Regrettable-Escapism… the negative effects of mobile app use: A retail perspective

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ABSTRACT

Despite the enhanced shopping opportunities that mobile devices offer to consumers, there is a fine line between consumers enjoying the mobile shopping process and them regretting time spent involved in it. Through the lens of *Uses and Gratifications Theory* (U&GT) and drawing on *Flow Theory*, this research aims to understand the effects of consumers' interactions with mobile shopping apps on their intention to reuse the app in the future, loyalty towards the brand and brand reputation. Study 1, through a questionnaire (n=1,024), provides insight into the positive and negative relationships between Utilitarian and Hedonic gratifications on intentions to reuse a retailer's mobile app, loyalty towards the brand and the brand's reputation. Through undertaking 24 in-depth interviews, Study 2 provides deeper insight into these relationships to uncover the complex nature of the negative effects of escapism. Findings demonstrate that the addictive nature of retailers' shopping apps lead to *regrettable escapism*. The flow state of mind experienced during escapism, becoming engrossed and notions of time-distortion, leave consumers with feelings of guilt and frustration due to the perceived wasted time spent on the retailer's app. Accordingly, this research advances theoretical understanding of escapism and its negative effects with ubiquitous, portable smartphones. The research provides implications for retailers and policy makers, while offering avenues for future research.

1.0 INTRODUCTION

Branded mobile applications (apps) have continuously changed the way consumers shop, search for information, socialise, communicate and generally seek both hedonic and utilitarian gratifications. It is expected that 258.2 billion branded mobile apps will be downloaded worldwide by 2022 (Statista, 2019). A branded mobile app is software that is downloadable to a mobile device via an app store, such as Apple's App Store or Google's Play Store, and prominently displays a brand identity in the form of a brand logo or icon (Bellman et al., 2011). Mobile apps are end-user software that enables individuals and developers to extend the smartphone's functionality. The proliferation of smartphones and the continued advancements in technology has seen retailers adopt apps as a form of service delivery at an exhilarant rate (McLean et al., 2020; Wang et al., 2015). Such mobile app adoption by retailers has been spurred due to their positive marketing outcomes, such as positive brand attitudes, purchase intentions, loyalty towards the brand and enhancing the customer experience (Jeon et al., 2019; Fang, 2018; McLean et al., 2018; Fang, 2017). Accordingly, consumers have embraced branded mobile apps for an array of needs and gratifications, including communication, social networking, information searches, shopping and escaping the difficulties of the real world (Stocchi et al., 2020; Rutz et al., 2019; Dinsmore et al., 2017; Kim et al., 2015).

Consumer reports suggest that 90% of mobile Internet time is spent on mobile apps (eMarketer, 2020), while an average user spends approximately 4 hours per day on mobile apps (App Annie, 2020). Smartphone and mobile app usage has surged further during the Covid-19 global pandemic, seeing an overall increase in smartphone usage by 20%, with spending through apps having increased by 25% from the previous year (App Annie, 2020). Research has found that a prominent reason for such extant use of mobile apps is as a distraction mechanism (Stocchi et al., 2017; Stocchi et al., 2020). Accordingly, in order to escape the stresses of everyday life, and to achieve instant forms of gratification, consumers are engaging in escapism behaviour, entering a flow state of mind through mobile apps. However, such excessive time spent on mobile apps has prompted commentary and research on their addictive nature and their subsequent effects on mental wellbeing (Barnes et al., 2019).

Smartphones have created the *always-on consumer* whereby individuals are afraid to leave their home without their mobile device. As consumers can use mobile devices on-the-go they are able to frequently interact with the technology and escape from the real word anytime, anywhere (Fuentes and Svingstedt, 2017; Wang et al, 2015). A recent report indicates that 1 in 3 individuals believe smartphone usage to have a negative impact on their health and wellbeing,

leading to stress, frustration and anxiety (Ofcom, 2018). Consumers' habitual mobile-related behaviour is often negatively perceived with them wishing they would spend less time on social media (Ko et al., 2015, Schoenebeck, 2014, Shin & Dey, 2013) and, more specifically, on apps. As a result, many users resort to downloading 'behavioural-control' apps, such as *Freedom* and *RescueTime*, to block, limit or monitor their access to certain apps at certain times (Lukoff et al., 2018). With the rise of awareness in spending too much time on mobile devices, and psychological developments in understanding correlations between mobile app use and anxiety, sleep disturbances, stress, decreased academic performance, and depression (Samaha & Hawi, 2016), there has been a surge in the number of wellbeing apps, such as *Headspace*. Subsequently, the ubiquitous nature of smartphones could lend themselves to be a greater concern than general Internet or computer addiction due to their higher level of portability, and ultimate personal affinity (Jeong et al., 2016; Demirci et al., 2014). Some commentators suggest that smartphones may be the preeminent technology that encourages technology addiction through escapism behaviour, resulting in habitual checking and higher levels of time spent on mobile devices (Wu, 2015; Shambare et al., 2012).

Despite the increase in the number of wellbeing and app-limiting apps being used by consumers, they continue to frequently and excessively use their mobile apps to seek gratifications, particularly to escape from the stress and strains of their daily life. To date, research has mainly drawn on technology adoption models to understand consumer behaviour with mobile apps (e.g. Yang, 2013; Baptista & Oliveira, 2015; Fang, 2017; Fong et al., 2017). Moving beyond this, through the lens of *Uses and Gratifications Theory* (U&GT), to study utilitarian and hedonic gratifications, and drawing on *Flow Theory*, to understand escapism behaviour, this research aims to examine the effects of consumers' interactions with retailers' mobile shopping apps on their intention to reuse the app in the future, alongside important marketing outcomes beyond the app, including loyalty towards the brand and brand reputation. This research uncovers a paradoxical situation with addictive escapism behaviour through retailers' mobile apps and investigates why consumers become so deeply immersed in them and continue to engage with them despite their negative impacts. Based on our findings, we introduce the term *regrettable-escapism* and detail the problematic notion of *regrettable-escapism* through retailers' mobile shopping apps. Thus, this research contributes to the mobile app literature by drawing focus on the role of branded mobile apps as a means for consumers to achieve utilitarian (life-compatibility) and hedonic (enjoyment, and escapism) gratification goals, and the subsequent implications of such gratifications for retailers.

2.0 LITERATURE REVIEW

2.1 Mobile app usage for gratification

Numerous theories have been used to help understand consumers' use and behaviour with mobile apps, with particular emphasis on the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975), the Theory of Planed Behaviour (TPB; Ajzen, 1985), Diffusion in Innovations Theory (DOI; Rogers, 1995), the Technology Acceptance Model (TAM; Davis, 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT; Venkatesh et al., 2003). The application of these theories has been seen throughout mobile app and mobile shopping literature (e.g. Huang et al., 2019). However, criticisms have emerged towards this narrow view of understanding mobile app use in that the models have become inherently limited in explaining how beliefs towards technology are shaped.

Uses and Gratification Theory (U&GT) is a motivational paradigm that has been used by researchers to help understand the motivations of individuals to adopt and use technology (Grellhesl et al., 2012). The theory derives from communication science (Katz, 1959) and helps to explain why individuals use specific technology to satisfy their needs (Gallego et al., 2016). It proposes that individuals use technology for a precise purpose (Katz, 1959) - i.e. for a specific need, such as enjoyment or to escape. Prior research has alluded that the theory can be applied to almost any type of media or technology due to its axiomatic nature (Luo & Remus, 2014). Accordingly, U&GT has been used to understand consumers' use of radio and television (Leung and Wei, 1998), the Internet (Flanagin & Metzeger, 2001), online games (Wu et al., 2010), social networks (Osei-Frimpong & McLean, 2018), augmented reality (Rauschnabel, 2018) and voice assistants (McLean & Osei-Frimpong, 2019). Thus, U&GT is a useful and interesting theoretical lens to investigate consumers' choice to use retailers' mobile apps as they are likely motivated to gratify an array of needs.

Research examining the usage of smartphones can draw on U&GT, whereby individuals seek out mobile app usage as a way of satisfying specific needs (Katz et al., 1974); one motive being the need for an escape outlet (Wang et al., 2015). Escaping for the needs of entertainment, stress relief, interest, or information searching are often prominent in respect to mobile shopping apps (Wang et al., 2015). Thus, researchers suggest that the concept of escapism can help to explain mobile retail app adoption and use. Escapism entails cognitive narrowing, which is characterised by proximal goals, concrete thinking, distorted time perceptions,

cognitive rigidity and a flow state of mind (Baumeister, 1990; Csikszentmihalyi, 1990). Escapism is an escape from the self often both in a psychological and physiological level. Katz and Foulkes (1962) affirm that escapism concerns intensified media exposure as a result of certain deficits or difficulties in everyday life, such as stress (Pearlin, 1959) or social isolation (Katz & Foulkes, 1962), often resulting in habitual compensatory gratifications or coping mechanisms (Knobloch-Westerwick et al., 2009; Roth & Cohen, 1986).

Mobile app literature has touched upon the notion of consumers using retail apps not only for fulfilling purposeful utilitarian needs, such as browsing, comparing and purchasing of goods and services in which consumers need (Marriott et al., 2017), but also as a means of fun (Natatajan et al., 2017). In fact, many mobile retailing apps have been developed to incorporate Augmented Reality (AR) technology to draw on the enjoyable aspects of using mobile apps to shop (Barhorst et al., 2021). Thus, AR technology has further allowed consumers the means of 'escape' from the real world that they crave from spending time on retailing apps. Accordingly, such mobile retailing apps are being used for a variety of hedonic as well as utilitarian gratifications at an increasing rate.

Agarwal and Karahanna (2000) presented the concept of cognitive absorption, moving beyond instrumental beliefs as drivers of consumer behaviour towards technology. Cognitive absorption illustrates that behaviour towards technology not only derives from instrumental beliefs but also complex cognitive beliefs drawn from holistic experiences (Agarwal & Karahanna, 2000). In this vain, constructs such as the *state of flow* (Csikszentmihalyi, 1990) have been empirically established as significant predictors of important outcomes related to the use of technology (Hoffman & Novak, 2009). Such cognitive absorption and the state of flow occur during the gratification of escapism behaviour (Baumeister, 1990; Katz & Foulkes, 1962), which can be seen to extend to the mobile retail app environment.

Originally, *flow* was distinguished as a combination of a clear goal, feedback, challenges, matching of skills, concentration, focused attention, control, the loss of self-consciousness, and time distortion (Csikszentmihalyi, 1997). There are conceptual similarities between cognitive absorption and the concept of flow. Several of the factors inducing cognitive absorption, such as control, time distortion and immersion, mirror those conceptualisations of the flow concept (Agarwal & Karahanna, 2000). The escapism model illustrates that escapism is psychologically rewarding and is described as being immersed in an activity, cognitively absorbed and a flow state of mind (Stenseng, 2009). Over time, the concept of flow and its application to technology has adapted through the works of Hoffman and Novak (1996), Novak et al. (2003) and Hoffman

and Novak (2009). Central to this work is that the concept of flow is the complete engagement and immersion in an activity (Hoffman & Novak, 2009).

Researchers generally agree that a flow state of mind is something that most individuals will have experienced, either through sports, board games, dancing, reading, watching television or shopping (e.g. Nanda and Banerjee, 2020). However, despite the conceptual and empirical developments of flow over the years, the concept remains somewhat murky, particularly within the mobile retail app setting. Social media research has considered the role of flow in relation to the amount of time users spend on various platforms (e.g. Dhir et al., 2020) and have subsequently developed gamification strategies to encourage further app engagement. The same strategies are beginning to be seen more in mobile retail apps, but the consequences of such on consumers' attitudes and behaviours have remained under-explored.

While a unified definition of 'flow', and its measures, has not been established in literature (see: Ghani & Dashpande, 1994; Hoffman & Novak, 1996; Choi et al, 2007; Hoffman & Novak, 2009), consensus illustrates that the state of flow encapsulates intrinsic enjoyment and absorption in an activity. Intrinsic enjoyment refers to the intrinsic pleasure derived from the interaction, while absorption refers to highly engaging and engrossing experiences that develop focused attention, time distortion and complete immersion in the activity (Barnes et al., 2019). Csikszentmihalyi (1990) and Ghani and Deshpande (1994) assert that positive outcomes are associated with the state of flow, resulting in positive attitudes towards technology. Hoffman and Novak (2009) extended their original model (see: Hoffman & Novak, 1996) to include the role of flow in influencing attitudes, behavioural intentions and behaviours. Within the desktop web environment, flow has been found to positively influence numerous important marketing outcomes including, online purchase intention (Liu et al., 2016; Liu & Pham, 2016; Zanjani et al., 2016; Huang, 2012), frequency of use (Pelet et al., 2017), loyalty towards a brand (Huang et al., 2017; Liu & Pham, 2016; Bilgihan et al., 2016; Zhou et al., 2012), brand equity (Bilgihan et al., 2016; Bilgihan & Bujisic, 2015), and future usage intention/intention to return (Rodriguez-Ardura & Meseguer-Artola, 2016; Kim et al., 2013; Chang, 2013; Zhou, 2013). More recently, flow has also been established as an important variable in influencing learning, enjoyment and information utility during use of augmented reality (AR) mobile apps (Barhorst et al. 2021).

2.2 The "Dark Side" of Mobile App Gratifications

Despite positive outcomes of hedonic and utilitarian gratifications from mobile app usage, attention has begun to focus on the ubiquitous nature and the growing commentary on smartphone/app addiction and its negative consequences on wellbeing (e.g. Lin et al., 2017; Jeong et al., 2016; Sapacz et al., 2016; Samaha & Hawi, 2016). The continued gratifications individuals seek from apps has resulted in such problematic smartphone usage (addiction) which, in turn, can result in increased escapism behaviour; this subsequently leads to higher levels of the state of flow as this would logically explain the increased interaction, deep state of involvement, attention and engagement with mobile apps. Grant and O'Donohoe (2007) observe that mobile shopping has close ties with the notion of escapism as consumers often turn to mobile apps out of mere boredom and to satisfy specific gratifications (i.e. hedonic benefits). In contrast to the use of desktop computers and other less portable devices, the state of flow with mobile devices may stimulate problematic behaviours due to their constant availability, which could result in some form of perceptual immersion with apps (Barnes et al., 2019). Drawing on research by Barnes and Pressey (2017) and Turel et al. (2011), the relationship between addiction and perceptual immersion results in increased flow experiences as such technology addiction can produce a framing effect resulting in individuals initially perceiving mobile app use as a positive activity.

Turel et al. (2011) indicate that addiction results in a change in cognitive processing. Therefore, individuals who have higher levels of technology addiction have more positive perceptions towards the technological system, resulting in higher levels of absorption and immersion in the system. Thus, even if individuals know they will feel guilt following the use of the device, this does not prevent them 'escaping' and engaging in the activity. Given that smartphones enable individuals to habitually use mobile apps anytime, anywhere (Shanker et al., 2016), even on-the-go (Wang et al., 2015), they can be more likely to develop addictive behaviour than non/less portable devices, such as desktop computers, laptops and tablets, due to proximity alone. Addictive behaviour is a term applied to excessive behaviour that has negative consequences (Rose & Dhandayudham, 2014). Clinicians state that addiction involves intense preoccupation with a behaviour to seek gratification which leads to psychological changes in an individual's mind. It is associated with a loss of control and negative outcomes either from a psychological, social or physical point of view (Sussman et al., 2010). Thus, the addiction to seek gratification to escape the real world through mobile apps may lead to negative consequences. Therefore, whilst those consumers addicted to smartphone use may hold positive perceptions of the

technology, the negative consequences of the addiction (problematic behaviour) and immersion with the technology may spill-over to effect important marketing outcomes.

Mobile apps have become indispensable to many individuals in their daily lives. Acknowledging consumers' need to seek gratifications, due to habitual addictive behaviour with mobile apps, fords us the ability to examine the effects of gratifications sought by consumers in a mobile retailing app context. Such research is both timely and important given the continued ubiquity of the smartphone device, the proliferation of retailers delivering services through mobile apps, the general increase in consumer's mobile app use, the amplification of mobile app use during Covid-19, the need to understand consumers' use of technology through a lens other that traditional technology theories and the growing reports and concern of problematic, addictive mobile app use. The following sections outline our hypothesis related to effects of both utilitarian and hedonic gratifications in relation to mobile app use.

3.0 CONCEPTUAL DEVELOPMENT

While consumers' needs and gratifications are dependent on unique circumstances and characteristics, prior research has aimed to catalogue such needs and gratifications (Katz et al., 1973). Recently, McLean and Osei-Frimpong (2019) as well as Stocchi, Pourazas and Michaelidou (2020) categorised uses and gratifications as both *utilitarian* and *hedonic*. From a utilitarian viewpoint, consumers may use a retailer's app for information gathering or to complete a task. From a hedonic viewpoint, consumers may use a retailer's app to seek enjoyment and escape difficulties in everyday life. Thus, drawing on the aforementioned discussion, alongside Technology Task Fit (TTF), U&GT and Flow Theory, we further assess the role of the utilitarian need, *compatibility* and the hedonic needs, *enjoyment* and *escapism*. The following sections outline our rationale.

3.1 Compatibility

Previous research outlines the importance of utilitarian factors as antecedents to technology adoption and use (Rauchnabel, 2018; King & He, 2006). Technology acceptance theories suggest that individuals use technologies that are compatible with life and the way they like to live. U&GT draws a parallel underlying theoretical assumption, particularly with Technology Task Fit Theory (TTF), that individuals have needs that are related to their specific lifestyle and circumstances (e.g. busy lives and want to browse on the go) and thus choose and use

technologies they expect to meet their needs (Katz et al., 1974; Rauschnabel, 2018; Sundar & Limperos, 2013).

In relation to technology, compatibility is defined as '*the degree to which an innovation is perceived as consistent with the existing values, past experiences, and the needs of potential adopters*' (Rogers, 2003, p.240). Drawing upon Rogers (2003), and in line with Ozturk et al. (2016), we define compatibility as the degree in which technology fits the lifestyle and the experiences of the individual. Goodhue (1995) argues that individuals are more likely to adopt and use technologies if the technology fits with their activities and situation. According to the TTF theory, a technology's compatibility with an individual's needs, previous ideas, existing values and beliefs is an important utilitarian gratification which influences the use of technology (Chen et al., 2002). Thus, it is important that a brand's technology is compatible with the needs of the individual (Fazeli et al, 2020). A key part of what makes a mobile device an indispensable part of a consumer's everyday life is the ability to use them and their apps on-the-go (Kim et al., 2013), fording to the lifestyle of the user.

In the context of online shopping, Chen et al. (2002) extended TAM and found that compatibility influences an individual's attitude to use an online virtual store. Koenig-Lewis et al. (2010) outline the importance of compatibility in general smartphone device usage, with Ewe et al (2015) asserting that compatibility with lifestyle is a significant predictor of mobile banking. Furthermore, compatibility is found to influence consumers' loyalty towards mobile hotel booking systems (Ozturk et al., 2016). Thus, it appears individuals seek utilitarian gratifications from their smartphone device. Therefore, in relation to consumers' use of retailers' mobile apps we hypothesise:

H1a: Compatibility has a positive effect on brand reputation

H1b: Compatibility has a positive effect on loyalty towards the brand

H1c: Compatibility has a positive effect on intention to reuse the app

3.2 Intrinsic Enjoyment

Consumers often seek intrinsic enjoyment gratifications from media (Gallego et al., 2016). U&GT scholars (e.g. Baldus et al., 2015) outline intrinsic enjoyment as a key hedonic gratification sought from the use of technology. Intrinsic enjoyment has been outlined as a

motivational factor in consumer adoption and use of technological systems (Nanda and Banerjee, 2020; Venkatesh et al, 2012). In the context of this study, we refer to intrinsic enjoyment as the intrinsic pleasure derived from the interaction with a retailer's mobile app. Individuals often turn to technologies to satisfy their tension-related needs (McGuire, 1974). Accordingly, they decide on technologies with high hedonic value (Katz et al, 1974); in other words, media that delivers some element of enjoyment. Through a U&GT theoretical lens, enjoyment reflects the notion of distracting oneself from regular activities through engaging with entertaining media (Ruschnabel, 2018). Prior research asserts that mobile apps are often recognised for their utilitarian value, given that consumers can use them on-the-go and save specific user preferences (Hubert et al., 2017). However, Hsiao et al. (2016) argue that the level of enjoyment consumers glean from their interactions with mobile apps influences their attitudes and behaviours towards them, in line with this, Kunkel et al (2021) suggest that gamification tactics within a mobile app that enhance consumers' enjoyment positively influences loyalty towards a brand. Fang (2018) illustrates that a consumer's hedonic motivation to use mobile apps is fundamental to app successfulness. Hedonic benefits are associated with numerous positive brand related outcomes (Rauschnabel, 2018). Thus we hypothesise:

H2a: Intrinsic enjoyment has a positive effect on brand reputation

H2b: Intrinsic enjoyment has a positive effect on loyalty towards the brand

H2c: Intrinsic enjoyment has a positive effect on intention to reuse the app

3.3 Escapism

As previously asserted, Chiu et al. (2014) observe that gratification, in relation to shopping for the purpose of stress relief, has a significant effect on hedonic value and subsequent repeat purchase intention. As previously outlined, we operationalise and define escapism as entailing cognitive narrowing, which is characterised by proximal goals, concrete thinking, distorted time perceptions, cognitive rigidity and a flow state of mind (Baumeister, 1990; Csikszentmihalyi, 1990). As such, escapism is inherently linked to U&GT in providing instant gratification of escaping the real world. However, the instant gratification can turn into a prolonged experience once consumers have entered a flow state of mind with their mobile retail apps.

Despite consumers' gratifications being sought and met using mobile retail apps for escapism, the amount of time being consumed by these apps has begun to see a shift in consumer interactions and attitudes with them. Consumer decisions to engage in avoidant behaviour can, therefore, result in retrospective negative emotion (Luce, 1998). On this premise, if consumers become aware of their escapism habits, or their mobile app addiction, and their negative effects on their productivity they may become cautious to "escape" through retailing apps. However, given the addictive behaviour shown towards mobile apps, and thus the distorted cognitive viewpoint (Barnes et al., 2018) of the benefits of escaping, consumers find it difficult to resist. Although addiction to smartphones generally means that users will seek out gratification from escaping the real world through their mobile apps, due to the level of anxiety involved in repetitive escapism behaviour, it has been observed in other technology contexts that anticipatory regret from learned behaviour can negatively impact intention to repeat a behaviour and, therefore, result in decision avoidance (Janis & Mann, 1977; Reb, 2008; Rose & Dhandayudham, 2014; Sussman et al., 2010). This can further be applied to retailing apps in that consumers may try to make conscious decisions to avoid reusing an app if they know it will distract them.

Mobile shopping on apps, particularly for utilitarian means, are often used for productivity purposes, as discussed in relation to compatibility with lifestyles. Voropanova (2015) observe that value obtained in this regard often derives from time/effort savings, money savings, right purchase and perceived utility benefits. Furthermore, Fuentes and Svingstedt (2017) observe that information overload negatively impacts consumers' experiences, whilst Dey and Srivastava (2017) outline that escapism through mobile app shopping can result in impulse purchasing. Accordingly, it can be suggested that engaging in escapism reduces levels of perceived productivity. As productivity is found to be a significant antecedent of overarching value, it can be argued that escapism can reduce the level of value consumers feel towards a brand.

In early work by Pine and Gilmore (1998), it was found that escapism did not influence experiential pleasure and, instead, had negative effects on both store patronage and recommendation intention. Along the lines that escapism can result in concerns around information overload (Scheibehenne et al., 2010), Hassan et al. (2013) confirm that complexity (i.e. too many factors to consider) negatively affects consumers' mind set and produces negative feelings of frustration and helplessness. In respect to U&GT, if the need for gratification is to obtain product information, in order to make an informed purchase decision,

consumers will not feel gratified if they feel overwhelmed as they will not be able to feel fully informed when making their final purchase decision. Consumers who are less informed about the brands they identify with are more likely to be motivated by conformity, while consumers who seek brands based on product knowledge are more likely to be motivated by escapism (Labrecque et al., 2012).

In respect to hedonic gratification circumstances, Wang and Hsiao (2012) found that level of consumer enjoyment will reach the highest when both perceived challenging of a shopping task and shopping skill are high in a retail store shopping experience. To this extent, it can be argued that if consumers enter a state of flow, yet do not feel sufficiently challenged (i.e. browsing for hedonic purposes), they will not feel that the time spent on the retail app is worthwhile, resulting in their needs and gratifications being unmet (Csíkszentmihályi & Csíkszentmihályi, 1988). Therefore, based on the establishment of "negative flow", we hypothesise:

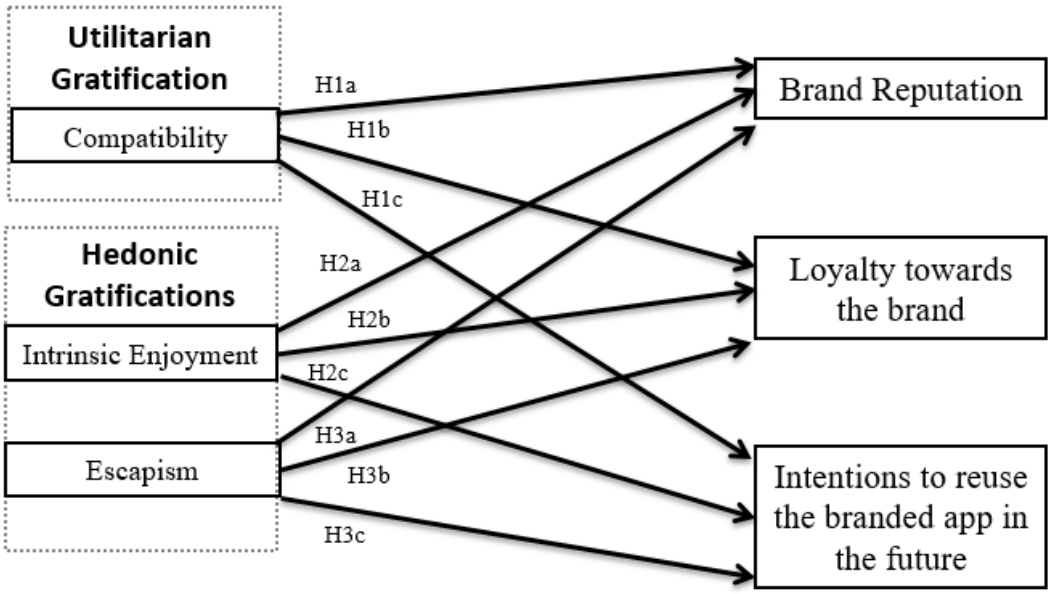
H3a: Escapism has a negative effect on brand reputation

H3b: Escapism has a negative effect on loyalty towards the brand

H3c: Escapism has a negative effect on intention to reuse the app

Figure 1 outlines a pictorial representation of our hypotheses.

Figure 1: Hypothesised Model



4.0 STUDY 1

The purpose of Study 1 is to test the hypothesised relationships, as discussed in the previous sections. Taking a quantitative approach, we deployed an online questionnaire with UK consumers. To gather the data required, we utilised a market research firm to recruit participants. Each participant was given a small financial incentive to participate. Respondents had retained the app for 6 months, which provided the study with true insights into consumers' attitudes and behaviours towards retailers' apps. In total, 1,410 responses were collected; following data cleansing, a total of 1,024 usable responses were obtained. Table 1 provides further details on the sample.

Four retailers' mobile apps were selected in this study, due to their popularity in the UK and obtaining a sample that had used these apps; namely *Next*, *John Lewis*, *Marks and Spencer* and *H&M*. Data were equally distributed across all four mobile apps. Due to the use of four different retailers' apps, the research is able to provide somewhat generalisable results. Given the adequate sample size, we utilised Structural Equation Modelling (SEM) with analysis of moment structures to assess the model in Figure 1. To conduct analysis, the data set were pooled from each application (x4) following configural invariance testing.

Table 1 Respondent Characteristics

Respondent Characteristics	Frequency (n)	%
Gender		
Male	481	47
Female	543	53
Age (in years)		
18 – 24	102	10
25 – 34	348	34
35 – 44	277	27
45 – 54	184	18
55 – 65	113	11
Education		
High School	133	13
College Graduate (FE)	481	47
University Graduate (HE)	410	40
No Qualifications	0	0

Employment		
Full Time	748	73
Part Time	174	17
Unemployed	73	7
Retired	29	3
Responses per App		
John Lewis	265	26
Marks and Spencer	265	26
Next	263	26
H&M	231	22
Main Use of the App		
Shopping to make a purchase	360	35
Browsing	595	58
Keeping up to date with news		7
Smartphone Screen Size		
Large Screen	625	61
Small Screen	399	39

The scales utilised in the research were drawn from established scales in the literature. Each of the scale items were carefully adapted to suit the context of this study. Six variables measured on a 7-point Likert scale (Strongly Disagree to Strongly Agree) were used to measure Compatibility, Intrinsic Enjoyment, Escapism, Brand Reputation, Loyalty towards the Brand and Intentions to Reuse the Branded App in the Future. Table 2 outlines each of the items and their corresponding variables.

Table 2 Scale Items

Variable	**Reference**	**Scale Items**	**Cronbach's Alpha**
Compatibility	(Taylor and Todd, 1995)	• Using the app is compatible with all aspects of my life and work. • I think that using the app fits well with the way I like to live and work. • I think that using the app fits well with the way I like to live and work.	.925
Intrinsic Enjoyment	Adapted: Davis et al (1992)	• I find using the app to be enjoyable • The actual process of using the app is pleasant • I have fun using the app	.922
Escapism	(Mathwick et al., 2001)	• Shopping from the app "takes me away from it all". • Shopping from the app makes me feel like I am in another world. • I get so involved when I shop from the app that I forget about anything else.	.916

Brand Reputation	(Veloutsou and Moutinho, 2009)	• The brand is trustworthy • The brand is reputable • The brand makes honest claims	.890
Loyalty towards the brand	Venkatesh et al (2012)	• I encourage friends and relatives to shop with the brand. • I say positive things about the brand to other people. • I intend to shop the brand in the next few years. • I would recommend the brand to someone who seeks my advice.	.886
Intention to Reuse the branded app in the future	(Venkatesh et al., 2012)	• I plan to continue to use the app in the future. • I intend to continue to use the app in the future. • I predict I would continue to use the app in the future.	.960

4.1 Preliminary Analysis

A number of preliminary analyses were conducted. As illustrated in Table 2, Cronbach's Alpha-coefficient was calculated to assess the reliability of the scales adopted for the research. Accordingly, each scale exceeded the critical value of .7 (Pallant, 2013). Thus, we can conclude the scales are reliable indicators of each variable.

Subsequently, SEM with AMOS Graphics 24 was used to examine our relationships outlined in Figure 1. Confirmatory-based SEM (CB-SEM) is a two-phase process; firstly, a Confirmatory Factor Analysis (CFA) is calculated followed by the assessment and estimation of the structural model. The purpose of the CFA is to understand the causal relationships between variables. The results of the CFA illustrate *goodness* of fit CMIN/DF= 4.229, CFI= .975 GFI= .940, RMSEA= .057, SRMR= .0503. In addition to the fit statistics, each of the regression loadings were adequate and significant ($p < .001$).

Following the CFA, discriminant and convergent validity were examined. Table 3 confirms that discriminant and convergent validity were satisfied as the average variance extracted (AVE) values were above .50 and construct reliabilities above .70. Accordingly, the AVE values were also greater than the square of their correlations, thus affirming discriminant validity.

To avoid misleading deductions, Common Method Bias (CMB) tests were calculated (Podsakoff et al., 2003). As a technique to reduce the likelihood of CMB, the scale items of corresponding variables were mixed throughout the questionnaire (Karikari et al, 2017). In

addition, a Common Latent Factor (CLF) was introduced with each of the items of the constructs included and regressed in the model. Accordingly, the CLF returned a value of .281. Subsequently, to calculate the common method variance, the CLF value was squared, which equals .0789 (8%). Importantly, this value falls below 50%, which according to Ranaweera and Jayawardhena (2014) is the benchmark for avoiding CMB.

Lastly, Variance Inflation Factor (VIF) analysis was used to assess for multi-collinearity amongst the variables. Given that the results outlined no variables presented to be above the critical value of 3.0 (Hair et al., 2013), it can be assumed that multi-collinearity was not violated.

Table 3 Convergent and Discriminant Validity

	CR	AVE	MSV	ESCAP	BREP	COMPA	BLI	IRBA	ENJOY
Escapism (ESCAP)	0.922	0.797	0.331	0.893					
Brand Reputation (BREP)	0.856	0.665	0.531	0.155	0.815				
Compatibility (COMPA)	0.926	0.807	0.567	0.526	0.395	0.898			
Brand Loyalty Intentions (BLI)	0.890	0.670	0.531	0.241	0.729	0.439	0.819		
Intentions to reuse the Branded App in the future (IRBA)	0.961	0.891	0.458	0.347	0.463	0.634	0.535	0.944	
Intrinsic Enjoyment (ENJOY)	0.916	0.784	0.567	0.575	0.432	0.753	0.480	0.677	0.885

CR - Construct Reliability; AVE – Average Variance Extracted; MSV - Maximum Shared Variance

4.2 Structural Equation Modelling (SEM)

Given the *goodness of fit* of the CFA and satisfying the subsequent tests, the second part of SEM can take place in calculating the structural model to test the hypothesised relationships displayed in figure 1. Accordingly, the structural model outlined *goodness of fit* (x^2/df = 4.466, CFI= .973, GFI= .956, RMSEA= .059, and SRMR= .0562) and provides support for many of the relationships as shown in table 4.

Table 4 Structural Model Regression Results

Hypotheses				Standardised Estimate β	R^2	Result
H1a	Compatibility	→	Brand Reputation	.165 **	.25	Supported
H1b	Compatibility	→	Loyalty towards the brand	.166 ***	.29	Supported
H1a	Compatibility	→	Intention to reuse the branded app	.249***	.52	Supported
H2a	Intrinsic Enjoyment	→	Brand Reputation	.463 ***	.25	Supported
H2b	Intrinsic Enjoyment	→	Loyalty towards the brand	.463 ***	.29	Supported
H2c	Intrinsic Enjoyment	→	Intention to reuse the branded app	.543***	.52	Supported
H3a	Escapism	→	Brand Reputation	-.210***	.25	Supported
H3b	Escapism	→	Loyalty towards the brand	-.121***	.29	Supported
H3c	Escapism	→	Intention to reuse the branded app	-.125***	.52	Supported

4.3 Results

The results outline strong regression β and statistically significant relationships. In support of H1a, b, and c, the results indicate that the utilitarian gratification of *compatibility* has a positive effect on *brand reputation*, *loyalty towards the brand* and *intentions to reuse the branded app*. Thus, the fit of retailers branded mobile retail apps with a consumer's lifestyle influences such important marketing outcomes. As consumers continually illustrate their busy lives and their need to consume on-the-go, they choose technology that they expect will meet their needs. The mobile device is an indispensable part of a consumer's everyday life, of which mobile apps

have become an integral part. Therefore, retailers can take benefit from consumers' needs to use technology on-the-go, through providing a mobile app that fits with consumers' lifestyles. Mobile apps are naturally more convenient and can be customised to the individual consumer's needs. Not only does the utilitarian gratification, *compatibility*, have a positive effect on the retailer's app (in terms of future usage) but also on outcomes beyond the app and, thus, a retailer's app that is compatible with a consumer's lifestyle becomes an important antecedent of loyalty towards the brand as well as the reputation of the brand. As such, drawing on U&GT theory, retailers' mobile apps can stimulate an important utilitarian gratification resulting in positive effects on intentions to reuse the app in the future, loyalty towards the brand and the brand's reputation.

Furthermore, the results indicate that the hedonic gratification (intrinsic enjoyment) has a significant positive influence on *brand reputation*, *loyalty towards the brand* and *intentions to reuse the branded app*, supporting H2a, b and c. Thus, consumers who find the actual process of a retailer's app enjoyable and fun to use will more likely use the app in the future. Meanwhile, in a similar vein to the utilitarian gratification of compatibility, the hedonic gratification of intrinsic enjoyment with the app has a positive influence on outcomes beyond the app, positively influencing brand reputation and loyalty towards the brand. Thus, such gratifications (both hedonic and utilitarian) from a single channel (mobile app) have a positive spill-over effect on important marketing outcomes of loyalty towards the brand and brand reputation.

While results indicate the positive effect of the hedonic gratification, *intrinsic enjoyment*, a related hedonic gratification, namely *escapism*, has a negative effect on such outcomes, supporting H3a, b and c. Individuals often turn to technologies to satisfy their tension-related needs; accordingly, they may decide on technology with high hedonic value, thus being media that delivers some form of enjoyment. While consumers may obtain enjoyment from their interactions with a retailer's mobile app, through a U&GT theoretical lens, enjoyment reflects the notion of distracting oneself from normal activities through engaging with entertaining media. As such, consumers are using mobile devices to escape the realities of the real world. However, the results indicate that such escapism habits and behaviour lead to negative consequences for retailers. Consumers who seek gratifications through retailers' mobile apps to "escape" the real world, are less likely to reuse the app in the future. Thus, aligned with previous research (Janis & Mann, 1997), the anticipatory regret from the learned behaviour can have a negative effect on intentions to repeat the behaviour. Therefore, while consumers may

seek the hedonic gratifications of escapism through a retailer's mobile application, the regret they feel following the "escape" activity results in a negative intention to complete the same behaviour in the future.

The results also outline further spill over effects from the mobile app to the brand as a whole. Those consumers who engage in escapism activities with a retailer's mobile app will subsequently have negative perceptions towards the brand and loyalty towards the brand. Therefore, due to consumers becoming distracted and completely immersed in the retailer's mobile application, based on prior research (Luce, 1998), we conclude that the consequential guilt from the experience results in the negative perception towards the brand's reputation and loyalty towards the brand.

5.0 STUDY 2

Study 1 provided insight into the hypothesised relationships, outlined in Figure 1. To gain a deeper insight into these relationships and to uncover the complex nature of the negative relationships of escapism on brand reputation, brand loyalty and app reuse intention, a second study was employed. As such, we employed an explanatory sequential design through utilising a qualitative study (Study 2) to focus on the new findings from Study 1. According to Creswell and Clark (2011), an explanatory sequential design often comprises of two separate phases and is useful to employ in situations when researchers find results that are not fully explained from one study. Therefore, we utilise a follow-up qualitative study in this research to link two types of data to help build on the quantitative study to further understand the results. Through consideration into the available qualitative data collection methods, the utilisation of face-to-face semi-structured individual in-depth interviews were considered the most useful for this study, due to the need to understand this complex consumer insight.

An interview guide was developed for this second study and was informed by the literature and results derived in Study 1. The interviews followed the three-phase approach, proposed by Wilson (2012), starting broadly with an introduction to the topic area, then moving on to the discursive phase, before concluding with the summarising phase. This second study utilised non-probability quota sampling to capture relevant information to answer the research question aligned with the specific characteristics in Study 1. A market research agency was employed to help to recruit respondents. The sample all had experience of using retailers' mobile apps, specifically; the sample had all used the retailer's mobile apps in Study 1 (John Lewis, Next,

Marks and Spencer's and H&M). The total number of participants for Study 2 was 24, of which 11 (46%) were male and 13 (54%) were female, with ages ranging from 21 to 53 (see appendix 1 for more details). The interviews were audio recorded and lasted around 40 minutes. All of the interviews were transcribed resulting in over 500 pages of content, 1.5 line spaced and 12pt font. The interpretation analysis involved rounds of refinement with the researchers agreeing on keywords and thematic codes. The purpose of Study 2 was to provide a deeper insight into the relationships outlined in Study 1.

5.1 Findings

5.1.1 Utilitarian Gratifications (Compatibility)

The qualitative analysis confirms the results from Study 1 in showing that utilitarian gratifications influence consumers' continuous intention to use a retailer's branded app. The in-depth interviews highlight that the compatibility factor is valued by consumers in influencing their continuous intention to use traditional retail branded apps. Importantly, the interviews shed light on why this variable influences intention to reuse the app in the future, with many respondents highlighting the app's value when working long hours or lack of free time due to life and family commitments. Respondents expressed:

> *"Apps make my life easier, especially with my 7-month old baby. Anything that can simplify and fit with my life and give you an extra 10 minutes per day... It would be difficult for me to go back to my old way of shopping."* [Respondent 12]

> *"I would personally find that shopping with three children is a complete nightmare. If I am going to do something, I want to know that I'm not going to waste my time."* [Respondent 16]

Other respondents revealed that the main motivation to continue using a retailer's shopping app is when the app becomes a lifestyle assistant. Respondents explained:

> *"I think now it is a lifestyle… you do everything on your phone these days. I think it's important for brands like Marks and John Lewis to get their apps right and make sure that it is easy access and it is as simple and straightforward as possible."* [Respondent 19]

> *"It's like a lifestyle assistant. You know that's exactly what it's there for. John Lewis is the perfect example. Or Next is the perfect example."* [Respondent 16]

However, an important observation is that some respondents who viewed the app as compatible with their lifestyle feel guilty in the view that their lifestyle has changed due to work and other life commitments, which has caused the way they shop also to change. Not only is this an interesting observation in relation to compatibility on intention to reuse the branded app but is also an early indicator of the negative associations with using retailing mobile apps. An example of this is highlighted in the following comment:

> *"…if I'm stuck in with a toddler, I can put the shopping in the app and I'll know I have it the next day…. It has changed the way everyone goes around their daily life. It is sad as well though… I'm guilty of it as well, I and my partner will both sit on our phones in the house just browsing shopping apps… The majority of my apps are for convenience and making my life easier."* [Respondent 6]

The qualitative analysis reveals how compatibility influences consumers' brand loyalty. The in-depth interviews highlight that brand loyalty is heightened by the convenience of returning to the same brand. Findings reveal that consumers who repeatedly shop with a particular retailer value the ability to save products within a "favourites list" in an app and, therefore, do not have to spend lengthy time browsing similar products. Alongside this level of convenience is the capability for a more personalised experience when using the same branded retail app. Such elements of time saving, convenience, personalisation and simplicity appear to explain the importance of compatibility influencing loyalty intentions. Respondents commented:

> *"I've moved from Tesco to Asda; all my favourites are saved. When I go into my app, I just click favourites and my previous shopping list comes up and it's really easy. Whereas if I was to go back to Tesco, I would have to type in apples and check 400 different types of apples, I don't have time for this in my life."* [Respondent 4]

> *"The apps tend to be personalised. Well, in my case they are because they are logged into my account. I can save things directly onto the app and save them and delete them; it's been good for Christmas presents. The other things I do are save items then check them on Boxing Day to see if they have gone into the sale. This all makes life simpler."* [Respondent 18]

For branded apps to provide a personalised online shopping experience, they may require to store personal consumer information. In this regard, respondents explain that while some people consider the security or privacy risks associated with this, others reveal that providing personal information helps the retail brand to provide a personalised shopping experience to

the consumer and is particularly not a concern when the retailer is recognised and credible. The following comment from the in-depth interviews reflect this view:

> *"I think with the app you get more of a personalised experience because you are already signed into the app on your phone. Some people would say that is a security risk; if your phone was stolen, people could get into the app. However, it does offer you a good experience if you are able to."* [Respondent 3]

> *"I'm quite happy to put in information like address and bank details; I wouldn't do that with everyone but with them being big companies you know there is a safety, there is credibility with them and it makes your life so much easier to get on with things."* [Respondent 19]

The respondents illustrate that the compatibility of a retailer's app with their lifestyle influences their intentions to continue using the app, loyalty towards the brand and their positive perceptions towards the brand. The interviews reveal that such compatibility stems from the time saving, convenience, personalisation and simplicity of the app.

5.1.2 Hedonic Gratifications (Enjoyment)

Study 1 illustrated the importance of an app being enjoyable in influencing consumers' continuous use of a retailer's app. The interviews further shed light on the intricate details of this relationship. Respondents of Study 2 explain:

> *"For me there's a lot of apps, and I could do some shopping on all of them…. But I need to enjoy using them. Shopping on a fun app, gives you a sense of enjoyment."* [Respondent 2]

> *"If I wasn't enjoying it so much, it would sit on my phone untouched for a few months before I would get rid of it."* [Respondent 11]

> *"There was a period maybe two or three years ago when I still shopped through a website or go in store. But when I started shopping and making purchases through apps, I enjoyed it and it is now how I like to shop, I keep going back."* [Respondent 13]

This finding is extended further to highlight that if shopping through a branded retail app is enjoyable some consumers may choose to use it over visiting the physical store out of preference; even when the physical store is in close proximity. Therefore, a retailer's app can

become a consumer's primary source of interaction with a brand. This view is reflected in the following comment from the in-depth interviews:

> *"I find more realistically that I spend most of my leisure time on my iPhone. So, when I'm on my phone, I'm really familiar with it… I live five minutes away from Debenhams and John Lewis but I still prefer to shop via the app because I enjoy it."* [Respondent 13]

While we find the level of enjoyment consumers have during their interactions with a retailer's mobile app to influence their continuous use of the app, results of Study 2 further support those of Study 1 in revealing enjoyment to have a positive effect on consumers' brand loyalty. Respondents reveal that if they do not find the experience of using the retailer's app enjoyable it will result in them discontinuing the use of the app. Subsequently, they remove the app from their smartphone and are unlikely to recommend the brand to others. Respondents commented:

> *"If I didn't enjoy using the app then I wouldn't be likely to recommend it to anyone else. It would stop me recommending the brand in general because people might use the app if I recommend the brand and then they will think poorly of me as I inadvertently recommended the brand."* [Respondent 22]

> *"When I recommend something to my friends or family my own reputation is on the line… If I don't enjoy using the app, I'm not going to recommend the app or the brand to anyone or even use the brand in the future, competition is high these days… someone else will provide a more enjoyable app that I can use."* [Respondent 24]

Relatedly, in aiding our understanding on the influence of app enjoyment on brand reputation, respondents explained from two differing perspectives:

> *"Should I enjoy using the app, then I'll think the brand has done a good job, they are providing me something that's valuable and they have respect for me as a customer and my time, this reflects well on the brand overall – I would generally be more likely to shop and recommend them and I guess this comes from my use of the app."* [Respondent 22]

> *"When the app isn't enjoyable to use and I'm looking to enjoy my time browsing, I'll definitely leave the app, delete it, probably review it and tell them what's wrong and then make me unlikely to shop with them. If they can't get the app right with their brand*

name on it what else are they getting wrong… I lose faith in the brand". [Respondent 23]

In enhancing understanding into why intrinsic enjoyment with the app influences the overall brand reputation, results demonstrate that consumers appear to lose respect and faith in the brand if they do not provide an enjoyable experience through the app. Respondents outlined that they learn from their experiences with the brand and take their expectations into all channels they may interact with the brand. Thus, if a consumer does not enjoy their interactions with the app, they expect their interactions in other channels (e.g. in-store, online) will be similar, effecting the brand's overall reputation**.**

5.1.3 Hedonic Gratification (Escapism results)

The most interesting contribution of this research was further confirmed in this qualitative study whereby consumers perceive escapism more in a negative light when concerning branded retail apps. It was found that escapism causes consumers to have the behavioural intention to discontinue using the retail branded app despite the addictive nature of the apps. In fact, the findings show that spending more time than is necessary, while conducting shopping activities on the app and becoming immersed in the activity, results in consumers experiencing a feeling of guilt, causing a negative relationship with continuous use intention. Accordingly, attention has turned to the importance of time when choosing to engage in hedonic gratification seeking behaviour on mobile retail apps. As such, if the gratification is instant and has not cost significant time then the escapism feelings have been met, whereas the notion of negative flow emerges when the gratification becomes a perceived lengthy event.

The results illustrate that consumers often do not want to seek escapism from the real world when using a retailer's mobile app, as they may use the app for shopping productively. An example of this view is reflected in the following comments:

"I can be using the app for a specific purpose, like to buy a gift, then I realise that I have spent way longer than I would have liked to, it's very distracting from day-to-day life." [Respondent 25]

"I often want to just purchase something, but I then end up browsing all night… I shouldn't be spending my time this way, I always feel guilty". [Respondent 21]

Similarly, the findings indicate that although consumers may experience escapism when using retailer's branded apps, they may not like doing so as it causes them to spend more time than perceived necessary. Respondents reveal:

> *"I become frustrated with myself when I get really into the app, I lose time, I look at the time and an hour has past, it makes me angry sometimes and I think I'm not doing that again, but it is addictive."* [Respondent 22]

> *"…you are not always going onto these apps with the intention of buying anything; it's more like, I've got my phone in front of me and I'm going to waste hours and hours looking at anything."* [Respondent 17]

> *"I'm guilty of wasting away time on shopping apps. I can lose hours, I may have intended on doing some work or going to the gym, instead I waste time on the app. I have actually deleted a couple of shopping apps recently to stop it encouraging me to shop and lose the time".* [Respondent 24]

Study 1 outlined the negative relationship between escapism and intentions to reuse the app in the future. The findings in study 2 outline why there is a negative relationship drawing on the time individuals lose on the app, the guilt they feel due to not spending time more wisely, and the distraction they cause from the real world. While the apps can be addictive, such influences appear to drive some consumers to delete retailers' shopping apps.

Experiencing escapism may subsequently lead consumers to become frustrated with themselves. In addition, consumers feel that the amount of time spent on the app could have been utilised better in other activities. An example of this view is illustrated in the following comment:

> *"I become annoyed with myself… I'm literally addicted to these apps… Both my boyfriend and I get frustrated that we have become so engrossed in the app that an hour passes, we are sitting together but haven't even spoken, I'd be adding things to my favourites that I then don't buy. It gets to the point where I actually tell my friends don't use those apps you will waste away your evenings"* [Respondent 23]

> *"My friends often say to me not to use the ASOS app or the H&M app because you get so involved in what you're doing on the app, time passes and you don't even realise, they are all addicted to it and actually hate it."* [Respondent 22]

These insights outline that the addictive nature of the apps drive consumers away. Subsequently, the time distortion and immersion in the app leads consumers to avoid using the app in the future, even to the extent where they do not recommend using the app and actively discourage the use of the app, which helps to explain the effects of escapism on consumer's loyalty towards the brand.

The results from Study 1 and 2 illustrate that escapism through retailers' mobile apps develop negative associations with the brand. Despite the decision to browse these apps and spend time on retailers' shopping apps, consumers express that regularly revisiting apps that are distracting and immersive has an overarching negative effect on the corresponding brand reputation, due to the time consumers perceive to waste on the app. Such views are reflected in the following comments:

> *"I actually get frustrated with them [retailers], because I am often looking for the offers they are doing on the app and browsing for longer than I should. You get frustrated with yourself and that frustration is also on them [retail brand] … to the extent I try to avoid shopping with them."* [Respondent 23].

> *"…it is dangerous and addictive. I think its these retailers who should be held responsible for the length of time people are spending on technology like this. I get notifications from them* [the retailer] *to use the app and when I do, afterwards I feel guilty and blame them* [the retailer] *for this guilt."* [Respondent 24].

The respondents uncover the reasons for the negative relationship between escapism and the overall brand reputation. The findings illustrate that the guilt and negative emotions consumers experience, due to spending their time using the retailer's shopping app, spills over to the perception towards the brand, resulting in a negative effect on the brand reputation, loyalty towards the brand and intentions to reuse the app in the future.

6.0 DISCUSSION

Drawing on the results of Study 1 and Study 2, this research furthers our understanding of consumer behaviour towards retailers' shopping apps. To date, research has mainly utilised technology adoption models to understand consumer behaviour with mobile apps (e.g. Yang, 2013; Baptista & Oliveira, 2015; Fang, 2017; Fong et al., 2017; Jeon et al, 2019; McLean et al., 2019). However, moving beyond this, through the lens of *Uses and Gratifications Theory*

(U&GT) and drawing on *Flow Theory*, this research uncovers the effects of consumers' interactions with retailers' mobile apps, based on their intention to reuse the app in the future, loyalty towards the brand and brand reputation. Importantly, this research uncovers the negative effect of escapism through retailers' shopping apps on mobile devices, furthering our theoretical understanding of mobile app shopping and escapism.

6.1 Theoretical Implications

While literature has regularly considered the positive effects of the hedonic gratification 'escapism' through technologies, literature remains in its infancy in considering the negative implications of escapism on consumers' wellbeing and subsequent attitudes and behaviours towards a brand. This research has offered insight into how escapism, as a means of gratification, can develop a *negative* flow state of mind which subsequently leads to negative attitudes towards the brand, reduced intention to reuse the branded app and reduced loyalty towards the brand. Accordingly, we highlight that escapism behaviour, resulting in a lengthy flow state of mind, can increase the duration of escapism behaviour but lead to higher levels of regret. Thus, during escapism behaviour, individuals enter a flow state of mind which causes frustrations with time duration on the app resulting in the initial hedonic gratification turning into a negatively experienced escapism.

Grant and O'Donohoe (2007) observe that consumers often turn to mobile shopping apps out of mere boredom and to satisfy specific gratifications (i.e. hedonic benefits). Building upon this, consumers often feel guilt due to their overuse of retailer's mobile apps. Such overuse stems from the immersive experiences consumers have during their interactions, leading them to becoming engrossed in the app and lose track of time. Previous literature has noted the benefits of this immersive flow state of mind with desktop computers (e.g. Hoffman & Novak, 2009). However, with other less portable devices (i.e. the smartphone device), the state of flow experienced during escapism stimulates problematic behaviours, due to their constant availability; which could result in some form of perpetual immersion with devices and apps. Accordingly, the results detail that, due to the ease of picking up the smartphone and its ubiquity, escapism through retailers' apps results in consumers perceiving to waste their own valuable time and become frustrated at themselves as well as the corresponding brand. Thus, due to the stimulation of *negative flow,* escapism causes sensations of 'self-blaming', prompting negative feelings and reduced levels of personal wellbeing, to which we coin the

term *regrettable escapism. Regrettable escapism* is defined as the regret experienced by an individual when escaping from the self both in a psychological and physiological level through intensified media exposure as a result of certain deficits or needs such as stress relief, entertainment, information seeking or interest.

These findings, therefore, align with a smaller body of literature in finding that consumers who spend more time than necessary on branded shopping apps feel they have a negative customer experience (Mclean et al., 2018; Anderson et al, 2014). However, this research establishes that the flow state of mind experienced during escapism, resulting in time distortion, is the fundamental cause of this. While previous research has evidenced the positive outcomes of 'escaping the real world', this research advances our theoretical understanding of the escapism gratification with ubiquitous, smaller, portable devices, outlining the negative outcomes on continuous usage intentions, loyalty towards brands and brand reputation due to the guilt and frustrations individuals experience following app use. Subsequently, in line with literature (Lin et al., 2017; Jeong et al., 2016), the results of this research indicate the additive nature of smartphones and mobile apps and their negative effects on wellbeing, attitudes and behaviours.

Previous literature outlines consumers' general smartphone addiction, while this study indicates towards consumers' shopping app addiction. This insight is interesting as such addiction creates a paradoxical situation. The literature indicates that addiction results in a change in cognitive processing. Thus, consumers who have higher levels of technology addiction will have positive perceptions of the technological system, despite if those perceptions are not logical, resulting in higher levels of absorption and immersion in the technology; in which they are seeking instant gratifications. Furthermore, even if individuals know they will feel guilt and become frustrated following the use of the device this may not prevent them in seeking hedonic gratifications, thus 'escaping' and engaging in the activity, resulting in further and somewhat perpetual *regrettable escapism*. As such, this research adds to the existing body of literature in establishing a paradoxical situation with regard to hedonic gratifications sought through retailers mobile apps, thus furthering our understanding of Uses & Gratifications Theory and Flow Theory.

However, the results from both studies indicate that the utilitarian gratification, compatibility, positively influences loyalty towards the brand, brand reputation and intentions to reuse the retailer's app in the future. Thus, an app that enables consumers to complete tasks efficiently and in a convenient manner allows consumers to fit the app into their day to day life. Consumers

express the busyness of their daily life and so an app that is compatible with their lifestyle subsequently influences their continued use, further loyalty to the brand and positive perceptions towards the brand's reputation.

Lastly, while the hedonic gratification, enjoyment with the app, influences continuous future use, importantly we find that enjoyment with the app spills over to influence factors beyond the app and has a positive influence on overall brand reputation and loyalty towards the brand. The findings reveal that consumers carry expectations across channels and carry the experiences from their interactions with the app into future interactions with the brand. Accordingly, those apps that do not provide an enjoyable experience results in consumers losing faith in the brand and respect for the brand which, subsequently, results in consumers switching to alternative providers. Whilst such gratifications have been outlined in previous studies in relation to mobile apps through the lenses of technology adoption theories (e.g. Joen et al., 2019; McLean et al., 2019), the effects of utilitarian and hedonic gratifications sought through retailers' mobile apps have not been examined against factors beyond the app. This research addresses this gap in understanding.

6.2 Practical Implications

This research outlines to managers that consumers use retailers' shopping apps for both utilitarian and hedonic gratifications. Managers should ensure they develop and understand the persona(s) of their customers to develop a mobile app that meets customers' utilitarian gratifications. The results pertain that retailers' shopping apps which are compatible with individuals' lifestyles results in consumers intending to use the app in the future, loyalty towards the brand and positive perceptions towards the brand's reputation. Thus, understanding the brand's customer base is important to meet the needs and overcome pain-points consumers may have during their shopping activities. Respondents of this research detailed the need for mobile apps to be simple to use, convenient, customisable and enable efficient shopping.

Moreover, managers should note that consumers seek hedonic motivations during their interactions with retailers' shopping apps. Consumers expect an enjoyable experience during their interactions with the app influencing them to continue using it. However, it is important to note that such enjoyment with the app extends to outcomes beyond the application. Accordingly, enjoyment with the app positively influences loyalty towards the brand and

positive perceptions towards the brand's reputation. Therefore, managers should engage in continued usability testing to ensure their customers encounter an enjoyable and compatible experience with the app.

While it is important that brands continue to conduct usability testing with a representative sample of consumers, to ensure their app meets both hedonic and utilitarian gratifications, consumers may still abandon and go as far as to delete retailers' apps due to *regrettable escapism*. Thus, this research sheds light on a new factor negatively effecting the use of retailers' apps, the reputation towards their brand and loyalty towards their brand. The practical issues here are twofold; (1) brands want their app to continue to be used, but (2) brands should be mindful of consumer wellbeing.

To directly address consumer wellbeing, whilst indirectly effecting willingness to reuse the app, it is suggested that, given the consequences of negative escapism, managers and policy makers should consider strategies to alert customers on how long they have spent browsing on their shopping app. Considering the popularity of behavioural-control apps, such as *Freedom* and *RescueTime*, managers and/or policy makers could approve an optional timer system within the app to notify users how long they have spent browsing on the app. Such a system may be in the form of a timer illustrating how long the customer has used the app for or through notifications at predefined times (e.g. after 5 minutes of use, 10 minutes of use). Subsequently, brands and policy makers should conduct testing with their customers to establish the benefits of time notifications. This would likely prevent consumers becoming so engrossed in the app to the extent that they experience time distortion and lose track of how long they have spent on the retailer's app. Such a simple time notification may prevent consumers experiencing feelings of guilt and frustration due to the length of time they perceive to waste with their shopping apps. Moreover, the optionality of this function allows consumer freedom to choose how long they wish to engage with various apps based on their own needs and lifestyles, which positively relate to the utilitarian and hedonic gratifications established in the results. Particularly given that most consumers appear to use apps to browse rather than to purchase *(see Table 2 and Study 2)*, the app activity is likely to still facilitate purchase, while ensuring consumers do not enter the realms of *regrettable escapism,* whilst taking responsibility for consumers' wellbeing.

Alternatively, brands may adopt gamification tactics to prevent individuals transcending into an immersive and engrossed state of mind whilst maintaining levels of positive gratifications and brand associations. Such gamification tactics may involve the customer solving a short and

simple brand-related puzzle. A gamification strategy may offer brands a subtler form of helping consumers avoid immersion, time distortion and to manage their time during their interactions with the retailer's mobile application.

Managers should engage in such activities not only to encourage brand loyalty and app usage but also to acknowledge the negative effects of smartphone addiction on their customers and their own brand. Although breaking addictive habits mid "flow" can risk shopping cart abandonment or discourage spontaneous purchasing, brand reputation and being perceived as a "caring" brand will develop more positive brand associations and will more likely see returning customers with fewer app deletions.

7.0 LIMITATIONS AND FUTURE RESEARCH

Despite advancements in our understanding of mobile retail apps through the theoretical lens of *Uses and Gratifications Theory* and drawing on *Flow Theory*, some limitations are present. Firstly, the research findings represent a snapshot in time; with the significant daily developments of technologies and the evolving consumer interactions with them, it would be interesting to investigate the longer-term effects of *regrettable-escapism* and retail app addiction deriving from an initial desire for escapism. While we gathered data following six months of use, a longitudinal study could be conducted to determine how an established addiction to apps as an escape mechanism can affect consumers' wellbeing and behaviour towards brands over time.

Secondly, four popular retailing mobile apps were chosen for Study 1; although the four have the most prominent presence in the UK at the time of the research, insight into other brands in different countries or developing research into other types of apps would progress this area further. Additionally, it would be insightful to conduct research on lesser known brands to identify if the results remain the same.

Thirdly, given that this research is the first to establish the negative effects of escapism through smartphone devices, in contrast to the positive effects found in desktop computing devices, it would be useful to replicate the study with other shopping apps, particularly those with sole online presence (e.g. ASOS, Boohoo, Gymshark) to further establish the role of escapism with smaller, portable, and ubiquitous hand-held devices.

Lastly, while this research establishes the effects of negative escapism and proposes strategies that retailers could adopt, future research should conduct experiments to establish the length of time consumers deem acceptable to browse retailers' mobile apps; this would help app developers, managers and policy makers to understand when to provide alerts on how long the customer has spent on the app and to further lower the effects of addiction and subsequent negative escapism.

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Appendix 1

Study 2 Interview Respondent Sample

Respondent	Gender	Age
1	Male	48
2	Male	47
3	Male	26
4	Female	43
5	Female	40
6	Female	24
7	Female	29
8	Female	53
9	Female	28
10	Male	26
11	Male	24
12	Male	32
13	Male	28
14	Female	26
15	Male	34
16	Female	36
17	Male	24
18	Female	26
19	Female	43
20	Female	23
21	Male	45
22	Female	21
23	Female	23
24	Male	26