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The Connection and Disconnection between E-commerce Businesses and Their Customers:

Exploring the Role of Engagement, Perceived Usefulness, and Perceived Ease-of-use

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ABSTRACT

Significant time, resources, and attention have been given over the past few decades to explore how businesses can attract more customers to their online stores, and yet problems remain. It is still difficult to convert a potential customer's initial online encounter into a buying relationship. Thus, this study aims to develop a deeper comprehension of the driving forces that not only attract visitors to a website, but also motivate them to make a purchase. Drawing from the e-commerce, regulatory focus, and regulatory fit theory literatures, this study crafts a series of predictions about visitors' attraction to and intention to purchase from a website. In studies conducted using three different technology-product websites (i.e., websites selling smartphones, smartwatches, and laptops) and two different samples (i.e., students and actual shoppers), we found supporting evidence that visitors' evaluation and purchase intentions are determined by the fit between the shopping experiences offered (hedonic vs. utilitarian) and visitors' regulatory focus (promotion vs. prevention). Furthermore, we reveal that engagement, perceived usefulness, and perceived ease of use serve as the underlying mechanisms that mediate the effect of regulatory fit on visitors' attitudes and purchase intentions.

Keywords: Consumer Online Decision Making; Regulatory Focus and Regulatory Fit Theory; Engagement; Shopping Experience; Perceived Usefulness; Perceived Ease of Use

INTRODUCTION

The advent of electronic commerce has revolutionized the way business is done by providing consumers with a plethora of information sources and convenient shopping methods. It has increased e-commerce business offerings (i.e., goods and services) and has given online shoppers the option and ability to switch effortlessly from one website to another. Recent industry trends involve reducing customer acquisition costs and increasing customer retention rates (Hanssens et al., 2008). Yet, several companies still suffer from rising e-commerce customer acquisition costs and falling sales (Brohan, 2011) and have failed to reduce operating costs and fulfill online customer needs (Luo et al., 2012; Venkatesh et al., 2012). The global conversion rate of online shoppers averaged only 2.48% and 2.37% in the second and third quarters of 2014 (Monetate Ecommerce Quarterly, 2014), rates that are significantly lower than those of traditional brick-and-mortar firms. Hence, developing a deeper comprehension of the driving forces that not only attract online customers to a website but also motivate them to make a purchase is crucial for e-commerce businesses facing ever-increasing global customer demands and competition.

In the context of online business, website homepages are arguably the “first contact” points between firms and their potential customers (Wang et al., 2011), and they offer varying experiences based on their functionality and appeal (Falk et al., 2010). Experiences offered online (e.g., easy product search and evaluation, up-to-date information, visually appealing interface, fun and enjoyable, etc.) are not only the primary asset that customers look for while making decisions, but they also shape their initial impressions of a website and subsequent adoption or exploration (Menon and Khan, 2002; Yang et al., 2005). Research has shown that online customers’ (unlike offline customers’) acquisition is dependent, at least in part, on their

initial impression of the website homepage (Campbell et al., 2013; Tuch et al., 2012). That is, initial impression of the website is likely to determine whether or not the website will be initially adopted, subsequently explored, and eventually sway browsers' perceptions and choice processes (Campbell et al., 2013; Tractinsky et al., 2006). More importantly, information received early is weighted more heavily in the decision process (Russo et al., 1998). Similarly, Deng and Poole (2010) have argued that users' initial responses towards a website influence their subsequent experiences with the website. Hence, if the first impression is not favorable, the abundance of e-retailer choices and the low switching costs involved in the online context may prompt online customers to switch to another seller (Campbell et al., 2013; Deng and Poole, 2010).

Consumer behavior research in the offline context has shown that individuals' evaluations for advertisements and decisions for products are influenced by their regulatory focus (Avnet and Higgings, 2006; Wang and Lee, 2006). Regulatory focus theory proposes that people can achieve their goals by adopting either an achievement/accomplishment-oriented, promotion-focused strategy or a safety/security-oriented, prevention-focused strategy (Higgins, 1997). However, to date, little theoretical and practical understanding exists regarding what initially influences consumers' attraction (i.e., pre-adoption stage) to an e-commerce website, and the carryover effect of first impressions on subsequent decisions (i.e., purchase intention–adoption stage) is still unclear (Campbell et al., 2013; Deng and Poole, 2010; Venkatesh and Agarwal, 2006).

This understanding is critical because it is widely recognized by academics and practitioners that online consumer behavior and decision making differs from those in traditional shopping environments (Alba et al., 1997; Chatterjee, 2010; Danaher et al., 2003). Unlike the physical shopping environment where it would be highly challenging, if not impossible, for

consumers to visit a large number of shops in a short span of time, online shopping provides more alternatives and involves low search cost and effort (Overby and Lee, 2006). Nevertheless, while online shopping is considered to be convenient by many shoppers, some shortcomings remain. By definition, online consumers are in a virtual environment (i.e., removed from the store's physical location), and therefore, cannot touch or try the products which would otherwise influence their overall shopping experience and behaviors (Park, Hill, and Bonds-Raacke, 2015; Wolfinbarger and Gilly, 2001). In other words, designing websites that are capable of capturing online customers and turning visitors into buyers is a significant concern for e-commerce businesses.

A closer look at the literature offers some insight into what may account for this lack of theoretical and practical understanding. Since first impressions matter, exploring how shopping experiences facilitates the acquisition of tangible products (Meuter et al., 2000; Menon and Khan, 2002) may provide theoretical and practical insights into what initially attracts customers to a website and what subsequently influences their perceptions and decisions. More importantly, shopping experience (website type) has been shown to influence important outcomes such as increased spending, increased liking of the store, increased time spent at the store, and increased unplanned purchases (Babin et al., 1994; Menon and Khan, 2002). For example, past researchers have conceptualized websites as hedonic and utilitarian and argued that in order to attract customers; e-retailers should incorporate the online shopping entertainment attributes along with functional attributes (Bauer et al., 2006; Childers et al., 2002; Falk et al., 2010). Wang et al. (2011) propose that e-retailers should use a high level of aesthetic formality when website visitors are pursuing a purchase task, whereas a high aesthetic appeal should be used when website visitors do not have an immediate shopping goal. Similarly, in the offline context,

regulatory focus (promotion- versus prevention-focus) has been shown to play a critical role in consumer decision making for products (Chitturi et al., 2007; Safer, 1998). For example, Chernev (2004) found that prevention-focused participants were more likely to select a product that highlighted reliability-related and functional product attributes, whereas promotion-focused individuals were more likely to select a product that highlighted performance-related and attractive attributes.

Surprisingly, while both customer regulatory focus and website characteristics (i.e., type of shopping experiences offered) are critical factors that affect consumers' decisions, these issues have been studied mainly in isolation in the online context (Deng and Poole, 2010; Martínez-López et al., 2014). We still do not know much about the relationship between customers' regulatory focus and the type of online shopping experience, particularly when this option varies in its mix of hedonic and utilitarian attributes (To, Liao, and Lin, 2007). Among others, Deng and Poole (2010), have been calling for more studies to provide a clearer and more complete picture of how these important variables work together to prevent substantial resource misallocations in the online shopping context. Hence, exploring the role of regulatory focus in the context of online shopping will not only provide a differential account of how online shoppers (who are fundamentally different from offline shoppers) (Alba et al., 1997; Chatterjee, 2010; Shankar et al., 2003) formulate their decisions for e-commerce websites (which are certainly different from products) (Shankar et al., 2003), but will also allow e-retailers to make better time, effort, and resource allocations.

Building on the growing body of evidence that regulatory focus (i.e., promotion and prevention orientation) is central to consumer choice and decision making (Chernev, 2004a; Wang and Lee, 2006), this study examines consumer shopping preferences and their subsequent

decisions as a function of regulatory focus. Past research in the offline context has shown that people experience fit when the strategy or manner in which they pursue a goal matches their regulatory focus (Aaker and Lee, 2006; Wang and Lee, 2006). In other words, their attitude towards and choice of a product and information is more favorable when the product or information attributes fit their regulatory goals (Chernev, 2004b; Wang and Lee, 2006). Extant regulatory focus and regulatory fit literatures have primarily focused on the influence of product attributes (Chernev, 2004a), construal level (Hong and Lee, 2010), and persuasive messages (Wang and Lee, 2006) that demonstrate fit (non-fit) on consumer attitudes and behavioral intentions in the offline context. The effect of shopping experiences—hedonic versus utilitarian in this case—that fit (non-fit) on consumers’ attitudes towards and intentions to purchase from a website are, however, less well understood. In this study, we documented and validated a new source of regulatory fit: a match between the hedonic or utilitarian shopping experience and shoppers’ promotion versus prevention focus. Moreover, we explore the consequences of the correspondence between consumers’ regulatory focus and the nature of the shopping experience (i.e., the regulatory fit). Hence, drawing on recent theoretical insights into regulatory fit and technology acceptance, we go beyond objective website attributes to incorporate different web user orientations in relation to their choice of either a hedonic or utilitarian website. In doing so, we address an important research question: How does the regulatory focus of online customers affect website evaluation and purchase intention when the website’s mixture of hedonic and utilitarian attributes varies?

Second, we explore the mechanism underlying the regulatory fit effect (i.e., promotion focus/hedonic website and prevention focus/utilitarian website) on evaluations and purchase intentions when a fit to the shopping experience is present. With the notable exception of recent

work by Lee et al. (2010) in an offline context, research exploring the underlying mechanism of compatibility effects remains scarce (Yao and Chen, 2014), particularly in the context of online shopping. Drawing on recent theoretical insights into regulatory fit and the Technology Acceptance perspective, we argue that in addition to engagement, there is evidence that individual beliefs—perceived usefulness (PU) and perceived ease of use (PEOU)—mediate the effect of external and internal factors on individuals' attitudes towards and intention to purchase from a website (Chen et al., 2002; Venkatesh and Davis, 2000). This leads to our next important research question: What mechanisms underlie the regulatory fit effect on evaluations and purchase intentions when fit to the shopping experience is present?

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Online shopping experience has been identified as one of the most important factors affecting e-commerce traffic and sales (Menon and Khan, 2002; Falk et al., 2010). Mounting evidence would suggest that price discounts are no longer enough to attract or retain customers; in fact, the shopping experience motivates online customers (Kim et al., 2009).

Hedonic and Utilitarian Websites

Consumers gain benefits from shopping, whether it is utilitarian, hedonic, or both (Bridges and Florsheim, 2008). Previous research has defined utilitarian experiences as those providing instrumental, practical, and functional convenience, whereas hedonic experiences have been viewed as more fun, playful, experimental, and enjoyment-related (Childers et al., 2002; Falk et al., 2010). Past research has established that websites offering utilitarian experiences facilitate consumers' information processing and goal-attainment and are positively associated with the effectiveness of the website (Cyr and Head, 2013), whereas websites offering hedonic experiences furnish sensory gratification and are positively associated with enjoyment (Falk et

al., 2010; Wang et al., 2011). That is, utilitarian websites have been shown to satisfy utilitarian and more pragmatic needs (Van der Heijden, 2004). In contrast, hedonic websites have been shown to satisfy hedonic and more affective needs (Falk et al., 2010; Wang et al., 2011).

While a utilitarian experience furnished on a website allows consumers to shop and purchase a product in a timely and efficient manner with minimum irritation, a hedonic shopping experience allows them to have fun and enjoy the shopping (Childers et al., 2002). The dominant objective of providing a hedonic experience is to reflect potential entertainment and the emotional worth of shopping (Babin et al., 1994). In contrast, the dominant objective of furnishing a utilitarian experience is to facilitate users' task performance while instigating efficiency (Van der Heijden, 2004). While hedonic experiences are arousal-laden, fantasy-driven, and are strongly connected to leisure activities, utilitarian experiences are aligned with utilization strategies with a focus on enhancing functionality and user-friendliness (Bilgihan and Bujisic, 2015).

Thus, an 'ideal' website offering utilitarian experience should have a well-designed structure and layout, it should follow a logical flow, and the information presented should not be cluttered since these features increase the accessibility and ability to effectively search for the desired information and product (Bilgihan and Bujisic, 2015; Cyr and Head, 2013). In contrast, the developer of a hedonic website is expected to incorporate bright colors, attractive sounds, eye-catching animated images, an aesthetically appealing layout, and other hedonic content since these features increase the pleasure of recreational shoppers (Cyr and Head, 2013; Wang et al., 2011).

Regulatory Focus and Hedonic versus Utilitarian Websites

Regulatory focus theory argues that there are two distinct types of approach-avoidance systems, namely promotion- and prevention-focused systems, which differ along three dimensions: “the needs that individuals seek to satisfy; the standards with which individuals aim to align themselves; and the salient outcomes” (Chernev, 2004b, p. 443). Promotion goals are characterized by the desire to achieve positive outcomes such as “looking cool” or “being sophisticated,” whereas prevention goals are characterized by the desire to behave “in a safe and secure manner” and “being responsible” (Chitturi et al., 2007).

From a regulatory focus perspective, promotion-focused individuals experience better fit when they process information or evaluate ads or products based on affect, whereas prevention-focused individuals experience better fit when they process information or evaluate ads or products based on substantive arguments (Pham and Avnet, 2004). Building on Pham and Avnet’s (2004) work, Avnet and Higgins (2006) found that promotion-focused consumers were willing to pay more for products when they based their judgements on feelings rather than reasons, whereas the reverse appeared to be true for prevention-focused consumers.

Similarly, research has shown that consumers’ hedonic shopping behaviour is more affective (Babin et al., 1994) and intrinsically motivated (i.e., benefits are derived from interactions with the system) (Van der Heijden, 2004). Hedonic shopping value is actualized through fantasy and the multisensory and emotive aspects of the shopping experience (Kemp and Kopp, 2011; Wu et al., 2015), which is based on the enjoyment and excitement of consuming hedonic products (Babin et al., 1994; Chitturi et al., 2008). In contrast, consumers’ utilitarian shopping behaviour is more rational, task-related (Chitturi et al., 2008), and extrinsically motivated (i.e., the consumer expects a reward or benefit external to the system-user interaction) (Van der Heijden, 2004), wherein satisfaction comes from accomplishing a task—the acquisition

of a product, information, or both—in an efficient manner and reflects a more instrumental, goal-driven, and cognitive approach to shopping (Babin et al., 1994).

Given this, it is logical to expect that affectively driven promotion-focused individuals will evaluate and show more willingness to purchase from a hedonic (versus utilitarian) website. Conversely, cognitively - or rationally-driven - prevention-focused individuals should evaluate and show more willingness to purchase from a utilitarian website. Similarly, as symbolism, fantasy, and imagination are central to hedonic consumption (Hirschman and Holbrook, 1982), evaluating this type of experience necessitates the deeply abstract and expansive thinking that is characteristic of a promotion focus (Arnold and Reynolds, 2009). In contrast, utilitarian behaviour is more rational and task-specific (Chitturi et al., 2007; Wu et al., 2015), and requires the more concrete and unambiguous thought process that is characteristic of prevention focus (Arnold and Reynolds, 2009). As illustrated in Figure 1, we predict the following in line with previous research:

H1a-H1b: Promotion-focused (prevention-focused) individuals will show a more favorable (a) evaluation and (b) purchase intention towards a website that offers a more hedonic (utilitarian) shopping experience than prevention-focused (promotion-focused) individuals.

In addition to the outcome of their purchase decision, consumers can also derive value from pursuing their decision goals in a manner that fits their regulatory focus (Higgins, 2002). People are more motivated and more likely to feel positive (negative) when they engage in activities or use strategies that fit (do not fit) their regulatory focus (Trudel et al., 2012).

-----Insert Figure 1 about here-----

Regulatory Fit and Underlying Mechanisms (Engagement, PU, and PEOU)

Regulatory fit theory posits that people value their decisions more when they engage in decision strategies that are suitable to their regulatory goals (Camacho et al., 2003; Lee et al., 2010). Motyka et al. (2013) have reported that people experience regulatory fit when they process information or make trade-off decisions in a way that sustains their regulatory focus. Researchers have demonstrated regulatory fit's effect on product evaluation (Camacho et al., 2003; Cesario et al., 2004; Wang and Lee, 2006), behavioral intention (Avnet and Higgins, 2006; Higgins et al., 2003), and actual behavior (Higgins et al., 2003; Hong and Lee, 2008).

When people experience fit, they “feel right” about the goal pursuit activity, become more strongly engaged in the activity, and cultivate more intense reactions toward the goal-enabling information and/or objects (Aaker and Lee, 2006). With heightened engagement, both attraction to (in the case of fit) and repulsion from (in the case of non-fit) a target is magnified (Hong and Lee, 2008). Levav et al. (2010) observed that compatibility between participants' regulatory focus and product attributes led to higher engagement in five of the six comparisons. Consistent with this view, regulatory fit has been shown to enhance people's motivation and engagement across different tasks, including anagram performance (Yao and Chen, 2014), math problem solutions (Freitas et al., 2002), handgrip exercises, and temptation resistance (Hong and Lee, 2008). Hence, people value their decisions more when they engage in decision strategies that are suitable to their regulatory goals (for a review, see Avnet and Higgins, 2006). However, the critical role of the shopping experience in consumer decision making and the mechanisms underlying attraction and purchase intention towards a website still needs to be unveiled.

Additional support for the premise that fit creates engagement, which in turn intensifies reactions, comes from studies that examine engagement as mediating the effect of fit on persuasion or judgment (Camacho et al., 2003; Higgins et al., 2003). For example, Higgins et al.

(2003) argued that when people experienced fit, they became more engaged; this experience of engagement has been characterized by a perception of feeling right, which in turn has been shown to mediate the effect of fit on product judgments (Malaviya and Sternthal, 2009). Idson et al. (2004) observed that anticipating positive prospective outcomes constituted a better fit for people with a promotion focus, while considering negative prospective outcomes provided a better fit for people with a prevention focus. Participants who experienced a fit condition reported stronger engagement, which significantly mediated the regulatory fit effect on value intensity for both negative and positive outcomes. Similarly, Pierro et al. (2013) found a regulatory fit effect when participants with a locomotion orientation evaluated non-comparative ads, but observed the fit effect for assessment-orientated participants when they evaluated comparative ads. More importantly, engagement mediated the effect of fit (namely, the locomotion orientation-non-comparative ads and the assessment orientated-comparative ads combinations) on purchase intention. Lee et al. (2010) investigated the mediating role of engagement in the relationship between fit from construal and brand attitudes and found that participants became more engaged when they processed information construed at a level that fit their regulatory focus (promotion focus/high level construal, prevention focus/low level construal); this subjective experience of engagement mediated the effect of fit on brand attitudes. Furthermore, researchers have shown that engagement mediates the effect of fit on message-processing fluency (Lee and Aaker, 2004) and attitude towards an advertising message (Yao and Chen, 2014).

When people experience regulatory fit (e.g., promotion-focused individuals pursuing goals eagerly), they have been found to become more engaged and motivated in their goal pursuit (Idson et al., 2000; Lee et al., 2010); indeed, “when people experience strong engagement

with something, they are involved, occupied, interested and attentive to it” (Higgins, 2006, p. 451). Strong engagement, in turn, has been shown to positively influence a number of positive outcomes. For example, in the marketing literature, engagement has been shown to have a positive influence on consumer attitude towards products (Malaviya and Sternthal, 2009), attitude towards an advertisement (Lee et al., 2010), intention to purchase a product (Ashraf and Thongpapanl, 2015), and customer loyalty (Patterson, Yu, and Ruyter, 2006). In the information systems literature, engagement has been shown to affect the amount of money spent online (Cheung et al., 2015), electronic word of mouth (Ray, Kim, and Morris 2014), attitude towards a website and intention to purchase from a website (Ashraf and Thongpapanl, 2015). As illustrated in Figure 1, and in line with past research, we propose that promotion-focused (prevention-focused) consumers exploring a hedonic (utilitarian) website will feel more engaged which, in turn, will mediate the effect of regulatory fit on consumers’ website evaluation and purchase intention. These predictions can be expressed more formally as the following set of hypotheses:

H2a-H2b: The subjective experience of engagement stimulated as a result of fit will mediate the effect of regulatory fit on consumers’ website (a) evaluation and (b) purchase intention.

Engagement has been shown to mediate fit effects; however, a review of regulatory fit and technology acceptance literature reveals that engagement may not be the only factor that mediates the effect of fit (Wang and Lee, 2006; Lee et al., 2010; Ashraf et al., 2014; Venkatesh and Davis, 2000). Drawing on the regulatory fit and technology acceptance literatures, our study identifies other mechanisms that clarify how regulatory focus exerts its effects. For example, Lee and Aaker (2004) have shown that a message is easier to process when its frame matches the receiving individual’s regulatory focus; this easier processing leads to more favorable attitudes

towards the ideas conveyed. Specifically, messages that fit individuals' regulatory focus are easier to process. Similarly, Labroo and Lee (2006) found that a target advertisement that matches a regulatory goal is easier to process than one that does not match, while Tam and Spanjol (2012) empirically demonstrated that when participants experience regulatory non-fit, they perceive a task as more difficult than those who experience regulatory fit. Similarly, regulatory fit literature suggests that information that is consistent with the way individuals think can be processed more easily, and this easier processing of information leads to positive attitude towards a brand (Lee et al., 2010). Although none of these studies referred here directly examine the effects of regulatory fit on consumers' perceptions regarding how easy a website is to use, they provide basis for the hypothesis that regulatory fit enhances consumers perception regarding ease with which a website can be used.

Second, the regulatory fit literature shows that when people experience fit, their assessment of a product's value increases (decreases in the case of unfit) or the value experience is transferred to the subsequent evaluation of the information/product (Aaker and Lee, 2006; Avnet and Higgins, 2006). In this case, value refers to the usefulness of something, which relates to the concept of utility in economics (Higgins, 2006). The goal-attribute compatibility hypothesis proposed by Chernev (2004a) predicts that the relative significance of an attribute is a function of the extent to which its attractiveness and/or functionality is compatible with an individual's regulatory focus. For example, people receiving health-related information that matches their regulatory focus have been found to perceive the information as more valid and easier to process (Lee and Aaker, 2004), and the recommended motive as worthy of pursuit and more believable (Cesario et al., 2004). Zhao and Pechmann (2007) have shown that anti-smoking advertisements are more effective when viewers' regulatory focus and the message's valence

match (i.e., a message with a promotion focus is more persuasive with a positive frame, whereas the reverse is true for prevention focus). This effect was largely mediated by the message's perceived usefulness. In other words, ad messages that matched viewers' regulatory focus were perceived as more relevant and useful. We interpret these findings as evidence that fit may enhance customers' perceptions of a website's usefulness and ease of use, and in turn, may lead to more favorable attitudes towards and intention to purchase from the website.

From a technology acceptance perspective, studies have shown that individual beliefs—PU and PEOU—mediate the effect of external factors on individuals' attitudes towards and intention to purchase from a website (Ashraf et al., 2014; Chen et al., 2002; Venkatesh and Davis, 2000). As illustrated in Figure 1, and in line with the regulatory fit and technology acceptance literatures, we expect that in addition to being more engaged, individuals experiencing fit will not only perceive the website as easier to use, but will also perceive it as more useful. This leads us to hypothesize:

H3a-H3b: The perceived usefulness stimulated as a result of fit will mediate the effect of regulatory fit on consumers' website (a) evaluation and (b) purchase intention.

H4a-H4b: The perceived ease of use stimulated as a result of fit will mediate the effect of regulatory fit on consumers' website (a) evaluation and (b) purchase intention.

OVERVIEW OF THE STUDIES

We present the results from three experiments testing websites selling three different technology product categories—smartphones (Study 1), smartwatches (Study 2), and laptops (Study 3)—using students (Studies 1 and 3) versus actual online shoppers (Study 2). Study 1 establishes support for our main prediction (H1a-H1b). In particular, we show that promotion-focused (prevention-focused) individuals are more likely than prevention-focused (promotion-

focused) individuals to show favorable evaluation and purchase intention from a hedonic (utilitarian) website. Study 2 tests the mechanisms underlying regulatory fit effect when fit to the shopping experience is present (H2-H4). More specifically, it shows that individuals are more engaged and perceive the website as more useful and easier to use when fit to shopping experience is present and that increased engagement, perceived usefulness, and ease of use mediate the effects of fit on attitude towards and intention to purchase from a website. Finally, Study 3 further validates our findings and provides clear evidence in favor of our predictions (H1-H4).

STUDY 1

Overview and Procedure

Stimuli development (Pre-test 1). We recruited 71 participants (42 females) through MTurk, an online labor system (Goodman et al., 2013). Two fictitious smartphone selling website homepages—hedonic and utilitarian—selling similar smartphones were used because smartphones are among the most common online purchases. See Appendix A for examples of the websites. In line with past studies (Ashraf and Thongpapanl, 2015; Childers et al., 2001; Cyr and Head 2013; Wang et al., 2011; Falk et al., 2010; Bernardo et al., 2012; Van der Heijden, 2004), our research conceptualizes utilitarian shopping experience as being composed of four dimensions:

- (1) degree of organization, which is reflected by different types of elements (e.g., systematic layout, clear text/background color combination, and legible font size and type);

- (2) efficiency, which is related to the ease and speed of accessing and using the website (e.g., quick search and order specification elements, particularly price range and brand navigation bars);
- (3) security, which is associated with the degree to which the website offers a safe and secure shopping environment and protects customer information (e.g., highlighting built-in security features, information privacy, money back guarantees, and product warranties); and
- (4) functional information, which relates to the logical, factual, and objectively verifiable characterization and assessment of product and service features (e.g., smartphone with a 1.9GHz Quad Core processor, an extended product warranty of 2 or 3 years, and delivery in 2-5 business days).

Following the aforementioned literature, the hedonic shopping experience is conceptualized using three dimensions:

- (1) aesthetic appeal, which relates to the overall attractiveness of the website (e.g., large and bright images, product images in constant motion, and beautiful graphics);
- (2) enjoyment, which relates to the extent to which the shopping process reinforces an entertaining and fun experience beyond its functional consequences (e.g., photo gallery and video options); and
- (3) hedonic information, which relates to the pleasurable and fun details of the product attributes (e.g., a stunningly designed, sleek aluminum body with a breathtaking HD screen that is packed with color and detail).

Using fictitious online retailers allowed us to avoid issues concerning brand awareness, existing reputation, and familiarity with the brand. Moreover, in order to enhance the external

and internal validity, the smartphone website homepages were designed based on actual websites selling smartphones and the website attributes were reflective of the theoretical conceptualizations of hedonic and utilitarian websites adopted by past researchers (Bilgihan and Bujisic, 2015; Cyr and Head, 2013; Falk et al., 2010; Bernardo et al., 2012; Childers et al., 2001; Wang et al., 2011). In line with the e-commerce literature, we gave participants the definitions of hedonic and utilitarian websites in step 1. Participants were told that the researcher was interested in their opinions of the homepages. We then showed participants the homepages one at a time and asked them to classify each according to one of three categories: HH-LU, LH-HU, or unsure. The same participants were then directed to step 2 and were told that the researcher was interested in their perceptions of the websites' homepages. Consistent with step 1, we gave participants the definition of hedonic and utilitarian websites. Next, we asked participants to rate each of the websites homepages on a five-item seven-point scale referring to the hedonic dimensions (1 = "not fun, dull, not delightful, not enjoyable, and unpleasant" and 7 = "fun, exciting, delightful, enjoyable, and pleasant"), and a five-item seven-point scale referring to the utilitarian dimensions (1 = "unhelpful, not functional, impractical, insecure, and unprotected" and 7 = "helpful, functional, practical, secure, and protected"). The same procedure was repeated for the utilitarian website (Okada, 2005). The order of the two websites was counterbalanced across all participants. We considered only those homepages that were characterized as HH-LU and LH-HU by at least 75% of the participants for further analysis. As a result, two website homepages were retained (one HH-LU and one LH-HU) (see Appendix A).

We averaged the hedonic and utilitarian scale ratings for the two websites that 75% of the participants in step 1 categorized as HH-LU ($\alpha_{\text{Hedonic}} = .93$ and $\alpha_{\text{Utilitarian}} = .90$) and LH-HU ($\alpha_{\text{Hedonic}} = .93$ and $\alpha_{\text{Utilitarian}} = .85$). The result from step 2 showed that the HH-LU website that

75% of the participants in step 1 categorized as HH-LU was actually perceived as high hedonic and low utilitarian ($M = 5.1$ versus $M = 4.0$; $t(70) = 6.5$, $p < .001$). In contrast, the LH-HU website that 75% of the participants in step 1 categorized as LH-HU was actually perceived as low hedonic and high utilitarian ($M = 3.3$ versus $M = 5.4$; $t(70) = 12.89$, $p < .001$).

Method

Regulatory focus manipulation: Two hundred and thirty-five undergraduate/graduate students (115 females; $M_{\text{Age}} = 24$ years)—from a large urban university in Australia and who had shopped online at least once in the past three months—were randomly directed to one of the two regulatory focus conditions ($n_{\text{Promotion condition}} = 121$ and $n_{\text{Prevention condition}} = 114$). The experiment was conducted in two phases. In phase 1, we manipulated individuals' situational regulatory focus by using pre-established and validated primes. In line with Higgins et al. (1994) and Yoon, Sarial-Abi, and Gürhan-Canli (2012), the participants in the promotion-focus condition (prevention-focus condition) were asked to take a few minutes to think of and list three of their past dreams, hopes, and aspirations (duties, obligations, and responsibilities). Next, they listed three of their present dreams, hopes, and aspiration (duties, obligations, and responsibilities). They were then asked to write a short essay on one of their present dreams, hopes, and aspirations (duties, obligations, and responsibilities).

Regulatory focus manipulation checks: Next, regulatory focus checks adapted from Pham and Avnet (2004) were administered that captured the conflict between the ideal self (promotion-focused) and ought self (prevention-focused). Participants were asked to indicate the extent to which they would prefer to “do what is right versus do whatever I want,” “take a trip around the world versus pay back my loans,” and “go wherever my heart takes me versus do

whatever it takes for me to keep my promises” on a three-item seven-point scale (1 = ought self; 7 = ideal self).

Website evaluation and purchase intention. In phase 2, participants were asked to imagine being close to graduating and being offered a great job. To celebrate, they will buy a new smartphone online. Next, they were shown one smartphone website homepage (the same one that was used in pre-test 1; see Appendix A) and asked to evaluate the website on a five-item seven-point scale adapted from Wang and Lee (2006): (1 = “not at all appropriate, dislike very much, very bad, very unfavorable, very undesirable,” and 7 = “definitely appropriate, like very much, very good, very favorable, very desirable”). Participants were then asked to indicate their purchase intention on a three-item seven-point scale adapted from Ashraf et al. (2014): “I predict that I would use this website to make a purchase” (strongly disagree/strongly agree), “what is the likelihood that you would explore this website further to make a purchase” (highly unlikely/highly likely), and “how likely would you be to purchase a smartphone from this website” (highly unlikely/highly likely). We repeated the procedure for the second website and counterbalanced the order of the two websites across all participants.

Choice: Participants were then asked to indicate which of the two smartphone-selling websites they would like to explore further (choice).

Website manipulation check and confounds. Finally, as a manipulation check for website stimuli, participants were asked to indicate whether they perceived the website as: 1 = “practical/utilitarian” or 7 = “aesthetically appealing/hedonic.” We asked the same question for the second website. In addition, we captured the subjects’ mood and overall time spent completing the task to control for their influence on perceptions of the experimental stimuli.

Participants rated their current affective state on three seven-point items (“bad/good,” “negative/positive,” and “unhappy/happy”).

Study 1 Results

We analyzed the dependent variables using a 2 (regulatory focus: promotion, prevention) x 2 (website type: hedonic, utilitarian) repeated measures ANOVA, in which the website was the within-participant factor.

Manipulation Checks and Confounds. We averaged responses across the three manipulation check questions, and showed through ANOVA that participants in the promotion condition placed relatively greater emphasis on ideal self ($M = 4.6$, with 7 = emphasis on ideal self), relative to those in the prevention condition ($M = 2.7$; $F(1, 233) = 144.73$, $p < .001$). Moreover, participants perceived the hedonic website as more hedonic ($M = 4.73$) and the utilitarian website as more utilitarian ($M = 3.44$; $t(234) = 11.61$, $p < .001$). Finally, there were no main effects of the manipulation on participants’ mood ($\alpha = .82$; $p > .10$) or total time spent completing the task ($M_{\text{Time promotion condition}} = 27.84$ and $M_{\text{Time prevention condition}} = 26.75$; $p > .10$).

Dependent Variable

Website evaluation (H1a). We averaged participants’ attitudes towards the website on the five items to form a website attitude index for each website ($\alpha_{\text{Hedonic}} = .92$ and $\alpha_{\text{Utilitarian}} = .91$). We predicted that promotion-focused participants would evaluate the hedonic website more favorably than the utilitarian website, whereas the reverse would be true for prevention-focused participants. A repeated measures ANOVA on the evaluation index yielded a significant regulatory focus by website interaction ($F(1, 233) = 23.1$, $p < .001$). See Table 1 and Figure 2 for results.

Supporting H1a, subsequent analysis showed that promotion-focused participants evaluated the hedonic website more favorably than prevention-focused participants ($M = 5.1$ versus $M = 4.6$; $t(233) = 3.35$, $p < .001$), while prevention-focused participants evaluated the utilitarian website more favorably ($M = 5.0$ versus $M = 4.6$; $t(233) = 2.79$, $p < .01$). The main effects of website and regulatory focus were not significant ($p > .10$).

-----Insert Table 1 and Figure 2 about here-----

Purchase intention (H1b). We averaged participants' purchase intentions on the three items to form a website purchase intention index for each website ($\alpha_{\text{Hedonic}} = .86$ and $\alpha_{\text{Utilitarian}} = .87$). A repeated measure ANOVA on the purchase intention index showed that participants had more favorable intention to purchase from the utilitarian website than the hedonic website ($M = 4.6$ versus $M = 4.3$; $F(1, 233) = 4.62$, $p < .05$); however, there was no regulatory focus main effect ($p > .10$).

More central to our hypothesis, a repeated measure ANOVA on the purchase intention index yielded a significant regulatory focus by website interaction ($F(1, 233) = 21.45$, $p < .001$) (for results, see Table 1). Supporting H1b, planned contrasts showed that promotion-focused participants showed more willingness to purchase from the hedonic website than prevention-focused participants ($M = 4.6$ versus $M = 4.1$; $t(233) = 2.75$, $p < .05$), whereas prevention-focused participants showed more willingness to purchase from a utilitarian website than promotion-focused participants ($M = 4.9$ versus $M = 4.3$; $t(233) = 3.20$, $p < .01$). The graphical pattern of results was similar to those shown in Figure 2.

Choice. Finally, we asked participants to indicate which of the two websites they would like to explore further. The choice data was coded as binary (0 = hedonic website, 1 = utilitarian website) and analyzed using logistic regression. The results showed that in the prevention-

focused condition, 68.4% of the prevention-focused participants chose the utilitarian website compared with only 35.5% of the promotion-focused participants ($\beta = 1.37$, $\chi^2(1) = 25.91$, $p < .01$), who were more likely to choose the hedonic website. Furthermore, the correlation between purchase intention and choice was highly significant ($r(233) = .32$, $p < .001$).

Study 1 Discussion

The results of Study 1 provide evidence for the compatibility or relationship between regulatory focus and the type of shopping experience (hedonic versus utilitarian) being offered. The results support our predictions and indicate that promotion-focused individuals have a more favorable attitude towards and intention to purchase from a hedonic website, and the reverse is true for prevention-focused participants. Though these results provide initial support for our predictions, they do not explicate the mechanisms driving these effects. Drawing on the existing literature (Falk et al., 2010; Tractinsky and Lowengart, 2007), we identified different hedonic and utilitarian attributes and verified the treatment of hedonic and utilitarian websites by manipulating different levels of these factors. However, we may not have exhausted all factors and combinations. In particular, more research is required to explore the influence of a website when it scores high and low on both utilitarian and hedonic shopping experiences to establish if this combination is better for the retailer. We address this in Study 2.

STUDY 2

Overview and Procedure

Stimuli development. In order to investigate how hedonic and utilitarian shopping experiences influence the information search and decision-making process of online consumers with different regulatory goals, webpage stimuli needed to (1) vary only in terms of hedonic and utilitarian attributes and (2) allow subjects to engage in excitement/enjoyment-seeking

experiences (hedonic experience), practical/goal-oriented tasks (utilitarian experience), both (high hedonic and high utilitarian experience), or neither (low hedonic and low utilitarian experience). In line with past research (Bernardo et al., 2012; Bilgihan and Bujisic, 2015; Cyr and Head, 2013; Falk et al., 2010), four versions of an online electronic store's homepage—selling similar smartwatches—were designed, each version varying in terms of its hedonic (e.g., large, bright images, beautiful graphics, photo gallery, and video options) and utilitarian (e.g., quick search and order specification elements, a price comparison option, and highlighted built-in security features) attributes, to create websites with (1) high hedonic-low utilitarian attributes (HH-LU), (2) low hedonic-high utilitarian attributes (LH-HU), (3) high hedonic-high utilitarian attributes (HH-HU), and (4) low hedonic-low utilitarian attributes (LH-LU). Following the above mentioned criteria, we conducted two pre-tests to create appropriate webpage stimuli (See Appendix B for examples of the HH-LU and LH-HU websites).

Pre-test 1. Twelve website homepages selling smartwatches were designed to offer different levels of hedonic and utilitarian shopping experiences. The websites presented identical products (i.e., smartwatches) in order to minimize the differences among the stimuli and to isolate the effects of hedonic and utilitarian shopping experiences. We recruited 40 participants (25 females) through MTurk. In line with practices in the current e-commerce literature, we provided participants with the definition of hedonic and utilitarian websites. Participants were told that the researcher was interested in their opinions about the homepages. We then showed participants the homepages one at a time and asked them to classify each according to one of five categories: HH-LU, LH-HU, HH-HU, LH-LU, or unsure. We retained only those homepages that at least 75% of the participants characterized as HH-LU, LH-HU, HH-HU, and LH-LU. The order of the website homepages was counterbalanced across all participants.

Pre-test 2. We recruited 43 (19 females; $M_{\text{Age}} = 31$) participants through MTurk. We told them that the researcher was interested in their perceptions of the smartwatch-selling websites homepages. Similar to pre-test 1, we gave participants the definition of hedonic and utilitarian websites. Next, we asked them to rate each of the four websites homepages—retained from pre-test 1—on a five-item seven-point scale pertaining to the hedonic dimensions and a five-item seven-point scale pertaining to the utilitarian dimensions. The measures were identical to those used in the pre-test 1 of Study 1. The order of the website homepages was counterbalanced across all participants. We averaged the hedonic- and utilitarian-scale ratings for all four website homepages (HH-LU: $\alpha_{\text{Hedonic}} = .96$ and $\alpha_{\text{Utilitarian}} = .84$; LU-HU: $\alpha_{\text{Hedonic}} = .95$ and $\alpha_{\text{Utilitarian}} = .92$; HH-HU: $\alpha_{\text{Hedonic}} = .92$ and $\alpha_{\text{Utilitarian}} = .94$; LH-LU: $\alpha_{\text{Hedonic}} = .94$ and $\alpha_{\text{Utilitarian}} = .95$). As expected, participants perceived the HH-LU website as high hedonic ($M = 5.3$) and low utilitarian ($M = 3.9$; $t(42) = 6.49$, $p < .001$), the LH-HU website as low hedonic ($M = 3.9$) and high utilitarian ($M = 5.3$; $t(42) = 6.10$, $p < .001$), the HH-HU website as high hedonic ($M = 5.0$) and high utilitarian ($M = 5.1$; $t(42) = .65$, $p = .52$), and the LH-LU website as low hedonic ($M = 3.6$) and low utilitarian ($M = 3.7$; $t(42) = .74$, $p = .47$).

Method

Three hundred and fifty-nine (193 females) online shoppers were recruited through an online panel in exchange for a small payment. The experiment was conducted in two phases. In the first phase, participants were put into a promotion ($n = 181$) or prevention ($n = 178$) focus condition through the same scenario as used in Study 1. We then administered the regulatory focus checks, which were the same as those used in Study 1.

Website evaluation and purchase intention. In phase 2, participants were asked to imagine being offered a great job. To celebrate, they will buy a new smartwatch online. Next, the participants were shown one of the four versions of the smartwatch webpage stimuli. Each subject was randomly assigned to view only a single webpage. Participants were then asked to evaluate the website. The evaluation measures were identical to those in Study 1. Participants were then asked to indicate their purchase intention on a five-item seven-point scale adapted from Kleijnen et al. (2007), with 1 = “very unlikely, very improbable, very impossible, very uncertain, and definitely not purchase” and 7 = “very likely, very probable, very possible, very certain, definitely purchase.”

Engagement. We used a seven-point scale (1 = “not at all,” and 7 = “a lot”) developed by Lee et al. (2010) to assess participants’ engagement (motivated, felt right, felt wrong) while they were exploring the website homepage.

Perceived usefulness and perceived ease of use. Next, we measured perceived usefulness by asking participants to indicate their agreement (1 = strongly disagree; 7 = strongly agree) with four statements. Participants rated whether or not the website would allow them to shop quickly, increase their productivity while shopping, make it easier for them to shop, and be very useful for shopping. We assessed perceived ease of use by asking participants to indicate their agreement (1 = strongly disagree; 7 = strongly agree) with five statements: whether or not using this website would be easy for them, interacting with the website is clear and understandable, interacting with the website does not require a lot of mental effort, it would not be difficult for them to shop from this website, and do they find the website to be easy to use. The perceived usefulness and perceived ease of use scales were adapted from Ashraf et al.

(2014) and Davis (1989). We repeated the procedure for the second website and counterbalanced the order of the two websites across all participants.

Website manipulation check and confounds. Finally, we administered a manipulation check for the website stimuli. Participants' mood and overall time spent completing the task was also captured to control for possible influence on their perception of the experimental stimuli. The measures of the website manipulation check and mood were identical to those in Study 1.

Study 2 Results

Manipulation checks and confounds. Responses across the three manipulation check questions were averaged, and ANOVA showed that participants in the promotion condition placed relatively greater emphasis on ideal self ($M = 4.2$, with 7 = emphasis on ideal self), relative to those in the prevention condition ($M = 2.8$; $F(1, 357) = 95.51, p < .001$). Our website manipulation checks indicate that participants perceived the HH-LU website as high hedonic ($M = 4.7$) and low utilitarian ($M = 3.7$; $t(90) = 5.54, p < .001$), LH-HU website as low hedonic ($M = 3.6$) and high utilitarian ($M = 4.8$; $t(87) = 9.25, p < .001$), HH-HU website as high hedonic ($M = 4.6$) and high utilitarian ($M = 4.9$; $t(90) = 1.56, p = 1.22$), and LH-LU website as low hedonic ($M = 3.6$) and low utilitarian ($M = 3.8$; $t(88) = .93, p = .36$). Moreover, there was no main effect of the manipulation on participants' mood ($\alpha_{\text{Hedonic}} = .82$; $p > .10$) or total time spent completing the task ($M_{\text{Time promotion condition}} = 29.5$ and $M_{\text{Time prevention condition}} = 31.2$; $p > .10$).

Dependent Variables

Website evaluation (H1a). We averaged participants' attitudes towards the website on the five items to form a website attitude index ($\alpha = .89$). The participants' website evaluation index was submitted to a 2 (regulatory focus: promotion, prevention) x 4 (website type: HH-LU,

LH-HU, HH-HU, LH-LU) ANOVA. The results from the ANOVA were significant for website type ($F(3, 351) = 3.38, p < .05$) but not for regulatory focus ($F < 1$).

More central to our investigation, there was a significant regulatory focus by website type interaction ($F(3, 351) = 13.53, p < .001$). Supporting H1a, subsequent analysis showed that promotion-focused participants evaluated the HH-LU website more favorably than other websites [mean differences (HH-LU versus LH-HU) = 1.05; $p < .001$; (HH-LU versus HH-HU) = .62; $p < .01$; (HH-LU versus LH-LU) = 1.01; $p < .001$]. Similarly, prevention-focused participants evaluated the LH-HU website more favorably than other websites [mean differences (LH-HU versus HH-LU) = .96; $p < .001$; (LH-HU versus HH-HU) = .74; $p < .01$; (LH-HU versus LH-LU) = .87; $p < .001$]. The cell means and standard deviations for all website evaluations as a result of the interaction between regulatory focus and website type appear in Table 2 (for a graphical representation, see Figure 3).

-----Insert Table 2 and Figure 3 about here-----

Purchase intention (H1b). We averaged participants' purchase intentions on the five items to form a website purchase intention index ($\alpha = .94$). Results from a 2 (regulatory focus: promotion, prevention) x 4 (website type: HH-LU, LH-HU, HH-HU, LH-LU) ANOVA were not significant for website type and regulatory focus ($F < 1$). However, more central to our investigation, there was a significant regulatory focus by website type interaction ($F(3, 351) = 7.66, p < .001$). Supporting H1b, subsequent analysis showed that promotion-focused participants were more willing to purchase from the HH-LU website than from other websites [mean differences (HH-LU versus LH-HU) = .98; $p < .01$; (HH-LU versus HH-HU) = .80; $p < .01$; (HH-LU versus LH-LU) = .88; $p < .01$]. Similarly, prevention-focused participants were more willing to purchase from the LH-HU website than from other websites [mean differences

(LH-HU versus HH-LU) = .99; $p < .001$; (LH-HU versus HH-HU) = .62; $p < .05$; (LH-HU versus LH-LU) = .93; $p < .01$]. The cell means and standard deviations for participants' purchases intentions due to the interaction between regulatory focus and website type appear in Table 2, yielding a similar graphical representation to those shown in Figure 3.

Mediators

Next, we examined how fit from shopping experience affects participants' subjective experience of engagement and beliefs (PU and PEOU), and subsequently explored the role of engagement and individuals' beliefs in mediating the effect of fit on attitude towards and intention to purchase from the website.

Engagement (H2a-H2b). We created an engagement index by averaging the three items used to measure the construct ($\alpha = .82$). The participants' engagement index was submitted to a 2 (regulatory focus) x 4 (website type) ANOVA. The results from the ANOVA were not significant for website type and regulatory focus ($F < 1$).

Notably, we observed a significant regulatory focus by website interaction ($F(3, 351) = 10.50, p < .001$). Subsequent analysis showed that promotion-focused participants felt more engaged while exploring the HH-LU website than the other websites [mean differences (HH-LU versus LH-HU) = .90; $p < .001$; (HH-LU versus HH-HU) = .49; $p < .05$; (HH-LU versus LH-LU) = .67; $p < .01$]. Similarly, prevention-focused participants felt more engaged while exploring the LH-HU website than the other websites [mean differences (LH-HU versus HH-LU) = .89; $p < .001$; (LH-HU versus HH-HU) = .65; $p < .01$; (LH-HU versus LH-LU) = .81; $p < .001$]. The cell means and standard deviations for engagement as a result of the interaction between regulatory focus and website type appear in Table 2.

Perceived usefulness and perceived ease of use (H3a-H3b and H4a-H4b). We created a PU index by averaging the four items ($\alpha = .91$) and a PEOU index by averaging the five items ($\alpha = .90$) used to measure the constructs. The participants' PU index was submitted to a 2 (regulatory focus) x 4 (website type) ANOVA. The main effects of website type and regulatory focus were not significant ($F < 1$).

More specifically, we observed a significant regulatory focus by website interaction ($F(3, 351) = 8.47, p < .001$). Subsequent analysis showed that promotion-focused participants perceived the HH-LU website as more useful than the other websites [mean differences (HH-LU versus LH-HU) = 1.02; $p < .001$; (HH-LU versus HH-HU) = .56; $p < .05$; (HH-LU versus LH-LU) = .52; $p < .10$]. Similarly, prevention-focused participants perceived the LH-HU website as more useful than other websites [mean differences (LH-HU versus HH-LU) = .84; $p < .01$; (LH-HU versus HH-HU) = .67; $p < .05$; (LH-HU versus LH-LU) = .70; $p < .05$]. The cell means and standard deviations for PU as a result of the interaction between regulatory focus and website type appear in Table 2.

In addition, the participants' PEOU index was submitted to a 2 (regulatory focus) x 4 (website type) ANOVA. The results from the ANOVA were significant for website type ($F(3, 351) = 7.28, p < .01$) but not for regulatory focus ($F < 1$).

More central to our hypothesis, we observed a significant regulatory focus by website interaction ($F(3, 351) = 8.37, p < .001$). Subsequent analysis showed that promotion-focused participants perceived the HH-LU website as easier to use than other websites [mean differences (HH-LU versus LH-HU) = .58; $p < .05$; (HH-LU versus HH-HU) = 1.04; $p < .001$; (HH-LU versus LH-LU) = .48; $p < .05$]. Similarly, prevention-focused participants perceived the LH-HU website as easier to use than other websites [mean differences (LH-HU versus HH-LU) = 1.09; p

< .001; (LH-HU versus HH-HU) = 1.07; $p < .001$; (LH-HU versus LH-LU) = .63; $p < .05$]. The cell means and standard deviations for PEOU as a result of the interaction between regulatory focus and website type appear in Table 2.

Mediation Analysis

In order to further our understanding regarding the mechanism underlying the regulatory fit effect, we conducted mediation analysis to examine whether or not the regulatory fit effect on website evaluation and purchase intention was mediated by engagement, PU, and PEOU.

Mediation analysis for website evaluation and purchase intention. Separate analyses conducted for the two fit conditions (promotion focus/HH-LU and prevention focus/LH-HU) showed that engagement, PU, and PEOU mediated the effect of regulatory fit on website evaluation and purchase intention. We report our results for the mediation effects in Tables 3a and 3b (showing Model 1 without the mediator and Model 2 with the mediator) and present the standardized path coefficients and corresponding t-values in parentheses. Hence, ANOVA and mediation results provide support for H2-H4.

-----Insert Tables 3a and 3b about here-----

Study 2 Discussion

Taken together, the results from Study 2 support H1-H4. Study 2 provides further evidence that hedonic (utilitarian) websites allow individuals to sustain their promotion (prevention) goals. More importantly, the results demonstrate that individuals become more engaged and perceive the website as more useful and easier to use when there is a fit between their regulatory focus and website type, and that increased engagement, perceived usefulness, and ease of use mediate the effects of fit on attitude towards and intention to purchase from a website. Though the results of Study 2 provided support for our predictions, there is still a lack

of direct evidence that participants had favorable attitudes towards shopping experiences that fit when evaluating the two websites. Furthermore, the use of two product categories (smartphones and smartwatches) may call into question whether or not our findings are extendable to other websites selling other products. Study 3 not only addresses these issues but further validates our findings from Studies 1 and 2.

STUDY 3

Overview and Procedure

Stimuli development. Following a procedure similar to that in Study 2, four versions of an online store’s homepage—selling similar laptops—were designed, each varying in terms of its hedonic and utilitarian attributes (see Appendix C for examples of the HH-LU and LH-HU websites. The conceptualization of hedonic and utilitarian shopping experience is similar to that used in Study 1). In doing so, we conducted two pre-tests to create laptop-selling website homepages with (1) high hedonic-low utilitarian attributes (HH-LU), (2) low hedonic-high utilitarian attributes (LH-HU), (3) high hedonic-high utilitarian attributes (HH-HU), and (4) low hedonic-low utilitarian attributes (LH-LU).

Pre-test 1. Twelve laptop website homepages were designed to offer different levels of hedonic and utilitarian shopping experiences. A procedure similar to pre-test 1 in Study 2 was adopted. Thirty-two participants (16 females), recruited through MTurk, were told that the researcher was interested in their opinions of the laptop website homepages. Participants were provided with the definitions of hedonic and utilitarian websites. Next, the homepages were shown to them one at a time; they were asked to classify each homepage into one of five categories: HH-LU, LH-HU, HH-HU, LH-LU, or unsure. The target homepages were selected on the basis of the frequency with which each homepage was categorized across all participants.

Only those homepages that were characterized as HH-LU, LH-HU, HH-HU, and LH-LU by at least 75% of the participants were retained. The order of the website homepages was counterbalanced across all participants.

Pre-test 2. Thirty-one undergraduate/graduate students (18 females) were recruited from a large urban university in Australia. Similar to pre-test 1, participants were provided with the definitions of hedonic and utilitarian websites. Adopting an approach similar to that used by Okada (2005), participants were asked to rate each of the four laptop websites' homepages—retained from pre-test 1—on a five-item seven-point scale pertaining to the hedonic dimensions and a five-item seven-point scale pertaining to the utilitarian dimensions. The measures were identical to those used in the pre-test 1 of Study 1. The order of the website homepages was counterbalanced across all participants. We averaged the hedonic- and utilitarian-scale ratings for all four website homepages (HH-LU: $\alpha_{\text{Hedonic}} = .96$ and $\alpha_{\text{Utilitarian}} = .84$; LU-HU: $\alpha_{\text{Hedonic}} = .95$ and $\alpha_{\text{Utilitarian}} = .92$; HH-HU: $\alpha_{\text{Hedonic}} = .92$ and $\alpha_{\text{Utilitarian}} = .94$; LH-LU: $\alpha_{\text{Hedonic}} = .94$ and $\alpha_{\text{Utilitarian}} = .95$). As expected, participants perceived the HH-LU website as high hedonic ($M = 5.3$) and low utilitarian ($M = 3.7$; $t(30) = 7.40$, $p < .001$), the LH-HU website as low hedonic ($M = 3.5$) and high utilitarian ($M = 5.4$; $t(30) = 8.19$, $p < .001$), the HH-HU website as high hedonic ($M = 4.8$) and high utilitarian ($M = 4.9$; $t(30) = 0.61$, $p = .54$), and the LH-LU website as low hedonic ($M = 3.3$) and low utilitarian ($M = 3.5$; $t(30) = 0.98$, $p = .33$).

Method

Three hundred and ninety-nine (206 females; $M_{\text{age}} = 25$) undergraduate/graduate students who had not participated in the previous studies were recruited from a large urban university in Australia and randomly directed to one of the two regulatory focus conditions. Students who had

shopped online in the past three months were selected. The experiment was conducted in two phases. In the first phase, participants were put into a promotion (n = 201) or prevention (n = 198) focus condition through the same scenario as in Study 1. We then administered the regulatory focus checks which were the same as those used in Study 1.

Website evaluation and purchase intention. In phase 2, we asked participants to imagine being about to graduate and being offered a great job. To celebrate, they plan to buy a new laptop online. Next, they were shown one of the four versions of the laptop webpage stimuli. Each subject was randomly assigned to view only one webpage and was then asked to evaluate the website and indicate their purchase intention. The measures for evaluation and purchase intention are identical to those in Study 1.

Mediators (engagement, PU, and PEOU). Next, participants were asked to indicate their level of engagement and the extent to which they perceived the website to be useful and easy to use. The measures for engagement, PU, and PEOU are identical to those in Study 2.

Shopping experience attractiveness. In order to collect direct evidence that participants were paying more attention to website attributes that fit with their regulatory focus, we presented participants with six different shopping experiences (three hedonic and three utilitarian) and asked them to evaluate each of them on a seven-point scale (1 = “not at all attractive” and 7 = “very attractive”). If participants relied more on shopping experiences (hedonic versus utilitarian) that fit their regulatory focus in evaluating the website, they should find the experiences that address their regulatory concerns to be more attractive than those that do not.

Pre-test 3. Adopting a procedure similar to Wang and Lee (2006), we presented 37 participants (21 females), recruited through MTurk, with a list of nine hedonic and nine utilitarian online shopping experiences and asked them to evaluate their experiences based on

importance and impact on their laptop purchase decisions. We used the three hedonic shopping experiences (i.e., experiences that (i) allow me to explore new and exciting options, (ii) further enhance my excitement about the purchase, and (iii) is pleasurable and enjoyable) and three utilitarian shopping experiences (i.e., experiences that (i) provide upfront and easy access to in-depth information about the product, (ii) make me feel safe and confident about my decision, and (iii) allow me to focus on factual, objective information) which were most highly evaluated. These shopping experiences were presented as generic online shopping experiences rather than as experiences offered by a particular website.

Website manipulation checks and confounds. Finally, we administered a manipulation check for website stimuli. In addition, the subjects' mood and overall time spent completing the task were also captured. The measures of website manipulation check and mood identical to those in Study 1.

Study 3 Results

Manipulation checks and confounds. We averaged responses across the three manipulation check questions and showed through ANOVA that participants in the promotion condition placed relatively greater emphasis on ideal self ($M = 4.0$, with 7 = emphasis on ideal self), relative to those in the prevention condition ($M = 2.6$; $F(1, 397) = 98.48$, $p < .001$). Moreover, participants perceived the HH-LU website as high hedonic ($M = 4.75$) and low utilitarian ($M = 3.41$; $t(98) = 7.00$, $p < .001$), the LH-HU website as low hedonic ($M = 3.59$) and high utilitarian ($M = 4.93$; $t(98) = 10.02$, $p < .001$), the HH-HU website as high hedonic ($M = 4.64$) and high utilitarian ($M = 4.72$; $t(99) = .51$, $p = .61$), and the LH-LU website as low hedonic ($M = 3.50$) and low utilitarian ($M = 3.57$; $t(100) = .45$, $p = .66$). Finally, there was no main effect

of the manipulation on participants' mood ($\alpha_{\text{Mood}} = .82$, $p > .10$) or on total time spent completing the task ($M_{\text{Time promotion condition}} = 27.32$ and $M_{\text{Time prevention condition}} = 26.44$; $p > .10$).

Dependent Variables

Website evaluation (H1a). The website evaluation index was submitted to a 2 (regulatory focus: promotion, prevention) x 4 (website type: HH-LU, LH-HU, HH-HU, LH-LU) ANOVA. The results from the ANOVA were significant for website type ($F(3, 391) = 5.67$, $p < .01$) but not for regulatory focus ($F < 1$).

More central to our investigation, we found a significant regulatory focus by website type interaction ($F(3, 391) = 15.24$, $p < .001$). Hence, in support of H1a, subsequent analysis showed that promotion-focused participants evaluated the HH-LU website more favorably than other websites [mean differences (HH-LU versus LH-HU) = .91, $p < .001$; (HH-LU versus HH-HU) = .72, $p < .01$; (HH-LU versus LH-LU) = .92, $p < .001$]. Similarly, prevention-focused participants evaluated the LH-HU website more favorably than other websites [mean differences (LH-HU versus HH-LU) = 1.19, $p < .001$; (LH-HU versus HH-HU) = .92, $p < .01$; (LH-HU versus LH-LU) = 1.19, $p < .001$]. The cell means and standard deviations for all website evaluations as a result of the interaction between regulatory focus and website type appear in Table 4 (for graphical representation, see Figure 4).

-----Insert Table 4 and Figure 4 about here-----

Purchase intention (H1b). The purchase intention index was submitted to a 2 (regulatory focus: promotion, prevention) x 4 (website type: HH-LU, LH-HU, HH-HU, LH-LU) ANOVA. The results from the ANOVA were significant for website type ($F(3, 391) = 3.54$, $p < .05$) but not for regulatory focus ($F < 1$).

More pertinent to our investigation, we found a significant regulatory focus by website type interaction ($F(3, 391) = 8.91, p < .001$). Supporting H1b, subsequent analysis showed that promotion-focused participants were more willing to purchase from the HH-LU website than from other websites [mean differences (HH-LU versus LH-HU) = .92, $p < .01$; (HH-LU versus HH-HU) = .80, $p < .05$; (HH-LU versus LH-LU) = .95, $p < .01$]. Similarly, prevention-focused participants were more willing to purchase from the LH-HU website than from other websites [mean differences (LH-HU versus HH-LU) = 1.14, $p < .001$; (LH-HU versus HH-HU) = .98, $p < .01$; (LH-HU versus LH-LU) = 1.08, $p < .01$]. The cell means and standard deviations for participants' purchases intentions as a result of the interaction between regulatory focus and website type appear in Table 4. The graphical pattern of results was similar to those shown in Figure 4.

Mediators

Engagement (H2a-H2b). The participants' engagement index was submitted to a 2 (regulatory focus) x 4 (website type) ANOVA. The results from the ANOVA were significant for website type ($F(3, 391) = 6.59, p < .01$) but not for regulatory focus ($F < 1$).

Specific to our hypothesis, we observed a significant regulatory focus by website type interaction ($F(3, 391) = 11.77, p < .001$). Subsequent analysis showed that promotion-focused participants felt more engaged while exploring the HH-LU website than exploring other websites [mean differences (HH-LU versus LH-HU) = .96, $p < .001$; (HH-LU versus HH-HU) = .88, $p < .01$; (HH-LU versus LH-LU) = .92, $p < .01$]. Similarly, prevention-focused participants felt more engaged while exploring the LH-HU website than other websites [mean differences (LH-HU versus HH-LU) = 1.05, $p < .001$; (LH-HU versus HH-HU) = 1.04, $p < .01$; (LH-HU versus LH-LU) = 1.29, $p < .001$]. Our results reveal that promotion-focused participants (compared to

prevention-focused participants) felt more engaged while exploring the hedonic website, whereas the reverse was true for prevention-focused participants. The cell means and standard deviations for engagement as a result of the interaction between regulatory focus and website type appear in Table 4.

Perceived usefulness and perceived ease of use (H3a-H3b and H4a-H4b). We created a PU index by averaging the four items ($\alpha = .92$) and a PEOU index by averaging the five items ($\alpha = .91$) used to measure the constructs. The participants' PU index was submitted to a 2 (regulatory focus) x 4 (website type) ANOVA. The main effects of website type and regulatory focus were not significant ($p > .10$).

More importantly, we observed a significant regulatory focus by website interaction ($F(3, 391) = 7.41, p < .001$). Subsequent analysis showed that promotion-focused participants perceived the HH-LU website as more useful than other websites [mean differences (HH-LU versus LH-HU) = .73; $p < .05$; (HH-LU versus HH-HU) = .51; $p < .10$; (HH-LU versus LH-LU) = .63; $p < .10$]. Similarly, prevention-focused participants perceived the LH-HU website as more useful than other websites [mean differences (LH-HU versus HH-LU) = .99; $p < .01$; (LH-HU versus HH-HU) = .86; $p < .01$; (LH-HU versus LH-LU) = .83; $p < .05$]. The results are shown in Table 4.

The participants' PEOU index was also submitted to a 2 (regulatory focus) x 4 (website type) ANOVA. The results from the ANOVA were significant for website type ($F(3, 391) = 5.36, p < .01$) but not for regulatory focus ($F < 1$).

More specific to our hypothesis, we observed a significant regulatory focus by website interaction ($F(3, 391) = 10.06, p < .001$). Hence, subsequent analysis showed that promotion-

focused participants perceived the HH-LU website as easier to use than other websites [mean differences (HH-LU versus LH-HU) = .92; $p < .001$; (HH-LU versus HH-HU) = 1.02; $p < .001$; (HH-LU versus LH-LU) = .59; $p < .05$]. Similarly, prevention-focused participants perceived the LH-HU website as easier to use than other websites [mean differences (LH-HU versus HH-LU) = .87; $p < .01$; (LH-HU versus HH-HU) = 1.01; $p < .01$; (LH-HU versus LH-LU) = .81; $p < .01$]. The results are shown in Table 4.

Mediation Analysis

In order to further our understanding regarding the mechanism underlying the regulatory fit effect, we conducted a mediation analysis to examine if the regulatory fit effect on website evaluation and purchase intention was mediated by engagement, PU, and PEOU.

Mediation analysis for website evaluation and purchase intention. Separate analyses conducted for the two fit conditions (promotion focus/HH-LU and prevention focus/LH-HU) showed that engagement, PU, and PEOU mediated the effect of regulatory fit on website evaluation and purchase intention. We report the mediation effects results in Tables 5a and 5b (showing Model 1 without the mediator and Model 2 with the mediator) and present the standardized path coefficients and corresponding t-values in parentheses. Hence, ANOVA and mediation results provide support for H2-H4.

-----Insert Tables 5a and 5b about here-----

Shopping experience attractiveness. If participants relied more on websites that fit their regulatory focus in their evaluation, they should prefer the experiences that address their regulatory focus to those that do not. We averaged three hedonic and three utilitarian shopping experiences to form hedonic and utilitarian shopping experience indexes ($\alpha_{\text{Hedonic}} = .82$ and $\alpha_{\text{Utilitarian}} = .79$). We asked our study participants to indicate which type of shopping experience

would attract them more when purchasing a laptop online. A 2 (regulatory focus) x 2 (shopping experience type) repeated measures ANOVA on the shopping attractiveness index showed that the main effects of experience type ($F(1, 397) = 4.43, p < .05$) and regulatory focus ($F(1, 397) = 13.59, p < .01$) were significant.

In line with our predictions, the results showed a two-way interaction between regulatory focus and shopping experience type ($F(1,397) = 88.96, p < .001$). Planned contrasts indicated that promotion-focused participants ($M = 5.60$) considered hedonic experiences more attractive than prevention-focused participants ($M = 5.30; t(397) = 2.67, p < .01$), whereas prevention-focused participants ($M = 6.01$) considered utilitarian experiences more attractive than promotion-focused participants ($M = 5.20; t(397) = 8.62, p < .001$).

Study 3 Discussion

The results from Study 3 provide more support to our findings from Studies 1 and 2, and extend them in two notable ways. First, by using a different product category, the results strengthen the generalizability of the relationship between regulatory focus and the type of experiences being offered. Second, participants actually evaluated shopping experiences that fit their regulatory focus more favorably, which lends further support to our premise that hedonic (utilitarian) websites offer a better fit with promotion-focused (prevention-focused) shoppers.

GENERAL DISCUSSION AND CONCLUSION

In a series of studies conducted using student and non-student samples and across three websites selling different technology products, we show that regulatory focus moderates the influence of website characteristics on consumers' attitudes and purchase intention. Furthermore, we identified and explored new mechanisms underlying fit effects. Our conceptualization of the

shopping experience in light of customers' regulatory focus provides important and timely contributions to both theory and practice, which we discuss next.

Theoretical Contributions

This study contributes to the e-commerce, regulatory focus, and regulatory fit literatures on several fronts. First, consistent with recent calls to identify and explore what attracts customers to a specific website and how they can be converted into buyers (Campbell et al., 2013; Deng and Poole, 2010), this study provides a fresh theoretical perspective by leveraging the importance of regulatory focus and regulatory fit theories in the e-commerce context. From a theoretical standpoint, our findings make a critical and necessary contribution to the understanding of how fit influences consumers' decision making regarding websites by documenting the nature and role of engagement and consumer beliefs in mediating the effects of fit. Our findings imply that fit effects are not only persuasive when there is a match between individuals' regulatory focus and means of goal pursuit, such as product attributes, gains or losses, or construal level, but also for other means of goal pursuit, such as those related to shopping experiences. In doing so, this investigation followed Huang and Rust's (2013) call for e-commerce researchers to advance and contribute to e-retailing literature by using an intradisciplinary approach and utilizing theories not frequently applied to e-retailing. Also, our work brings the e-commerce and regulatory focus literature streams closer together and helps to develop further insights into online consumer decision making.

Second, by identifying and exploring the mediators and consequences of fit, this research provides an in-depth understanding of the process by which fit between regulatory focus and type of experiences offered influences consumers' attitudes and intention to purchase. Our results indicate that besides engagement, PU and PEOU mediate the effects of fit on consumers'

attitudes and intention to purchase from a website. Incorporating the role of PU and PEOU extends previous research on regulatory fit effect by providing a more comprehensive understanding of the mechanisms underlying compatibility effects.

Practical Contributions

E-retail managers can extract at least three key insights from this research. First, e-commerce businesses are finding it difficult to build e-commerce websites that suit and satisfy consumer needs (Zhang et al., 2011). With its grounding in regulatory focus and regulatory fit theory, this research not only offers prescriptions for different types of shopping experiences that should be furnished to online customers, but also provides regulatory goal-based explanations for those prescriptions. In this sense, the regulatory focus clarifies what experiences to offer such that the websites can be designed in an informative and purposeful fashion. More specifically, purposefully designing a website to appeal to the consumer type most likely to visit the website is one way e-commerce businesses could convert consumers. For example, a promotion or prevention focus can temporarily be introduced as a function of the website and usage occasion.

E-commerce businesses can infer their customers' regulatory focus through their product/service offerings (cosmetics versus prescriptions) (Kaltcheva and Weitz, 2006; Labroo and Lee, 2006) and/or click stream data collected through customer mouse-clicks and paths made through the website (Deng and Poole, 2010). For example, an e-commerce business selling prescriptions should expect its customers to have a temporarily enhanced prevention focus, whereas an e-commerce business selling games should expect its customer to have a temporarily augmented promotion focus. Hence, this research has significant implications for website presentation and customization (Thongpapanl and Ashraf, 2011). Therefore, depending on the type of customer e-commerce businesses target and the type of merchandise sold, some e-

commerce businesses may need to invest in making their websites more functional, while others should invest in hedonic attributes.

Second, limited financial resources may lead e-retail managers to make strategic investment decisions regarding website design. Providing shopping experiences that are either geared toward more hedonic or more utilitarian or both hedonic and utilitarian comes with a cost that may not be universally justified. Many e-commerce managers are frustrated with their online sales performance (Falk et al., 2010), and one possible reason for this may be a belief that both hedonic and utilitarian website attributes are necessary. Contrary to this erroneous belief, our results, by delineating the intricate relationship between individuals' regulatory focus and website characteristics, provide managers with a guide for designing a website that can elicit positive attitudes and, subsequently, desired behaviors. Websites that induce a subjective feeling of engagement and that are believed to be useful and easy to use can lead to more time spent browsing, which increases the probability of purchasing (Menon and Kahn, 2002). Hence, this study highlights the significance of developing insights into consumers' regulatory goals and provides e-commerce businesses with a guide for designing websites that positively influence even reluctant or wary consumers' attitudes and intentions by delivering appropriate value.

Third, in contrast to the extant literature on e-commerce which suggests that it would be ideal for an e-commerce business to offer a combination of both hedonic and utilitarian shopping experiences on their websites (Bernardo et al., 2012; Childers et al., 2001), our findings show that consumers prefer websites that offer shopping experiences that are in line with their regulatory focus. That is, offering a high hedonic/utilitarian shopping experience may not be as fruitful as was conventionally thought. Our study provides important insights for e-retail managers regarding how, by manipulating specific interface characteristics and by investing in

specific areas, they may not only be able to attract and retain online visitors, but also avoid future non-result expenses and enhance customer retention and purchase intention.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Online consumer decision making is a burgeoning research area with substantial practical relevance. However, as with any study, this study is not without limitations. In line with previous research (Deng and Poole, 2010), we used website homepages rather than full interactive websites (i.e., subjects could not click on the links on the web as they do in a natural internet environment). We believe that it is important for other researchers to extend our work using fully interactive websites. In this regard, tracking online customers' shopping behaviors and the corresponding click stream data, as well as measuring their galvanic skin responses and eye movements, are also promising avenues of exploration. Similarly, this research provides a better understanding regarding the fit effect on consumers' attitudes towards and intentions to purchase from a website. However, conventional wisdom is that the majority of the decisions made while shopping online occur as part of a single shopping episode (i.e., selecting an appropriate website, exploring it further and making a product/service purchase decision) (Ethier, Hadaya, Talbot, and Cadieux, 2006) and that consumers' prior experiences/decisions can influence their subsequent decisions (Labroo and Lee, 2006). Hence, future research should explore how a match (i.e., regulatory fit) between online consumers' goal pursuit strategies—hedonic versus utilitarian website—and their regulatory focus, affects their subsequent decisions to purchase products. Moreover, previous studies have shown that the level of involvement moderates the effect of fit on persuasion. Our study focused on a high involvement situation; future research can extend our findings by exploring the role of level of involvement in online customer decision making. Finally, consumers' past perceptions regarding online shopping being useful or easier to

use may directly or indirectly affect their perceptions of a particular e-retailer's website. That is, a general perception regarding online shopping being useful or easier to use may have a spillover effect on consumers' actual perception of an e-retailer's website. Future researchers can further our research by exploring whether or not general beliefs regarding online shopping may have a direct or indirect effect on consumers' beliefs regarding a particular e-retailer's website.

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Figure 1: Proposed Conceptual Model

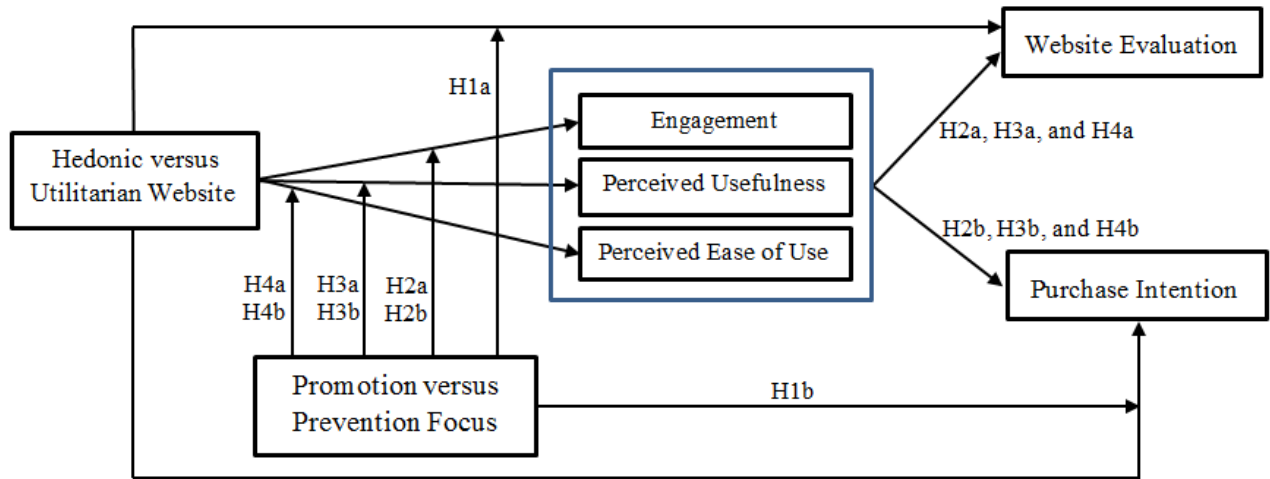


Figure 2: Effect of Regulatory Focus on Website Evaluation (Study 1)

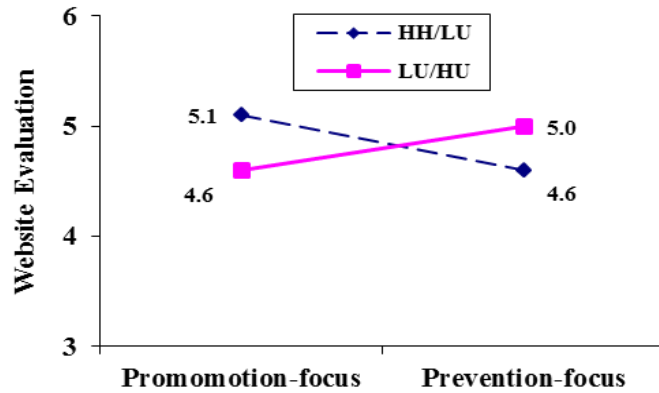


Figure 3: Effect of Regulatory Focus on Website Evaluation (Study 2)

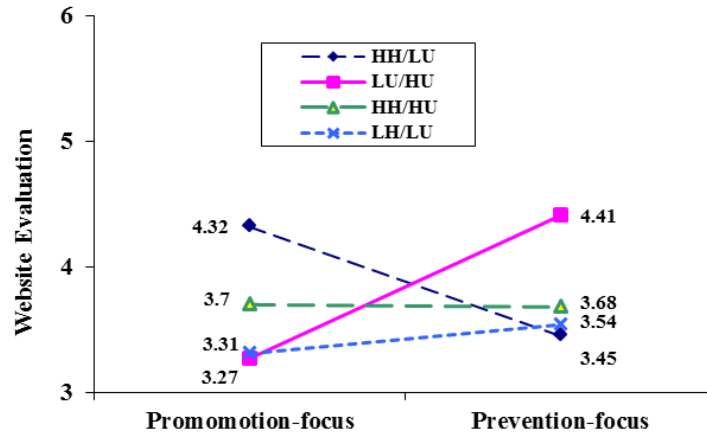


Figure 4: Effect of Regulatory Focus on Website Evaluation (Study 3)

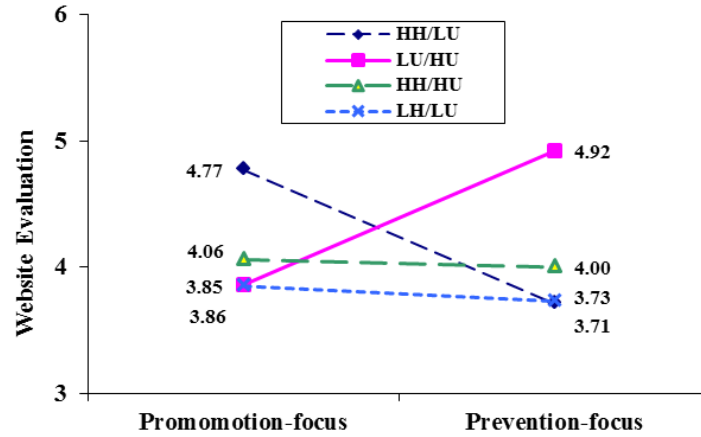


Table 1: Main Effects, Interactions, and Planned Contrasts (Study 1: n = 235)

Dependent Variables	Independent Variables							Hypotheses
	Main Effect	Interaction		Planned Contrasts				
	Regulatory Focus	Website	Regfoc x Website	Website	Promotion	Prevention		
Attitude	NS	NS	F(1, 233) = 23.10, p < .001	Hedonic	M = 5.1 (1.0)	M = 4.6 (1.3)	t(233) = 3.35, p < .01	H1a Supported
				Utilitarian	M = 4.6 (1.2)	M = 5.0 (1.1)	t(233) = 2.79, p < .01	
Purchase Intention	NS	p < .05	F(1, 233) = 21.45, p < .001	Hedonic	M = 4.6 (1.3)	M = 4.1 (1.5)	t(233) = 2.75, p < .05	H1b Supported
				Utilitarian	M = 4.3 (1.4)	M = 4.9 (1.3)	t(233) = 3.20, p < .01	

Table 2: Website Evaluation, Purchase Intention, Engagement, PU, and PEOU Results for Promotion-Focused Versus Prevention-Focused Participants (Study 2: n = 359)

Website Type	Promotion Focus: M (SD)	Prevention Focus: M (SD)	Estimate of Difference: t-Value	Hypotheses
Website Evaluations				
HH-LU	4.32 (1.17)	3.45 (1.01)	3.78*	H1a Supported
LH-HU	3.27 (0.95)	4.41 (1.13)	5.15*	H1a Supported
HH-HU	3.70 (1.02)	3.68 (1.09)	0.09	
LH-LU	3.31 (1.09)	3.54 (1.06)	1.01	
Purchase Intentions				
HH-LU	4.63 (1.13)	3.60 (1.21)	4.20*	H1b Supported
LH-HU	3.65 (1.55)	4.59 (1.24)	3.12*	H1b Supported
HH-HU	3.83 (1.48)	3.97 (1.32)	0.48	
LH-LU	3.76 (1.45)	3.66 (1.62)	0.28	
Engagement				
HH-LU	4.60 (1.08)	3.84 (0.87)	3.71*	
LH-HU	3.70 (1.06)	4.73 (0.96)	4.75*	
HH-HU	4.11 (1.25)	4.07 (1.03)	0.15	
LH-LU	3.93 (1.15)	3.92 (1.12)	0.04	
Perceived Usefulness				
HH-LU	4.91 (0.95)	4.03 (1.22)	3.81*	
LH-HU	3.89 (1.29)	4.87 (0.70)	4.40*	
HH-HU	4.35 (1.28)	4.21 (1.38)	0.51	
LH-LU	4.38 (1.50)	4.18 (1.44)	0.66	
Perceived Ease of Use				
HH-LU	5.23 (0.79)	4.28 (1.17)	4.52*	
LH-HU	4.64 (1.34)	5.37 (0.82)	3.02*	
HH-HU	4.18 (0.89)	4.29 (1.29)	0.48	
LH-LU	4.74 (0.88)	4.80 (1.34)	0.02	

*Significant at $p < .01$

Table 3a: Mediation Analysis when Dependent Variable is Attitude (Study 2: n = 359)

		Attitude											
		Dependent Variables						Attitude					
		Model 1	Model 2					Model 1	Model 2		Model 1	Model 2	
Regulatory Fit		AT	ENG	AT				AT	PU	AT	AT	PEOU	AT
Independent Variable	Promotion x HH-LU	0.37** (3.78)	0.36** (3.71)	0.18* (2.00)	<i>Hypothesis 2a</i> <i>Supported</i>	PU	0.37** (3.78)	0.38** (3.81)	0.25* (2.51)	0.37** (3.78)	0.43** (4.52)	0.22* (2.12)	<i>Hypotheses 3a & 4a</i> <i>Supported</i>
	Mediators	ENG		0.52** (5.76)						0.32** (3.12)	PEOU		
Independent Variable	Prevention x LH-HU	0.48** (5.17)	0.45** (4.75)	0.26** (2.83)	<i>Hypothesis 2a</i> <i>Supported</i>	PU	0.48** (5.17)	0.43** (4.40)	0.37** (3.71)	0.48** (5.17)	0.31** (3.02)	0.40** (4.24)	<i>Hypotheses 3a & 4a</i> <i>Supported</i>
	Mediators	ENG		0.49** (5.43)						0.26** (2.62)	PEOU		

Sobel Test (Attitude)

Promotion Focus Fit Condition	Prevention Focus Fit Condition
(ENG) z-score = 3.11; p < 0.01	(ENG) z-score = 3.58; p < .001
(PU) z-score = 2.41; p < 0.01	(PU) z-score = 2.25; p < .05
(PEOU) z-score = 2.62; p < 0.01	(PEOU) z-score = 2.10; p < .05

Note: Engagement (ENG), Perceive Usefulness (PU), Perceive Ease of Use (PEOU), Attitude (AT), Intention (INT), High Hedonic and Low Utilitarian (HH-LU), Low Hedonic and High Utilitarian (LH-HU)
 **p < .01; *p < .05

Table 3b: Mediation Analysis when Dependent Variable is Purchase Intention (Study 2: n = 359)

		Purchase Intention											
		Dependent Variables						Purchase Intention					
		Model 1	Model 2					Model 1	Model 2		Model 1	Model 2	
Regulatory Fit		PI	ENG	PI				PI	PU	PI	PI	PEOU	PI
Independent Variable	Promotion x HH-LU	0.41** (4.20)	0.37** (3.71)	0.22* (2.44)	<i>Hypothesis 2b</i> <i>Supported</i>	PU	0.41** (4.20)	0.38** (3.81)	0.24* (2.55)	0.41** (4.20)	0.43** (4.52)	0.21* (2.21)	<i>Hypotheses 3b & 4b</i> <i>Supported</i>
	Mediators	ENG		0.52** (5.84)						0.45** (4.83)	PEOU		
Independent Variable	Prevention x LH-HU	0.32** (3.13)	0.46** (4.76)	0.01 (0.07)	<i>Hypothesis 2b</i> <i>Supported</i>	PU	0.32** (3.13)	0.43** (4.40)	0.11 (1.11)	0.32** (3.13)	0.31** (3.02)	0.20* (2.06)	<i>Hypotheses 3b & 4b</i> <i>Supported</i>
	Mediators	ENG		0.69** (7.77)						0.48** (4.79)	PEOU		

Sobel Test (Purchase Intention)

Promotion Focus Fit Condition	Prevention Focus Fit Condition
(ENG) z-score = 3.13; p < .001	(ENG) z-score = 4.10; p < .001
(PU) z-score = 2.99; p < .01	(PU) z-score = 3.24; p < .001
(PEOU) z-score = 3.22; p < .01	(PEOU) z-score = 2.31; p < .05

Note: Engagement (ENG), Perceive Usefulness (PU), Perceive Ease of Use (PEOU), Attitude (AT), Intention (INT), High Hedonic and Low Utilitarian (HH-LU), Low Hedonic and High Utilitarian (LH-HU)
 **p < .01; *p < .05

Table 4: Website Evaluation, Purchase Intention, Engagement, PU, and PEOU Results for Promotion- Versus Prevention-Focused Participants (Study 3: n = 399)

Website Type	Promotion Focus: M (SD)	Prevention Focus: M (SD)	Estimate of Difference: t- Value	Hypotheses
Website Evaluations				
HH-LU	4.77 (0.97)	3.73 (1.22)	4.67*	H1a Supported
LH-HU	3.86 (1.08)	4.92 (1.05)	4.92*	H1a Supported
HH-HU	4.06 (1.03)	4.00 (1.18)	0.80	
LH-LU	3.85 (1.05)	3.73 (1.14)	0.56	
Purchase Intentions				
HH-LU	4.84 (1.11)	3.88 (1.53)	3.61*	H1b Supported
LH-HU	3.90 (1.45)	5.02 (1.32)	3.88*	H1b Supported
HH-HU	4.05 (1.49)	4.04 (1.43)	0.02	
LH-LU	3.90 (1.49)	3.94 (1.27)	0.14	
Engagement				
HH-LU	5.07 (1.05)	4.15 (1.45)	3.63*	
LH-HU	4.11 (1.19)	5.20 (1.08)	4.77*	
HH-HU	4.19 (1.10)	4.17 (1.29)	0.11	
LH-LU	4.16 (1.26)	3.91 (1.22)	1.01	
Perceived Usefulness				
HH-LU	4.85 (1.12)	4.08 (1.42)	2.99*	
LH-HU	4.12 (1.10)	5.01 (1.31)	3.91*	
HH-HU	4.34 (1.45)	4.21 (1.31)	0.45	
LH-LU	4.21 (1.22)	4.25 (1.27)	1.38	
Perceived Ease of Use				
HH-LU	5.32 (0.81)	4.51 (1.29)	3.69*	
LH-HU	4.40 (1.36)	5.38 (1.21)	3.80*	
HH-HU	4.30 (1.16)	4.34 (1.14)	0.31	
LH-LU	4.72 (0.88)	4.58 (1.28)	0.67	

*Significant at $p < .01$

Table 5a: Mediation Analysis when Dependent Variable is Attitude (Study 3: n = 399)

		Attitude											
		Dependent Variables											
		Model 1	Model 2		Model 1			Model 2		Model 1	Model 2		
Regulatory Fit		AT	ENG	AT	AT			PU	AT	AT	PEOU	AT	
Independent Variable	Promotion x HH-LU	0.43** (4.67)	0.35** (3.63)	0.16** (2.77)	<i>Hypothesis 2a</i> <i>Supported</i>	PU	0.43** (4.67)	0.29** (2.99)	0.24** (3.43)	0.43** (4.67)	0.35** (3.69)	0.20** (2.75)	<i>Hypotheses 3a & 4a</i> <i>Supported</i>
	Mediators	EXP		0.79** (13.96)						0.65** (9.39)	PEOU		
Independent Variable	Prevention x LH-HU	0.45** (4.93)	0.44** (4.77)	0.15* (1.99)	<i>Hypothesis 2a</i> <i>Supported</i>	PU	0.45** (4.93)	0.37** (3.90)	0.25** (3.05)	0.45** (4.93)	0.36** (3.78)	0.29** (3.38)	<i>Hypotheses 3a & 4a</i> <i>Supported</i>
	Mediators	EXP		0.69** (9.56)						0.54** (6.68)	PEOU		

Sobel Test (Attitude)

Promotion Focus Fit Condition	Prevention Focus Fit Condition
(ENG) z-score = 3.49; p < .001	(ENG) z-score = 4.26; p < .001
(PU) z-score = 2.85; p < .01	(PU) z-score = 3.37; p < .001
(PEOU) z-score = 3.41; p < .001	(PEOU) z-score = 2.95; p < .01

Note: Engagement (ENG), Perceive Usefulness (PU), Perceive Ease of Use (PEOU), Attitude (AT), Intention (INT), High Hedonic and Low Utilitarian (HH-LU), Low Hedonic and High Utilitarian (LH-HU)

**p < .01; *p < .05

Table 5b: Mediation Analysis when Dependent Variable is Purchase Intention (Study 3: n = 399)

		Purchase Intention											
		Dependent Variables											
		Model 1	Model 2		Model 1			Model 2		Model 1	Model 2		
Regulatory Fit		PI	ENG	PI	PI			PU	PI	PI	PEOU	PI	
Independent Variable	Promotion x HH-LU	0.45** (4.93)	0.35** (3.63)	0.19 (1.28)	<i>Hypothesis 2b</i> <i>Supported</i>	PU	0.45** (4.93)	0.29** (2.99)	0.27** (2.13)	0.45** (4.93)	0.35** (3.69)	0.14 (1.68)	<i>Hypotheses 3b & 4b</i> <i>Supported</i>
	Mediators	ENG		0.75** (10.93)							0.61** (7.82)	PEOU	
Independent Variable	Prevention x LH-HU	0.36** (3.88)	0.44** (4.77)	0.08 (0.96)	<i>Hypothesis 2b</i> <i>Supported</i>	PU	0.36** (3.88)	0.37** (3.90)	0.14 (1.70)	0.36** (3.88)	0.36** (3.78)	0.19** (2.21)	<i>Hypotheses 3b & 4b</i> <i>Supported</i>
	Mediators	ENG		0.66** (8.17)						0.62** (7.80)	PEOU		

Sobel Test (Purchase Intention)

Promotion Focus Fit Condition	Prevention Focus Fit Condition
(ENG) z-score = 3.44; p < .001	(ENG) z-score = 4.12; p < .001
(PU) z-score = 2.79; p < .01	(PU) z-score = 3.48; p < .001
(PEOU) z-score = 3.26; p < .01	(PEOU) z-score = 3.06; p < .01

Note: Engagement (ENG), Perceive Usefulness (PU), Perceive Ease of Use (PEOU), Attitude (AT), Intention (INT), High Hedonic and Low Utilitarian (HH-LU), Low Hedonic and High Utilitarian (LH-HU)

**p < .01; *p < .05

Appendix A: Study 1's Website Stimuli

Low Hedonic–High Utilitarian Website

The screenshot shows the Unique Mobiles website interface. At the top, there is a navigation bar with categories like Mobile Phones, Mobile Tablets, Accessories, Memory Cards, Cases, and More. A search bar is present with the text "Search for: 50". Below the navigation, there is a promotional banner for "Weapons of Choice" featuring Android, iOS, and Windows logos. The main content area displays a list of smartphones with filters on the left (Price, Brand, OS, etc.) and a "Sort By" dropdown. Three products are highlighted:

- Samsung GALAXY S4:** Priced at \$639. Features include 1.5GHz Quad Core processor, 5.0" Full HD Super AMOLED Display, 13MP Camera with Full HD Recording, Ram 1.5GB, Smart Power and Smart Scroll. Availability: Home Delivery, Click & Collect. "ADD TO CART" button.
- iPhone 5c 16GB:** Priced at \$729. Features include A7 chip, M7 coprocessor, 8MP iSight camera, RAM 1GB, iOS 7. Availability: Home delivery, In store pickup. "ADD TO CART" button.
- Nokia Lumia 520:** Priced at \$189. Features include 4.5" AMOLED HD+ display, 1.5GHz Dual Core processor, Optical Image Stabilisation (OIS), Primary camera 5 MP, RAM 512 MB. Availability: Home delivery, In store pickup. "ADD TO CART" button.

The footer contains sections for "Shopping With Us" (Return Policy, Delivery Information, Tracking Your Order), "Our Services" (Finance Option, After Sales Support, Our Warranties, Rating and Reviews), "About Unique Mobiles" (Store Locations, Careers, Extended Warranty), and "Contact Us" (Email, Phone, Live Chat). It also features logos for PayPal and Trustwave. Copyright notice: © 1997 - 2013 Unique Mobiles Limited. All Rights Reserved. Terms & Conditions, Privacy Policy.

High Hedonic–Low Utilitarian Website

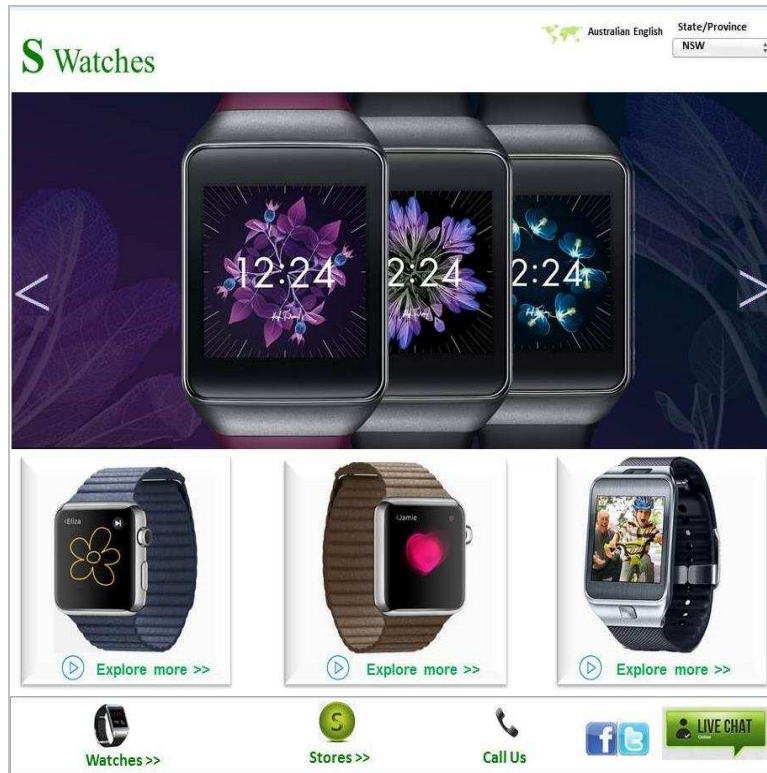
The screenshot shows the Q Mobiles website interface. At the top, there is a navigation bar with categories like PRODUCTS, ACCESSORIES, STORE LOCATOR, and COMMUNITIES. A search bar is present with the text "Search for: Q". Below the navigation, there is a large hero image of a hand holding an HTC One smartphone. The text on the right side of the image reads:

HTC One
Reshaping your smartphone experience
Stunningly designed sleek aluminium body with a breathtaking 4" 720p HD screen that is packed with colour and detail.
[LEARN MORE](#)

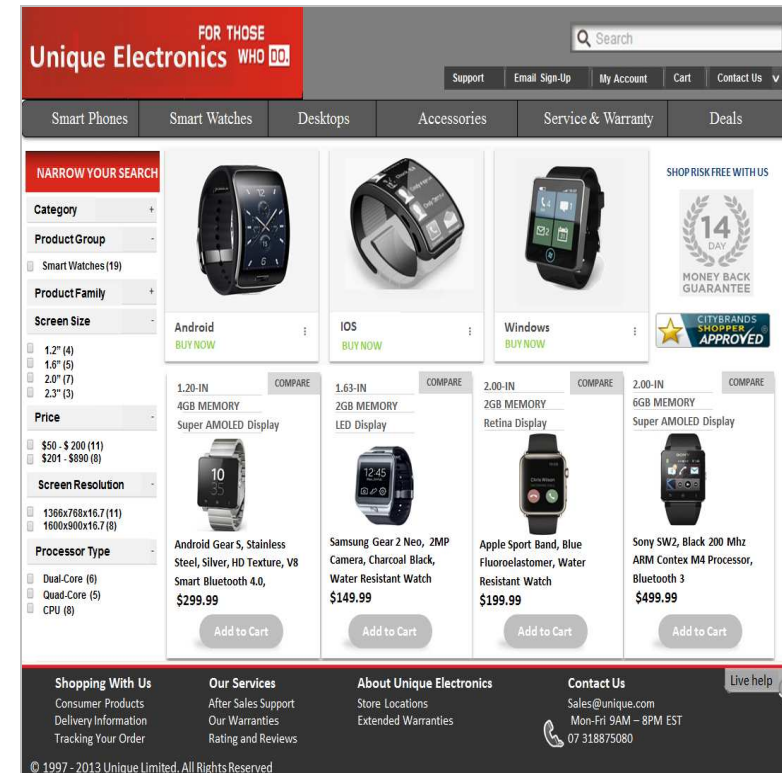
Below the hero image, there is a row of four smartphone icons (Samsung, iPhone, HTC One, and another HTC One) and social media icons for Facebook, Twitter, and YouTube. Below this, there are four main navigation buttons: "Compare phones >", "Buy a smart phone >", "Find a store>", and "Call Us 133-622". The footer contains sections for "Products" (Smartphones, Accessories, Buy Accessories), "Promotions" (Special offers, New Arrivals), "Support" (Support Centre, FAQ, Terms & Conditions), and "Our Services" (Finance Options, After Sale Support, Our Warranties). Copyright notice: © 1997 - 2013 Q Mobiles Limited. All Rights Reserved.

Appendix B: Study 2's Website Stimuli

High Hedonic-Low Utilitarian Website



Low Hedonic-High Utilitarian Website



Appendix C: Study 3's Website Stimuli

High Hedonic-Low Utilitarian Website



Low Hedonic-High Utilitarian Website

