures. Purchase intentions, perceived convenience, perceived risk, perceived enjoyment, and perceived value were assessed using same items as in Study 1. The internal reliability (α) ranged from 0.83 (perceived enjoyment) to 0.91 (purchase intentions). In addition, a two-item product attitude scale, one-item retailer characteristic scale, and three-item perceived realism scale as in Study 1 were used.

4.4.2. Results

Manipulation and realism. The perceived realism of the scenarios was high and did not differ across the conditions. The manipulation check results showed that regulatory primes were successful. Those participants primed with promotion focus (prevention focus) assigned more importance to what they "want to" rather than what they "ought to" than those in the prevention focus condition ($M_{promotion} = 4.21$, $M_{prevention} = 3.23$, $t = 3.50$, $p < 0.01$). As expected, participants rated a digital camera similarly on both the utilitarian scale ($M = 3.11$) and the hedonic scale ($M = 3.46$, $p = 0.10$).

Hypothesis testing. A one-way ANOVA with purchase intentions as the dependent variable and regulatory focus and retail format as fixed factors revealed a significant main effect of retail format ($F = 11.45$, $p < 0.01$, partial $\eta^2 = 0.13$) and interaction effect of retail format and regulatory focus ($F = 9.31$, $p < 0.01$, partial $\eta^2 = 0.19$). More specifically, promotion-focused Millennials show greater purchase intentions with omnichannel retailers ($M_{OMC} = 5.65$) than with online ($M_{ON} = 4.84$, $MD = 0.81$, $p < 0.05$) and brick-and-mortar retailers ($M_{BM} = 4.93$, $MD = 0.73$, $p < 0.05$). This provides support for H_{5a}. In contrast, prevention-focused Millennials showed lower purchase intentions with omnichannel retailers ($M_{OMC} = 3.64$) than with online retailers ($M_{ON} = 4.81$, $MD = 1.17$, $p < 0.01$) and brick-and-mortar retailers ($M_{BM} = 4.83$, $MD = 1.18$, $p < 0.01$). This provides support for H_{5b} (see Table 5).

[Insert Table 5 about here]

The mediating role of perceived convenience, enjoyment, risk, and value in the channel mode and purchase intentions relationship for promotion-focused Millennials using Hayes' (2013) PROCESS mediation (model 4) revealed a nonsignificant indirect effect as the confidence limits of mediating variables contained zero. For prevention-focused Millennials, a significant mediating role of perceived risk ($B = -0.31$, $LCI = -0.71$, $UCI = -0.05$) was observed. Post hoc contrast reveals that prevention-focused Millennials perceived greater risk with omnichannel ($M_{OMC} = 4.57$) than with online ($M_{ON} = 3.08$, $MD = 1.49$, $p < 0.01$) and brick-and-mortar ($M_{BM} = 2.81$, $MD = 1.76$, $p < 0.01$) retailers.

4.4.3. Discussion

The findings of Study 4 show that regulatory focus moderates the effect of retail format choice on purchase intentions. Specifically, it is found that prevention-focused Millennials may consider omnichannel retailing as risky and show lower purchase intentions. In contrast, promotion-focused Millennials may be concerned with the presence of positive outcomes such as convenience and enjoyment and thus show higher purchase intentions in omnichannel retailing than pure brick-and-mortar and pure online retailing.

5. Conclusion and implications

Research pertaining to omnichannel retailing continues to grow. Omnichannel retailing integrates all the channels of a retailer with the aim of providing a unique and integrated shopping experience for customers across all touchpoints. Despite its increasing popularity in practice, consumer adoption of omnichannel retailing has received limited attention. As Millennials comprise the largest shopping audience, this research study represents an initial attempt to examine Millennials' adoption of omnichannel retailing for shopping. Specifically, this study focuses on the underlying mechanism by which omnichannel retailing influences purchase intentions among Millennials. Also, the moderating role of product category and regulatory focus in Millennials' acceptance of omnichannel retailing were examined. Table 6 summarizes our findings.

[Insert Table 6 about here]

This study demonstrates that omnichannel retailing enhances Millennials' purchase intentions. Specifically, the findings of the Study 1 & 2 show that Millennials are more likely to adopt, in general, omnichannel retailing to pure brick-and-mortar and pure online retailing for shopping. One possible explanation is that Millennials perceive greater convenience, enjoyment, and value from shopping in omnichannel retailing than in traditional and online retailing.

Product category appears to moderate the effect of channel mode on purchase intentions. The findings of Study 3 show that Millennials are more likely to buy utilitarian products from online and omnichannel retailers, and hedonic products from omnichannel retailers. A possible explanation for this is that utilitarian products are likely to evoke goal-directed behaviors and thus Millennials are likely to value efficiency in shopping. As online and omnichannel retailing allows easy comparison of products and saves time, they are preferred over brick-and-mortar retailers. This is further supported by the mediating role of convenience and value in the relationship between Millennials' evaluation of retail format and purchase intentions. On the other hand, hedonic products might evoke impulse-buying and variety-seeking behaviors, and this influences Millennials' adoption of omnichannel retailing than pure brick-and-mortar and pure online retailing for buying hedonic products. This was supported by the mediating role of perceived enjoyment and value in the relationship between omnichannel retailing and purchase intentions for hedonic products among Millennials.

Finally, this study found that regulatory focus influences Millennials' retailer choice. In particular, prevention-focused Millennials showed lower purchase intentions in omnichannel retailing than promotion-focused Millennials. One possible explanation for this could be that promotion focus regulates Millennials' attitude and behavior towards positive outcomes while prevention-focused Millennials are likely to be concerned about the presence and absence of negative outcomes. This was further supported by the significant indirect effect of perceived risk on prevention-focused Millennials. Specifically, prevention-focused Millennials perceive greater risk in purchasing products from omnichannel retailers, and this lowers their purchase intentions.

5.1. Theoretical implications

Theoretically, this study contributes to the literature in several ways. First, the present study extends previous research on Millennials (Vodanovich, Sundaram, & Myers, 2010) and offer new insights into Millennials' retail format choice and purchase intentions. Despite Millennials making up about 25 percent of the world population, they have received little attention from researchers (Bilgihan, 2016). This study addresses this research gap and empirically examines Millennials' adoption of omnichannel retailing for shopping. The study findings demonstrate that Millennials are more likely to adopt omnichannel retailing than pure brick-and-mortar and pure online retailing for shopping. This study also extends previous research on Millennials' shopping goals (Lissitsa & Kol, 2016) by empirically demonstrating that both functional (convenience) and hedonic (enjoyment) channel attributes mediate the relationship between channel mode adoption and purchase intentions.

Second, this study extends previous research on omnichannel retailing, which has examined the role of online and offline information channel integration, retail operations, distribution strategy, and sales performance (Bell, Gallino, & Moreno, 2015; Blázquez, 2014; Gao & Su, 2016a, 2016b; Steinfield, Adelaar, & Liu, 2005). In responding to the recent call for research on omnichannel retailing (Li et al., 2017; Piotrowicz & Cuthbertson, 2014), the present study contributes to this literature by examining Millennials' assessment of omnichannel retailing for shopping. Third, this study adds to the growing literature on consumers' evaluation of different retail formats (Lee et al., 2007; Luo & Sun, 2016). In particular, this study shows that Millennials are more likely to adopt omnichannel retailing for shopping because of the greater convenience, enjoyment, and value when compared to pure brick-and-mortar and pure online retailing.

Fourth, this study illustrates the utilitarian and hedonic nature of product category in determining Millennials' retail format choice. Specifically, this study adds to the literature on the role of utilitarian vs. hedonic products in influencing consumers' retail format choice. The findings show that Millennials adopt online and omnichannel retailing for utilitarian products and omnichannel retailing for hedonic products. This finding contrast with previous findings by Kushwaha and Shankar (2013) that multichannel consumers are more valuable for hedonic products while single channels (online or traditional stores) offer greater efficiency for purchasing utilitarian products. This study findings show that Millennials adopt the retail format (e.g. online and omnichannel) that offers greater convenience and fit with their shopping goals when purchasing utilitarian products. In contrast, as omnichannel retailers offer greater enjoyment with shopping, Millennials perceive a greater fit with omnichannel retailing for shopping for hedonic products. Finally, the study findings show that regulatory focus impacts Millennials' retailer choice. The finding that prevention-focused Millennials perceive greater risk with omnichannel retailers adds to the existing literature on the role of regulatory focus in consumers' shopping behaviors (van Noort, Kerkhof, & Fennis, 2007; Das, 2015).

5.2. *Managerial implications*

The results offer three important implications for retail firms. First, the findings of this study reveal that, in general, Millennials find omnichannel retailing more valuable than pure brick-and-mortar and online retailing for shopping. So, retailers targeting Millennials must either introduce omnichannel retailing or integrate existing channels (online, brick-and-mortar, mobile) to increase purchase intentions. Second, the results show that while online retailing offers greater convenience, the omnichannel retailer offers greater value for Millennials when purchasing utilitarian products. Thus, specialty retailers of utilitarian products such as mobile phones, consumer electronics, and books should incentivize Millennials to shop for their products in online channels. For example, the brick-and-mortar retailer might offer discounts or gifts for customers when they purchase from their online store. When shoppers visit the online store, they might also try other utilitarian products, resulting in greater cross-purchasing. Similarly, retailers selling hedonic products such as accessories, cosmetics, and luxury items should motivate customers to shop in other channels as our study demonstrates that omnichannel retailing leads to greater purchase intentions for hedonic products. The retailer should inform Millennials who visit their store about other channels and how they can shop seamlessly across the channels. Finally, the study findings reveal that prevention-focused Millennials are less likely to shop in omnichannel retailing as they perceive greater risk. Thus, retail managers should emphasize the efficiency of shopping through omnichannel retailing and offer cues such as retailer reputation, warranty, and product performance to reduce risk and attract prevention-focused Millennials.

5.3. Limitations, further research, and conclusion

This study has limitations that future research should address. First, this study examined the evaluation of omnichannel retailing among Millennials. Future research should extend current research and compare the evaluation of omnichannel retailing across the different generational cohorts. Such an analysis provides a richer understanding of omnichannel adoption. Second, this study considered only brick-and-mortar, online, and omnichannel retail formats in assessing Millennials' shopping behaviors. Future research should extend the current study by examining other retail formats such as mobile and multichannel retailing to gain a deeper understanding of customer evaluation of new shopping channels. Third, this study examined Millennials' purchase intentions across different retail formats. Future research will be able to analyze transaction data of Millennials across the different retail formats to shed additional light on their shopping behaviors. Fourth, this study used cross-sectional data to analyze Millennials' evaluation of omnichannel retailing. Future research will be able to utilize longitudinal customer purchase data across a broad array of product categories to obtain deeper insights into omnichannel retailing. Finally, this study examined customers' evaluation of omnichannel retailing. As omnichannel retailing offers numerous benefits for retailers, future research could examine omnichannel retailing from retailers' perspective.

In conclusion, the present study shows that Millennials are more likely to adopt omnichannel retailing for shopping as it offers greater convenience, enjoyment, and value. The results reveal that product category moderates Millennials' evaluation of different retail formats. Specifically, for utilitarian products, Millennials adopt online and omnichannel retailing because of the convenience it offers for shopping. In contrast, Millennials are likely to purchase hedonic products at omnichannel retailers for the perceived enjoyment they derive from shopping. Similarly, the regulatory focus was found to influence Millennials' evaluation of omnichannel retailing. The findings of our study offer retail managers guidelines for investment in different retail channel formats when targeting Millennials. Also, it serves as the impetus for future research on the growing phenomenon of omnichannel retailing.

6. References

Akçayır, M., Dündar, H., & Akçayır, G. (2016). What makes you a digital native? Is it enough to be born after 1980?. *Computers in Human Behavior*, *60*, 435-440.

Arnold, M. J., & Reynolds, K. E. (2009). Affect and retail shopping behavior: Understanding the role of mood regulation and regulatory focus. *Journal of Retailing*, *85*(3), 308–320.

Balasubramanian, S., Raghunathan, R., & Mahajan, V. (2005). Consumers in a multichannel environment: Product utility, process utility, and channel choice. *Journal of Interactive Marketing*, *19*(2), 12–30.

Beck, N., & Rygl, D. (2015). Categorization of multiple channel retailing in multi-, cross-, and omni-channel retailing for retailers and retailing. *Journal of Retailing and Consumer Services*, *27*, 170–178.

Bell, D., Gallino, S., & Moreno, A. (2015). Showrooms and information provision in omni-channel retail. *Production and Operations Management*, *24*(3), 360-362.

Bilgihan, A. (2016). Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behavior*, *61*, 103-113.

Blázquez, M. (2014). Fashion shopping in multichannel retail: The role of technology in enhancing the customer experience. *International Journal of Electronic Commerce*, *18*(4), 97-116.

Cao, L. (2014). Business model transformation in moving to a cross-channel retail strategy: A case study. *International Journal of Electronic Commerce*, *18*(4), 69-96.

Chang, M. K., Cheung, W., & Lai, V. S. (2005). Literature derived reference models for the adoption of online shopping. *Information & Management*, *42*(4), 543-559.

Cheema, A., & Papatla, P. (2010). Relative importance of online versus offline information for Internet purchases: Product category and Internet experience effects. *Journal of Business Research*, *63*(9), 979–985.

Chernev, A. (2004). Goal–attribute compatibility in consumer choice. *Journal of Consumer Psychology*, *14*(1–2), 141–150.

Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2002). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, *77*(4), 511–535.

Chiu, C. M., Chang, C. C., Cheng, H. L., & Fang, Y. H. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, *33*(4), 761-784.

Chou, Y. C., Chuang, H. H. C., & Shao, B. B. (2016). The impact of e-retail characteristics on initiating mobile retail services: A modular innovation perspective. *Information & Management*, *53*(4), 481-492.

Chuah, S. H. W., Marimuthu, M., Kandampully, J., & Bilgihan, A. (2017). What drives Gen Y loyalty? Understanding the mediated moderating roles of switching costs and alternative attractiveness in the value-satisfaction-loyalty chain. *Journal of Retailing and Consumer Services*, *36*, 124-136.

Chau, M., Wong, A., Wang, M., Lai, S., Chan, K. W., Li, T. M., & Sung, W. K. (2013). Using 3D virtual environments to facilitate students in constructivist learning. *Decision Support Systems*, *56*, 115-121.

Chen, Y. H., Hsu, I. C., & Lin, C. C. (2010). Website attributes that increase consumer purchase intention: A conjoint analysis. *Journal of Business Research*, *63*(9), 1007-1014.

Chiang, K. P., & Dholakia, R. R. (2003). Factors driving consumer intention to shop online: an empirical investigation. *Journal of Consumer Psychology*, *13*(1-2), 177-183.

Chiu, C. M., Wang, E. T., Fang, Y. H., & Huang, H. Y. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, *24*(1), 85-114.

Cook, G. (2014). Customer experience in the omni-channel world and the challenges and opportunities this presents. *Journal of Direct, Data and Digital Marketing Practice*, *15*(4), 262–266.

Dai, B., Forsythe, S., & Kwon, W. S. (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.

Das, G. (2015). Retail shopping behaviour: Understanding the role of regulatory focus theory. *The International Review of Retail, Distribution and Consumer Research*, *25*(4), 431–445.

Dhar, R., & Wertenbroch, K. (2000). Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research*, *37*(1), 60–71.

Duffett, R. G. (2015). Facebook advertising's influence on intention-to-purchase and purchase amongst Millennials. *Internet Research*, *25*(4), 498-526.

Emrich, O., Paul, M., & Rudolph, T. (2015). Shopping benefits of multichannel assortment integration and the moderating role of retailer type. *Journal of Retailing*, *91*(2), 326–342.

Fleming, J. H. (2016). Millennials are starting to spend more. Retrieved from http://www.gallup.com/businessjournal/191837/Millennials-starting-spend.aspx

Fry, R. (2016). Millennials overtaking baby boomers as America's largest generation. Retrieved from http://www.pewresearch.org/fact-tank/2016/04/25/Millennials-overtake-baby-boomers/

Gallino, S., Moreno, A., & Stamatopoulos, I. (2016). Channel integration, sales dispersion, and inventory management. *Management Science*, *63*(9), 2813-2831.

Gao, F., & Su, X. (2016a). Omnichannel retail operations with buy-online-and-pick-up-in-Store. *Management Science*. ePub ahead of print June 20, http://dx.doi.org/10.1287/mnsc.2016.2473

Gao, F., & Su, X. (2016b). Online and offline information for omnichannel retailing. *Manufacturing & Service Operations Management*. *19*(1), 84–98.

Grewal, D., Roggeveen, A. L., & Nordfält, J. (2016). Roles of retailer tactics and customer-specific factors in shopper marketing: Substantive, methodological, and conceptual issues. *Journal of Business Research*, *69*(3), 1009–1013.

Gupta, A., Su, B. C., & Walter, Z. (2004). Risk profile and consumer shopping behavior in electronic and traditional channels. *Decision Support Systems*, *38*(3), 347-367.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.

Herhausen, D., Binder, J., Schoegel, M., & Herrmann, A. (2015). Integrating bricks with clicks: Retailer-level and channel-level outcomes of online–offline channel integration. *Journal of Retailing*, *91*(2), 309–325.

Hershatter, A., & Epstein, M. (2010). Millennials and the world of work: An organization and management perspective. *Journal of Business and Psychology*, *25*(2), 211–223.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, *52*(12), 1280–1300.

Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York. NY: Vintage.

Hsu, C. L., Wu, C. C., & Chen, M. C. (2013). An empirical analysis of the antecedents of e-satisfaction and e-loyalty: focusing on the role of flow and its antecedents. *Information Systems and e-Business Management*, *11*(2), 287-311.

Huang, L., Lu, X., & Ba, S. (2016). An empirical study of the cross-channel effects between web and mobile shopping channels. *Information & Management*, *53*(2), 265-278.

Hübner, A., Wollenburg, J., & Holzapfel, A. (2016). Retail logistics in the transition from multi-channel to omni-channel. *International Journal of Physical Distribution & Logistics Management*, *46*(6/7), 562–583.

Im, I., Kim, Y., & Han, H. J. (2008). The effects of perceived risk and technology type on users' acceptance of technologies. *Information & Management*, *45*(1), 1-9.

Ishfaq, R., Defee, C. C., Gibson, B. J., & Raja, U. (2016). Realignment of the physical distribution process in omni-channel fulfillment. *International Journal of Physical Distribution & Logistics Management*, *46*(6/7), 543–561.

Keller, P. A. (2006). Regulatory focus and efficacy of health messages. *Journal of Consumer Research*, *33*(1), 109–114.

Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, *44*(2), 544-564.

Kim, E., Park, M. C., & Lee, J. (2017). Determinants of the Intention to Use Buy-Online, Pickup In-Store (BOPS): The Moderating Effects of Situational Factors and Product Type. *Telematics and Informatics*. In Print.

Kushwaha, T., & Shankar, V. (2013). Are multichannel customers really more valuable? The moderating role of product category characteristics. *Journal of Marketing*, *77*(4), 67–85.

Kwon, O., & Sung, Y. (2012). Shifting selves and product reviews: How the effects of product reviews vary depending on the self-views and self-regulatory goals of consumers. *International Journal of Electronic Commerce*, *17*(1), 59-82.

Lee, M. K., Shi, N., Cheung, C. M., Lim, K. H., & Sia, C. L. (2011). Consumer's decision to shop online: The moderating role of positive informational social influence. *Information & Management*, *48*(6), 185-191.

Li, J., Konuş, U., Langerak, F., & Weggeman, M. C. (2017). Customer channel migration and firm choice: the effects of cross-channel competition. *International Journal of Electronic Commerce*, *21*(1), 8-42.

Lin, H. H., & Wang, Y. S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. *Information & management*, *43*(3), 271-282.

Liu, F., Zhao, X., Chau, P. Y., & Tang, Q. (2015). Roles of perceived value and individual differences in the acceptance of mobile coupon applications. *Internet Research*, *25*(3), 471-495.

Lissitsa, S., & Kol, O. (2016). Generation X vs. Generation Y: A decade of online shopping. *Journal of Retailing and Consumer Services*, *31*, 304–312.

Luo, L., & Sun, J. (2016). New Product Design under Channel Acceptance: Brick-and-Mortar, Online-Exclusive, or Brick-and-Click. *Production and Operations Management*, *25*(12), 2014-2034.

Ma, S., 2017. Fast or free shipping options in online and omni-channel retail? The mediating role of uncertainty on satisfaction and purchase intentions. *International Journal of Logistics Management,* In print.

Mäntymäki, M., & Riemer, K. (2014). Digital natives in social virtual worlds: A multi-method study of gratifications and social influences in Habbo Hotel. *International Journal of Information Management*, *34*(2), 210-220.

Massara, F., Liu, S. S., & Melara, R. D. (2010). Adapting to a retail environment: Modeling consumer–environment interactions. *Journal of Business Research*, *63*(7), 673–681.

McCarthy, A. (2017). Omnichannel 2017: Amazon and Walmart make moves. Retrieved from https://www.emarketer.com/Article/Omnichannel-2017-Amazon-Walmart-Make-Moves/1015000

Michaelidou, N., Arnott, D. C., & Dibb, S. (2005). Characteristics of marketing channels: a theoretical framework. *The Marketing Review*, *5*(1), 45-57.

Mohammed, F., & Norman, A. (2017). Understanding information sharing behaviour of millennials in large multinational organizations: research in progress. *Information Research*, *22*(1).

Murfield, M., Boone, C. A., Rutner, P., & Thomas, R. (2017). Investigating logistics service quality in omni-channel retailing. *International Journal of Physical Distribution & Logistics Management*, *47*(4), 263–296.

Nelson, E.M. (2012). Millennials want to party with your brand but on their own terms. Retrieved from http://adage.com/article/digitalnext/Millennials-party-brand-terms/236444/

Okada, E. M. (2005). Justification effects on consumer choice of hedonic and utilitarian goods. *Journal of Marketing Research*, *42*(1), 43–53.

Parment, A. (2013). Generation Y vs. Baby Boomers: Shopping behavior, buyer involvement and implications for retailing. *Journal of Retailing and Consumer Services*, *20*(2), 189–199.

Pham, M. T., & Avnet, T. (2004). Ideals and oughts and the reliance on affect versus substance in persuasion. *Journal of Consumer Research*, *30*(4), 503–518.

Picot-Coupey, K., Huré, E., & Piveteau, L. (2016). Channel design to enrich customers' shopping experiences: Synchronizing clicks with bricks in an omni-channel perspective: The Direct Optic case. *International Journal of Retail & Distribution Management*, *44*(3), 336–368.

Piotrowicz, W., & Cuthbertson, R. (2014). Introduction to the special issue information technology in retail: Toward omnichannel retailing. *International Journal of Electronic Commerce*, *18*(4), 5–16.

Rigby, D. (2011). The future of shopping. *Harvard Business Review*, *89*(12), 65–76.

Rodríguez-Torrico, P., Cabezudo, R. S. J., & San-Martín, S. (2017). Tell me what they are like and I will tell you where they buy. An analysis of omnichannel consumer behavior. *Computers in Human Behavior*, *68*, 465-471.

Saghiri, S., Wilding, R., Mena, C., & Bourlakis, M. (2017). Toward a three-dimensional framework for omni-channel. *Journal of Business Research*, *77*, 53–67.

Schramm-Klein, H., Wagner, G., Steinmann, S., & Morschett, D. (2011). Cross-channel integration: Is it valued by customers? *The International Review of Retail, Distribution and Consumer Research*, *21*(5), 501–511.

Sepehr, S., & Head, M. (2017). Understanding the Role of Competition in Video Gameplay Satisfaction. *Information & Management*. In print. https://doi.org/10.1016/j.im.2017.09.007

Shen, K. N., Cai, Y., & Guo, Z. (2016). When do online consumers shop in an offline store: The moderating effects of product characteristics. *Journal of Marketing Channels*, *23*(3), 129–145.

Shirish, A., Boughzala, I., & Srivastava, S. C. (2016). Adaptive use of social networking applications in contemporary organizations: Examining the motivations of Gen Y cohorts. *International Journal of Information Management*, *36*(6), 1111-1123.

Strauss, W., & Howe, N. (1999). The Fourth Turning, Broadway Books, New York, NY.

Steinfield, C., Adelaar, T., & Liu, F. (2005). Click and mortar strategies viewed from the web: a content analysis of features illustrating integration between retailers' online and offline presence. *Electronic Markets*, *15*(3), 199-212.

Stewart, K.J. (2003). Trust transfer on the world wide web. *Organization Science*, *14*(1), 5–17.

Sullivan, P., & Heitmeyer, J. (2008). Looking at Gen Y shopping preferences and intentions: exploring the role of experience and apparel involvement. *International Journal of Consumer Studies*, *32*(3), 285-295.

Teo, T. (2013). An initial development and validation of a Digital Natives Assessment Scale (DNAS). *Computers & Education*, *67*, 51-57.

Thomas, V., Azmitia, M., & Whittaker, S. (2016). Unplugged: Exploring the costs and benefits of constant connection. *Computers in Human Behavior*, *63*, 540-548.

van Noort, G., Kerkhof, P., & Fennis, B. M. (2007). Online versus conventional shopping: Consumers' risk perception and regulatory focus. *CyberPsychology & Behavior*, *10*(5), 731-733.

Verhoef, P. C., Neslin, S. A., & Vroomen, B. (2007). Multichannel customer management: Understanding the research-shopper phenomenon. *International Journal of Research in Marketing*, *24*(2), 129–148.

Vodanovich, S., Sundaram, D., & Myers, M. (2010). Research commentary—digital natives and ubiquitous information systems. *Information Systems Research*, *21*(4), 711-723.

Wang, Q., Yang, X., Song, P., & Sia, C. L. (2014). Consumer segmentation analysis of multichannel and multistage consumption: A latent class MNL approach. *Journal of Electronic Commerce Research*, *15*(4), 339.Wang, Y. M., Lin, H. H., Tai, W. C., & Fan, Y. L. (2016).

Understanding multi-channel research shoppers: an analysis of Internet and physical channels. *Information Systems and e-Business Management*, *14*(2), 389-413.

Wang, Q. E., Myers, M. D., & Sundaram, D. (2013). Digital natives and digital immigrants. *Business & Information Systems Engineering*, *5*(6), 409-419.

Wu, L., Chen, K. W., & Chiu, M. L. (2016). Defining key drivers of online impulse purchasing: A perspective of both impulse shoppers and system users. *International Journal of Information Management*, *36*(3), 284-296.

Wu, J. H., & Wang, S. C. (2005). What drives mobile commerce?: An empirical evaluation of the revised technology acceptance model. *Information & Management*, *42*(5), 719-729.

Xiao, L., Guo, Z., & D'Ambra, J. (2017). Analyzing consumer goal structure in online group buying: A means-end chain approach. *Information & Management*. In print.

Xu, J. D., Benbasat, I., & Cenfetelli, R. T. (2013). Integrating service quality with system and information quality: An empirical test in the e-service context. *MIS Quarterly*, *37*(3), 777-794.

Yu, U. J., Niehm, L. S., & Russell, D. W. (2011). Exploring perceived channel price, quality, and value as antecedents of channel choice and usage in multichannel shopping. *Journal of Marketing Channels*, *18*(2), 79-102.

Yurova, Y., Rippé, C. B., Weisfeld-Spolter, S., Sussan, F., & Arndt, A. (2017). Not all adaptive selling to omni-consumers is influential: the moderating effect of product type. *Journal of Retailing and Consumer Services*, *34*, 271–277.

Zhou, L., Dai, L., & Zhang, D. (2007). Online shopping acceptance model-A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, *8*(1), 41.

Figures

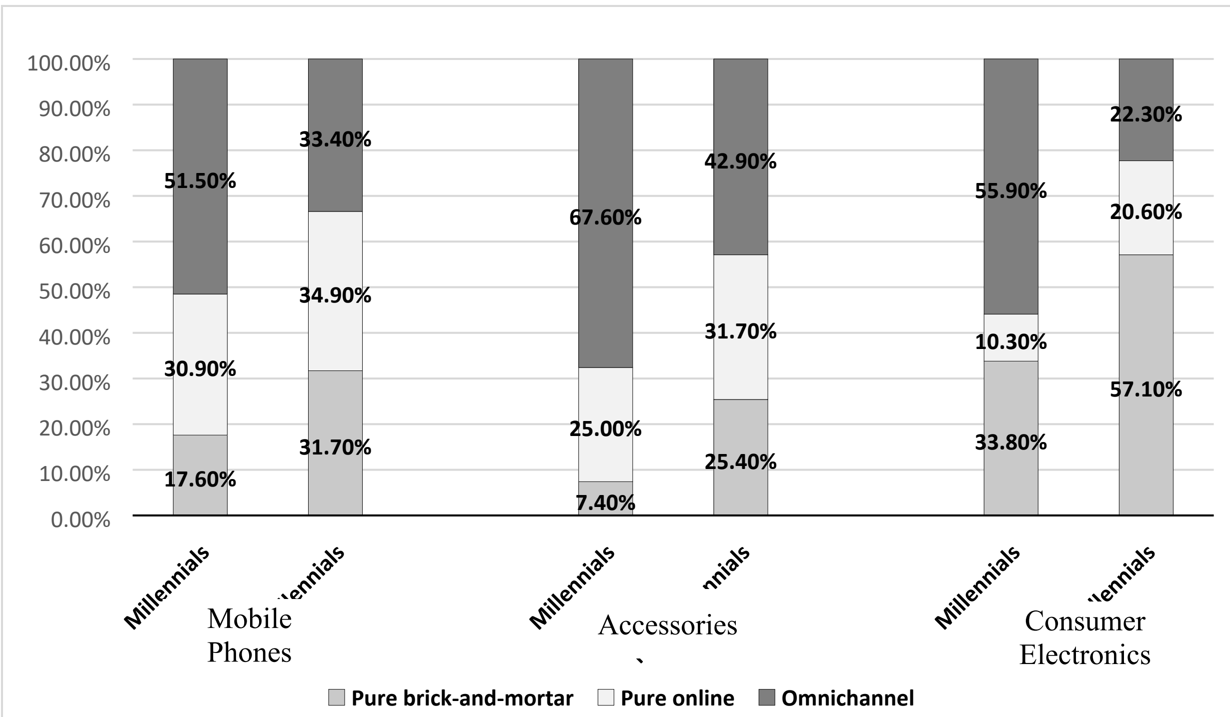

Figure 1a. Retailer preference among millennials

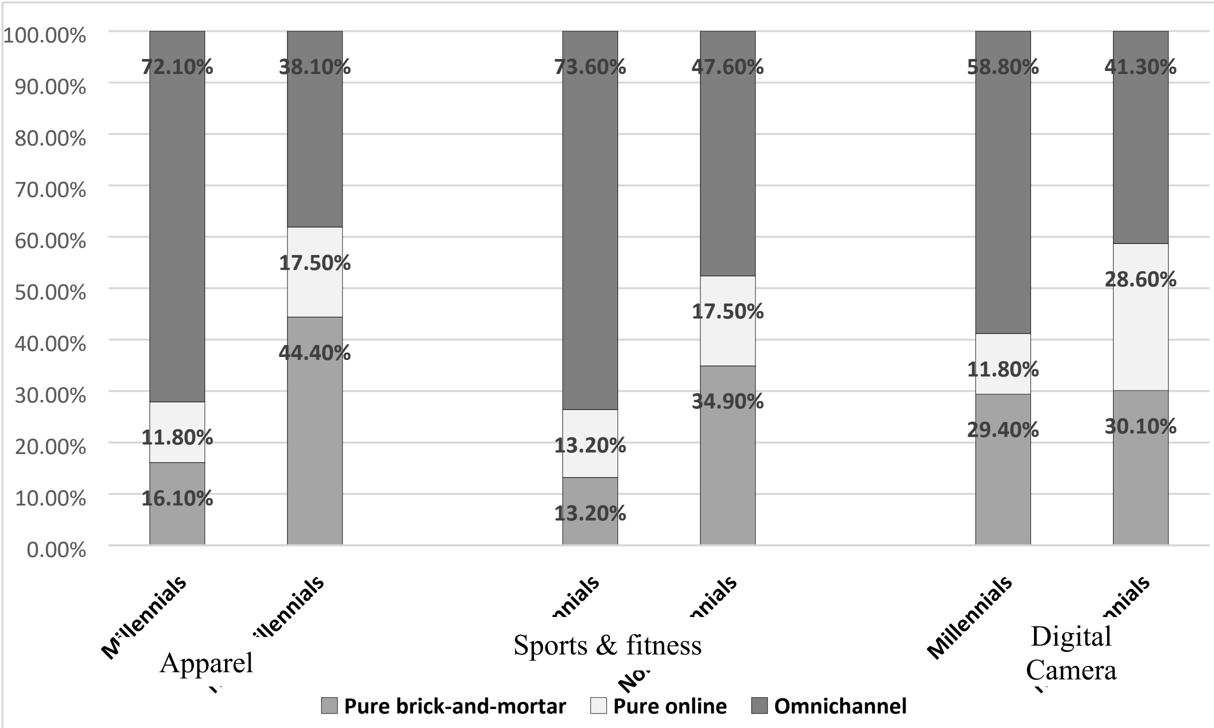

Figure 1b. Retailer preference among millennials

Tables

Table 1. Summary of key studies on Omnichannel retailing

Authors	Objective	Method	Key findings
Beck & Rygl (2015)	To identify a taxonomy of multichannel retailing	Classification of past literature on multichannel retailing	Provide a taxonomy of multichannel retailing, cross-channel retailing, and omnichannel retailing. Multichannel retailing does not involve interaction, cross-channel retailing includes partial integration, and omnichannel retailing involves full integration of channels. In omnichannel retailing, customers can purchase products or services through all widespread channels and return them through any channel.
Cook (2014)	Nature of omnichannel customer	Conceptual and exploratory study	The authors propose that omnichannel customers are young, mobile, highly connected and embrace technology in their daily live. Identifies three segments. Omni-integrated (affluent, well

			connected 30-50 years), young (under 30, constantly on the move) and social networker (all age groups and highly connected).
Bell, Gallino, & Moreno (2015)	To understand the market impact of omnichannel retailing on overall demand and online sales	Data from a leading omnichannel retailer Warby Parker was analyzed using propensity score adjustment	Introduction of traditional stores resulted in increase in market demand both in online channel as well as in showrooms. Specifically, when an online retailer become omnichannel by expanding new retailer channels, customers sort themselves into their preferred channels based on their information needs and this reduces the operational costs of serving customers through other channels.
Gao & Su (2016a)	To understand how buy online and pick up in store (BOPS) impacts customer base and to investigate what type of products are profitable in BOPS	Develop a stylized model that captures omnichannel retail environment	The authors find that omnichannel retail attracts customers through a convenience and information effect. BOPS offer real-time inventory information and a more convenient model of shopping for customers. While BOPS results in excess inventory it results in attracting more customers to the store and boost the sales of products.
Gao & Su (2016b)	How retailers can effectively deliver online and offline information to omnichannel consumers	Develop a stylized model that captures omnichannel retail environment of a retailer that operates both offline and online channels	Consumers shopping journey has become omnichannel and they switch channels based on the convenience when evaluating and purchasing products. Omnichannel retailing allows consumers access to information that reduces consumer uncertainty about product value and inventory availability.
Hübner, Holzapfel, & Kuhn (2016)	To investigate the distribution systems in omnichannel retailing context	Semistructured interviews with 43 executives from 28 German non-food omnichannel retailers	The authors propose forward distribution and backward distribution typology in distribution systems in omnichannel retailing. Expanding delivery modes, increasing delivery speed and service levels are key issues in omnichannel distribution
Hübner, Wollenburg,	How retailers develop from isolated	61 Survey responses from German retailers.	The results suggest that development of multichannel retailers with separate channel to

& Holzapfel (2016)	multichannel structures to omnichannel structure	Respondents included board members, general managers, directors, and division managers	omnichannel retailers requires integration and expansion of inventories, organizational units, and IT systems. Particularly, integration of channels is required for inventory availability while expansion is required in service options for convenience.
Ishfaq et al. (2016)	To identify the realignment of distribution system for retailers moving to omnichannel retailing	Mixed methods research involving 50 interviews and secondary data from retailers	Thematic analysis reveals that fulfillment methods, delivery methods, and leveraging store infrastructure are key areas emphasized by executives as important for long-term success in omnichannel retailing. Further, the firms need to configure their tangible and intangible assets to create unique omnichannel retail capabilities for the firm.
Murfield et al. (2017)	Examine the relationships between logistic service quality, customer satisfaction and customer loyalty in an omnichannel setting	507 respondents who recently purchased through buy-online-pickup-in-store or buy-in-store-ship-direct. Structural equation modeling.	Timeliness is the most important aspect of logistics service that affects customer satisfaction and loyalty. Product availability was not significant in determining customer satisfaction with omnichannel.
Picot-Coupey, Huré, & Piveteau (2017)	To investigate the challenges retailers confront with omnichannel retailing	In-depth longitudinal case study	Shifting to omnichannel retailing confronts e-tailers with organizational, cultural, management, and marketing challenges. However, the highest challenge relates to synchronization across the touchpoints in omnichannel. The authors offer organizational learning method of "trail-and-error' learn for overcoming challenges pertaining to shift to omnichannel retailing
Saghiri et al. (2017)	Develop a conceptual framework based on three dimensions of	Qualitative and case study approach of seven retailers based on company reports, documents, press	Two key enablers of omnichannel retailing are integration and visibility which create a single view of the product across the channels. Integration in omnichannel includes promotion, transaction, pricing,

	channel stage, type, and agent	releases, and specialist reports	product information, reverse logistics, and order fulfillment across the channels. Visibility pertains product visibility, order/payment visibility, stock visibility, delivery and supply visibility.
Yurova et al. (2017)	The role of product type in adaptive selling to omnichannel consumers	407 respondents from the US, UK, Russia, and Singapore. Structural equation modeling	The influence of interactive and non-interactive adaptive selling on purchase intentions for omnichannel consumers depend on product category and perceived control. While interactive adaptive selling leads to greater purchase intention for hedonic products, no effect was observed for utilitarian products among the omnichannel consumers.

Table 2. Summary of studies carried out

Study	Objective	Hypothesis tested
Study 1	To examine the differences in Millennials and non-Millennials shopping intentions across the different channel modes (pure-brick-and-mortar vs. pure online vs. omnichannel)	H_1
Study 2	To examine the mediating role of channel characteristics (convenience, risk, enjoyment, and value) in determining Millennials adoption of omnichannel retailing compared to pure brick-and-mortar and pure online channels	H_2
Study 3	To test the moderating role of product category in Millennials' evaluation and adoption of omnichannel retailing compared to pure brick-and-mortar and pure online channels	H_{3a}, H_{3b}, H_{4a}, H_{4b}
Study 4	To test the moderating role of Millennials' regulatory focus in their adoption of omnichannel retailing	H_{5a}, H_{5b}

Table 3. Study 2 results				
	Pure brick-and-mortar	Pure online	Omnichannel	Difference
Purchase intentions	4.17	4.01	5.04	$F = 4.29, p < 0.05$
Perceived convenience	3.72	4.74	5.50	$F = 10.09, p < 0.01$
Perceived enjoyment	4.23	5.21	5.02	$F = 8.73, p < 0.01$
Perceived risk	2.67	4.41	3.47	$F = 12.78, p < 0.01$
Perceived value	4.40	4.56	5.35	$F = 5.49, p < 0.01$

Table 4. Purchase intentions across channel modes for Study 3			
	Pure brick-and-mortar	Pure online	Omnichannel
Mobile phones (utilitarian)	3.76	5.29	5.20
Accessories (hedonic)	4.26	4.73	5.58

Table 5. Purchase intentions across regulatory focus for Study 4		
	Promotion-focused Millennials	Prevention-focused Millennials
Pure brick-and-mortar retailer	4.93	4.82

Pure online retailer	5.23	4.81
Omnichannel retailer	5.44	3.64

Table 6. Summary of Hypotheses and Empirical Support

	Statement	Inference
H_1	Millennials will show higher purchase intentions through omnichannel retailing than through pure brick-and-mortar and pure online retailing.	Supported
H_2	For Millennials, perceived convenience, perceived risk, perceived enjoyment, and perceived value mediates the relationship between channel modes (pure brick-and-mortar vs pure online vs omnichannel) and purchase intentions.	Partial support
H_{3a}	For utilitarian product, Millennials will show greater purchase intentions in omnichannel and pure online retailing than in pure brick-and-mortar retailing.	Supported
H_{3b}	For hedonic product, Millennials will show higher purchase intentions in omnichannel retailing than in pure online and pure brick-and-mortar retail modes.	Supported

H_{4a}	For utilitarian products, perceived convenience and perceived value will mediate the relationship between omnichannel retailing and purchase intentions.	Supported
H_{4b}	For hedonic products, perceived risk, perceived enjoyment, and perceived value will mediate the relationship between omnichannel retailing and purchase intentions.	Partial support
H_{5a}	Promotion-focused Millennials are more likely to purchase from omnichannel retailing than pure online and pure brick-and-mortar retailing.	Supported
H_{5b}	Prevention-focused Millennials are more likely to purchase from pure brick-and-mortar and pure online retailing than omnichannel retailing.	Supported